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Control, resistance and the labour process: a study of information communication technology utilization in local government Revenues and Benefits departments

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Abstract

This thesis provides a qualitative study of control of the labour process and its relationship to technology in Revenues and Benefits departments within local government. The study, from a Marxist analytical perspective, focuses on three aspects of Information Communication Technology (ICT) as a tool of control within the labour process. Firstly, why would management seek to control the labour process in a sector where the profit motive is absent? Secondly, having established a motive for control, how has ICT been utilized as a means to achieve it? Finally, how has the use of ICT affected workers' capability to resist such control? The thesis seeks to place these aspects within the context of the state's position within the capitalist system as an employer of labour and the relationship between central and local government.

Literature has been reviewed around the three aspects identified and feeds into the research. Research was carried out at two metropolitan authorities responsible for the administration of Revenues and Benefits. The components of this fieldwork were questionnaires, with the two-fold objective of gathering data on worker attitudes and as a means of interview selection, and a total of 35 interviews carried out with managers, workers and trade union officials to gauge views across a range of perspectives within the workplaces.

The findings of the thesis locate the desire for control of the labour process in the public sector within its position as a component part of a capitalist system and within a dynamic relationship between central and local government. This has led to management seeking to use ICT as a tool of control to achieve an intensification and displacement of labour, and to a challenging environment for labour to exercise

resistance. However, the thesis still views the frontier of control as shifting and not finally settled.

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List of abbreviations

APT&C Administrative, Professional, Technical and Clerical

BIFU Banking, Insurance and Finance Union

BV Best Value

CCT Compulsory Competitive Tendering

CWU Communication Workers' Union

EDM Electronic Document Management System

GMB General, Municipal, Boilermakers' and Allied Trades Union

HR Human Resources

ICT Information and Communication Technology

IIP Investors in People

IRRV Institute of Revenues Rating and Valuation

LGOL Local Government Online project

LPT Labour Process Theory

MSF Manufacturing, Science and Finance Union

NALGO National and Local Government Officers' Association

NJC National Joint Council for Local Government Services

NNDR National Non-Domestic Rates

NPM New Public Management

PMQA Performance Management and Quality Assurance System

RBCA Revenues and Benefits Collection and Administration System

TUPE Transfer of Undertakings (Protection of Employment) Regulations

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Chapter 1 - Introduction

1.1 Introduction

The aim of this thesis is to explore control and resistance within the labour process in local government Revenues and Benefits departments and how this has been affected by the implementation of ICT in these areas. Local government employees, for the purposes of this thesis, are those workers employed by local authorities largely under the National Agreement on Pay and Conditions of Service Council for Local Government Services (often referred to as the 'Green Book') (National Joint Council for Local Government Services, 2016). As such it does not cover those employed as teachers by local authorities. The thesis has three central issues. Firstly, why is control of the labour process seen within the areas of local government researched, secondly how has technology been utilized in attempt to exploit the fullest level of control possible, and finally, how has the utilization of ICT affected workers capability to resist management control. The thesis is conducted from a Marxist labour process theory perspective. A definition of this as it relates to the capitalist labour process is given below:

"labour process theory is concerned with analysing how a workforce's labour power (its ability to work) is directed towards the production of commodities (goods and services) that can be sold at a profit. [...] [M]anagers seek to control the way work is organized, the pace of work, and the duration of work because these are crucial to profitability. Labour process theorists are therefore particularly concerned with the social relations of production, and issues of workplace conflict, control, and regulation" (Heery and Noon, 2008:199).

Much of the available literature in this area (for example, Marx K., 1990; Braverman, 1998) can be seen to reflect the definition above. However, the researcher, as a past employee in Revenues and Benefits, and then latterly a union officer operating within local government, developed an interest in the application of labour process analysis within this area due to two specific aspects of concern. Firstly, the workers under investigation do not produce commodities but rather services and in this sense have been classified as non-productive, not in a pejorative sense, but in terms of their position within the analysis of the capitalist mode of production (Marx K., 1990). Secondly, these services, when carried out in the public sector, are not performed as a means of profit creation. The initial question for this thesis to address given the above is why would the labour process within the public sector be subjected to management control?

As the literature clearly points to profit being the motivation for control within the capitalist mode of production, the requirement for control of public sector labour would be expected to be found within the context of employment within the state sector. The thesis seeks to understand this motivation by considering the role of the state within the capitalist mode of production and also as an employer of labour in its own right. Central to this analysis is the work of Miliband (1969) and Gough (1975;1979). However, this thesis is also interested to consider how this aspect of control differs between the private and public sectors. Whilst the profit motive in the former may be seen to lead to a position where management seek to intensify and maximise the effort of employees, which in turn will establish the dynamic of control and resistance between the two parties, the latter may be seen as potentially more complex than this. The workers in this study are employed by local government, which itself as part of the state, is formally subordinate to central government,

therefore introducing a more complex and changeable dynamic taking into account initiatives and legislation from the centre and how local authorities respond. The thesis is particularly keen to examine how these initiatives and legislative changes have affected any reasons behind the implementation of ICT and any subsequent utilization as a tool of labour control.

With the establishment of motivation for control of the labour process within the public sector, the thesis goes on to examine the relationship between this control imperative and the use of ICT. In this respect the objectives of the designers or commissioners of the systems can be seen to be central and so the research was particularly interested to determine what the design process for the ICT systems was, the extent to which control was a conscious objective of management (Knights and Murray, 1994:16) and the extent to which any contestation could be seen.

The thesis makes use of Edwards' (1979) model of types of control, simple, technical and bureaucratic but without accepting an evolutionary view of these. However, it proves useful in linking types of control to the ICT systems implemented within the areas being researched and exploring when and why they became utilized as tools of management control and also how the technology allowed a technical form to be applied, by way of embedding rules and business processes to non-production jobs in a way Edwards (1979) felt unachievable, but that Braverman (1998) foresaw. The thesis was also concerned to explore developments in ICT particularly around integration of systems that may make them distinct in developing an overarching panoptic system of control through monitoring and surveillance, not only subjecting workers but also certain managers to this (Thompson and Bannon, 1985:107) in terms of whether they apply corporate or departmental rules and

policies (Rosen and Baroudi, 1992:221) should workers breach behavioural or performance norms, so potentially altering this dynamic.

In exploring these aspects of control as exercised through ICT the thesis moves on to consider how the deployment and development of these ICT systems has impacted on how workers may respond to such management control in terms of the potential for resistance, and the debate between those who consider ICT has removed the possibility for resistance (Fernie and Metcalf, 1998; Delbridge et al, 1993) and those who consider this an overstatement (Bain and Taylor, 2000). In order to consider the issue of resistance the thesis seeks to arrive at a working definition but also accepts the same type of act can differ according to circumstance and intent as to whether it is resistant or not. This thesis seeks to examine the possibility technology can affect the resistance seen in that there may be "distinctive patterns of resistance to technologically facilitated forms of control" (Hall, 2010:167). The thesis also examines the extent to which the absence of worker resistance can be equated with the use of ICT as a means of control, or whether this is an overly simplistic correlation. This is an important aspect of the thesis inasmuch as technology may have been afforded a more effective role in the curtailing of resistance if other explanations for its absence can be shown, such as agreement with management forms of control, a belief in an essentially progressive nature of technology, or fear of consequences. If these explanations are valid then this would potentially point more to a lack of resistance being driven by a range of factors rather than solely a technologically facilitated constraint. As certain managers also become subject to control by monitoring and surveillance, as mentioned above, the thesis considers the extent to which they too may seek to resist more senior management and as such act as a heterogeneous, rather than homogeneous, group. Linked to

this debate is a point of interest for the research in considering whether, if ICT provides such a powerful control, management will seek any non-technological forms such as seeking to foster consent of workers.

The contribution of this thesis can be seen in that it takes the motivation, control and conflict aspects of the capitalist labour process as detailed by Heery and Noon (2008:199) and extends this into the public sector by examining changes in labour management and shifts within the frontier of control between employers and workers. As such, the thesis can be seen to be distinctive in establishing linkages between control of the labour process within this specific area of local government, the technology implemented and developed as tools of control, and the environment created by the central/local government dynamic. The scope of the thesis is limited by the research being carried out at only two sites. However, links have been established between workers' and management's views in terms of their working experiences within the workplaces researched and the wider themes and issues arising from the literature.

1.2 Overview of Chapters

Chapter 2 is the first of the chapters considering the literature relevant to the thesis and it deals with the motivation management have in seeking to control the labour process. It commences by detailing a Marxist perspective on how the employment relationship is made possible by the separation of conception and execution of tasks (Marx K., 1990:284; Braverman, 1998:35). It then goes on to explain the distinction between labour power and labour and the relationship of these concepts to the creation of profit within a capitalist system (Marx K., 1990) detailing the connection between this and capital's requirement to control the labour process. The chapter

considers an alternative explanation as proposed by Foucault (1995) that sees the Marxist position as overly reductionist and that control is part of a wider system than seen in the workplace. Having considered this alternative view, the chapter proceeds with the view that the accumulation of profit is an adequate explanation for capital's need to control labour in the capitalist mode of production. The chapter goes on then to consider why, in the absence of a profit motive, control of the labour process is seen in the public sector. To achieve this the chapter examines the role of the state as a collection of institutions that act as a defender and promoter of the interests of the dominant capitalist class (Miliband, 1969) and also as an employer with the assumption control of the labour process will be rooted in its role within and as a component of a capitalist system (Gough, 1975; 1979). Having considered the motivations of control of the labour process within the public sector and locating this within its role as a constituent of the capitalist system, the chapter, largely drawing on the work of Coffey and Thornley (2009), considers the debate on whether we are witnessing a continuity or disjuncture in terms of labour management within the sector arising from the election of a Conservative government in 1979 at a time of increasing utilization of ICT.

Chapter 3 is the second of the chapters reviewing the literature relevant to this thesis. It follows on from the preceding chapter's considerations on the first main theme of the thesis, namely why control of the labour process is seen in the public sector to consider the second main theme, the application of control through ICT itself. This chapter looks at the different types of control that may be exercised and how ICT may be used as a tool to achieve these. The chapter uses the work of Edwards (1979) to categorize types of control, namely simple and structural, with the latter divided into technical and bureaucratic forms. Although the thesis does not

accept a linear development of these forms of control, with technical control being developed as a response to the perceived weaknesses of simple control in large organizations, and bureaucratic control being developed as a solution to technical control being inappropriate for non-production workers such as those clerical and administrative jobs being researched here, these types of control provide a useful conceptual model when considering the control applied through ICT. The chapter goes on to consider a further type of control where management try and elicit the consent of workers. The chapter paid particular attention to this as from the point of view of the thesis it is of interest to determine whether if effective means of control can be achieved through the use of ICT other types may cease to be used.

The chapter then moves on to consider aspects of design and implementation of technology particularly around the view that it is the motivations of the designer or commissioner that will be reflected in this process. As such, who exercises power over design and implementation of technology is crucial in terms of any utilization as a tool of control. Following consideration of design and implementation the chapter goes on to consider the actual use of ICT systems in delivering the types of control as highlighted by Edwards (1979) and discussed earlier in the chapter. The first area considered is how ICT can apply a form of simple control through the monitoring and surveillance of workers in what can be seen to be an electronic form of the panopticon (Berdayes, 2002:35) as proposed by Foucault (1995). Although Chapter 2 had challenged the Foucauldian view of workplace control being part of a wider system, the idea of the panopticon may be consistent with a Marxist perspective if the motivation for its application was intensification of effort from labour and providing a solution to the issues of simple control within large organizations. The chapter considers how this technique of control may address the

issues around the problems of effectiveness of simple forms of control in large organizations to the extent technology assumes control functions normally carried out by supervisors. The chapter then goes on to consider how ICT has been used to provide a technical form of control by embedding rules and regulations within the system itself and therefore subsumes a worker's knowledge and removes autonomy (Hall, 2010:172-173). In this aspect, this relates to the argument advanced by Braverman (1998) that technology would extend technical control into the non-productive area of clerical and administrative jobs, and it is particularly in this area the research seeks to consider its effects on skills. The chapter finally considers the development of ICT systems to apply bureaucratic forms of control (Rosen and Baroudi, 1992:215) as a means of controlling worker behaviour in relation to employer policies such as working time and absence and highlights how this has drawn management into the area of surveillance and monitoring where their response to worker transgressions may also be scrutinized.

Following on from chapters considering the literature around why managers would seek to control the labour process and how they would use technology to achieve this, Chapter 4 examines the third main strand of the thesis, the issue of resistance to this control. The context of this chapter is around the debate as to whether the use and development of ICT as a tool of management control has rendered it absolute (Fernie and Metcalf (1998); Delbridge *et al,* (1993)) or whether as countered by Bain and Taylor (2000) that this view is overstating the position. The chapter explores this debate by considering actual and potential acts of resistance. Firstly, however, the chapter considers a working definition of resistance as the literature indicates some definitional variations in how this is dealt with. From here the chapter moves on to consider individual acts that may be consistent with this

definition. The approach of the thesis is that in considering whether resistance has been rendered impossible, it is not possible or required to analyse every individual act so as to judge its meaning. The apposite question is whether, *in certain circumstances*, it could be seen as resistant. If an act in any category cannot be prevented by ICT then it remains as a potential form of resistance that workers may choose to carry out as an act of resistance to management control. The particular individual acts considered are sabotage, workers absenting themselves from the workplace and fiddling or deliberate falsification of performance data. The chapter then moves the debate around control and resistance from a simple binary position of management control and worker resistance by exploring the perception of a homogenous management group (Wardell, 1990; Hyman, 1987). The chapter examines the extent to which members of the management group may also be subject to monitoring and surveillance with ICT threatening the security or status of their employment and, therefore, members of this group may have motivations to resist the control of more senior managers.

The chapter moves on to consider the area of collective resistance, particularly as exercised through trade unions by studying issues around policy and resistance from unions in the design and implementation stages of the process and distinguishing this from aspects of collective resistance to ICT that may be used following implementation. Indeed, the possibility is raised that if ICT does reduce the effectiveness or possibility of individual resistance, then recognition of the potential of collective resistance may occur (Bain and Taylor, 2000:13). The effect ICT has had on trade union organization is also considered in this chapter with particular attention paid to the potential geographical dispersal of workers and how this may be problematic for unions, particularly around communication with and between

members. However, the chapter also considers the extent to which ICT has a potential for it to be used as a tool of communication, organization and resistance for unions (Dyer-Witheford, 1999:126).

The chapter finally considers whether an absence of resistance at a time of increasing ICT utilization necessarily indicates a causal link (Hyman, 1988:55). The chapter considers and examines potential reasons, some of which may be connected to ICT but without a direct causal link emanating from the technology itself. These are, cultural, particularly around the ubiquitous and perceived progressive nature of ICT (Burnes *et al*, 1988:7); fear, particularly of loss of employment (Dyer-Witheford, 1999:196); agreements may have been entered into with trade unions (Price, 1988:256); that the use of ICT as a tool of control is perceived as legitimate and fair by workers (Challykoff and Kochan, 1989:811); and lastly, resistance occurs but is missed or downplayed by academic literature (for example, Thompson, 1989:87).

Following the exploration of the literature around control and resistance, Chapter 5 moves on to consider the area the study is researching, namely local government, to place the thesis within the particular context of its environment. A particular aspect of this environment, and a strand running through this chapter, is the relationship between central and local government, with its party-political dynamic, and this can first be seen as the chapter opens by considering the external structure of local government. The chapter considers the changeable nature of local government structure and how this has changed over time due to legislative instruction from central government to which it is formally subordinate. The chapter moves on to discuss the internal structures in terms of how this affects the day to day running of authorities, with particular attention paid to the legislative changes that saw the end

of the committee system. The chapter explores how these external and internal structural changes have impacted on labour management, chiefly the extent to which they may have resulted in a change from a style of management best described as professional bureaucracy to one of a more specifically managerial focus on outputs rather than processes. The chapter also explores how services have not remained constant over time but how they change according to the objectives and expediencies of central government. There is also an exploration concerning how certain services may be transferred to the private sector, particularly since the advent of Compulsory Competitive Tendering (CCT) and Best Value (BV). The chapter examines these aspects in the context of how initiatives emanating from central government, such as these, have played a role in any changing aspects of managerial control within local government. However, the chapter is also keen to explore and acknowledge the role local government, as an institution of the state, plays in this process and not necessarily accept a position of it as a passive recipient of central government diktat.

The chapter goes on to detail the system of local government finance, highlighting the two main funding streams of central government grants and local taxation. The ratios between these two streams will be considered and how these have changed over time according to the political objectives and expediencies of central government. There will also be an examination of the use of legislation to cap the amount of finance raised locally. The chapter seeks to establish any links between these aspects of finance and the effect this may have in terms of staffing levels and labour management, potentially in an environment of shrinking resources.

The chapter then details the legislative changes seen within the area of Revenues and Benefits. In terms of the Revenues function we have seen the abolition of

General Rates, the implementation and subsequent abolition of Community Charge and the implementation of Business Rates and Council Tax. Since 1990 and 1993 in respect of Business Rates and Council Tax respectively there is a recognition of what appears a relatively stable regulatory framework, unlike within Benefits that appear to be subject to several regulatory changes. These aspects will be considered as particularly important to the extent they tie in with the issue of skills and how this may affect labour control and resistance as discussed in chapters three and four.

The chapter discusses the relevant area of industrial relations within local government and again revisits the debate around a view of local government as relatively peaceful until 1979 (Kessler and Baylis, 1995) by examining evidence that, alternatively, it was a site of struggle and contestation between employers and labour (Coffey and Thornley, 2009; 2014). This debate is important to the thesis to the extent to whether we see a clear disjuncture between how local government operated as an employer prior to the election of the Thatcher government in 1979 or a situation where strains were already apparent in the industrial relations environment, thus pointing more towards a continuity. Whilst the chapter examines a view of a problematic environment for unions, particularly from the 1980s onwards, it also considers the situation is not entirely negative. Trade unions still operate in the workplaces researched and still have a considerable membership (Coffey and Thornley, 2014:207).

In terms of the thesis the examination of the use of ICT is established in this chapter exploring what had become a regular feature of local government in the late 1970s and as such coincides with many of the government policies highlighted in Chapter 2, for example CCT and an increased requirement for performance indicators. The

chapter details the development of ICT within local government from the earliest computerized systems delivering back-office functions to more customer focussed systems arising from the growth of the internet and private ownership of computers. The chapter examines the role central government has played in encouraging local government to adopt ICT and the extent to which it has been specifically linked to financial savings (Local Government Association, 2014:13) and is therefore relevant to any consideration of resources and how this may link to issues of labour management.

A particular concern of this chapter is the dynamic between central and local government and how the former has initiated and sought to impose changes on the latter. This is important in as much as it points to a more complex dynamic than may occur with an employer and employee and the relationship this has on labour management and control, resistance and the use of ICT.

Chapter 6 considers the methodology and field research appropriate for a study around issues of control and resistance arising from the use of ICT within Revenues and Benefits departments. The chapter highlights the primarily deductive nature of the thesis. The chapter also details why a case study approach was taken that was broadly qualitative and why this was felt to be particularly suited to the field of employment research. The chapter goes on to discuss concerns of reliability and validity considered in the overall research design.

The chapter details the research methods considered, those of interview, questionnaire, ethnographic study and documentary analysis. Ethnographic study was rejected as an option as whilst it was felt these studies have great value, it raised a number of major difficulties due to the intrusive nature of this method. Time

constraints were also felt to mitigate against this method. However, the chapter does detail the background of the researcher and considers this from the perspective of autoethnography and whilst recognizing aspects of this approach that are relevant here clearly places this thesis outside this perspective. The chapter details the unavailability of relevant documentary sources for the researcher. This left the two methods of interviews and questionnaires as the ones utilized in the study. In terms of the questionnaire the chapter details the view that the two sites were felt to be sufficiently homogenous that the same questionnaire could be used. The chapter details the design of the final questionnaire using a Likert scale format with a space for any comments participants may wish to make. The chapter discusses the weaknesses and limitations of this method in terms of it being a snap-shot and how low return rates may lead to no meaningful statistical procedures being performed. However, the chapter also details the main reason for its inclusion as a method as being a means to allow participants to volunteer for the interviews whilst also gleaning some potentially valuable information from the survey itself. The chapter details the decision in carrying out interviews of the semi-structured variety and why these were seen to offer an appropriate level of researcher control whilst also allowing interviewees the space to express their feelings. The chapter detailed some of the practical considerations in respect of interviews such as location, recording, transcription and piloting. The chapter highlights issues around any ethical concerns of the research project, particularly it may involve the potential for participants to divulge information concerning transgressive acts. Issues of confidentiality, anonymity and informed consent are detailed and the process of gaining ethical clearance from the university was explained.

The final aspect of the chapter was providing details of the two sites, including details of access. The chapter provides information on the sites, including their relative similarity of size, their structure and details of their political composition. There is also an overview of the industrial relations environment at the two sites. This takes into account the trade unions operating and union membership density within the authorities and workplaces being researched. The officer structure of the relevant unions is detailed along with any bargaining structures established within the two sites.

Chapter 7 is the first of the two chapters dealing with the findings from the fieldwork and deals with the aspect of management control of the labour process through ICT. It commences with an examination of the design and implementation of the systems utilized within the Revenues and Benefits departments at the two research sites in terms of who designed or commissioned these systems and any other inputs or challenges that may have an effect on the interests reflected in the ICT. The chapter details the three main types of ICT system identified by the research as being core systems used for the administration of the functions, bureaucratic systems to enforce rules and regulations with particular relevance here to attendance and absence, and performance management systems. Within the chapter the types of control as highlighted in Chapter 3 (Edwards, 1979) are referenced in discussing these three varieties of ICT system and also how the implementation and utilization of these systems impacted on working practices, particularly to the extent it addresses Braverman's (1998) view that computerization would lead to a technical form of control on non-productive workers.

The chapter moves on to examine how ICT is used as a tool of monitoring and surveillance and links with the discussions in Chapter 3 on the establishment of an

electronic panopticon. The first use of ICT to monitor and surveille that the chapter examines is around performance monitoring and how and why this is utilized by management. The chapter considers the findings around whether the monitoring capabilities of the initial core system were utilized immediately following implementation or at a later stage, potentially illuminating issues around whether how ICT is used is a matter of choice or technological determinism. The chapter also explores the possible integration (Berdayes, 2002:35) of core and bureaucratic systems to implement a performance management system and the extent to which this may be perceived as an objective measure of performance. In examining this, the chapter seeks to explore the motivation in carrying out this form of control in order to determine whether the purpose is to provide meaningful data in relation to the rational administration of services or merely to increase the intensity of effort in line with an attempt to increase surplus labour. The chapter goes on to consider a further aspect of monitoring and surveillance performed using ICT that may also be linked to a requirement for management to increase the amount of labour performed by monitoring and maximizing attendance and activity and minimizing absence. The chapter also details how management themselves are drawn into the monitoring and surveillance process with their own actions in relation to performing in a required manner against transgressions of workers highlighted by ICT systems being scrutinized (Thompson and Bannon, 1985:107). We can see then the use of monitoring and surveillance as a tool of intensification of effort by ensuring attendance and an adequate level of performance whilst at work. The chapter seeks to address the issue of whether the use of ICT systems, particularly by integration, has led to an electronic panoptic form of control. In considering this the chapter explores the occurrence of homeworkers who are geographically dispersed with no

physical supervision but who are still subject to management control should the establishment of this panoptic level of control be established (Zuboff, 1988:322).

The chapter moves on to consider the effect ICT has on control, not necessarily as a specific design but as a consequence of its use. This was seen to be particularly pertinent in the area of its effect on skills. The thesis accepting the view of Marx K. (1990) and Braverman (1998) that the absence of skill enhances the level of management control, sought to establish the effect ICT has on the workers being researched and whether the requirement for skills was reduced or enhanced and whether the result was uniform across different staff groups (Wilkinson, 1983:8). The chapter concludes by examining the role of control achieved through management eliciting a level of consent from workers. Whilst this in itself could be seen to be external to the issue of control exercised through ICT, the relevance is that if managers seek to use non-technological forms of control this may indicate a lack of effectiveness of control through ICT and *vice-versa* (Grint and Woolgar, 1997:119).

Chapter 8 is the second of the chapters dealing with the findings of the fieldwork and focusses on resistance, particularly in the context of its ongoing possibility (Fernie and Metcalf, 1998; Delbridge *et al*, 1993; Bain and Taylor, 2000). The chapter considers acts from the potential for them to be classed as acts of resistance as defined in Chapter 4 and commences with an examination of individual actions that are potentially resistant. The chapter considers resistance to the technical aspects of control highlighted in Chapter 4, along with any evidence of deliberate falsification of performance monitoring data and, if present, may be linked to workers seeking to control or restrict effort expended and along with management's response to this may demonstrate an ongoing and shifting frontier of control rather

than the achievement of total control for management *via* technology. The chapter also considers the extent managers may turn a blind eye to these forms of resistance (Zuboff, 1988:334-335) or accept plausible excuses as to why performance targets have not been met, which may indicate a potential for workers to subvert management control to some extent. An example of individual resistance, that of workers absenting themselves from the workplace (Edwards and Scullion, 1982; 1984), highlighted in Chapter 4, is considered in this chapter, particularly in the context of monitoring and surveillance as discussed in chapters 3 and 7.

The chapter considers management and the extent to which they may be considered a homogeneous group with a unified and coherent strategy (Wardell, 1990; Hyman ,1987). Relevant to this is a consideration of how as individuals within this group they may have been impacted in terms of numbers, status and career paths. This is important in terms of resistance to management control as the thesis is also keen to establish if managers can also engage in acts of resistance, potentially due to identifying with the interests of those they manage, or as a result of individual interests, thus extending the dynamic from one of managers controlling and workers resisting to a more complex situation (Wardell, 1990:157). Following on from this, and also potentially of relevance to managers, is the effect ICT has had on skills and the chapter specifically seeks to link this to whether workers, or managers, could resist management control by quitting and transferring their labour to another employer. In doing this the chapter considers the debate around skills as raised in Chapter 3 and what this impact is and whether the effects have been uneven (Wilkinson, 1983:8) between those working in the Revenues and Benefits functions respectively and even if so whether any evidence exists to point a tendential aspect of deskilling (Thompson, 1989:118).

The chapter moves on to consider collective resistance, particularly through trade unions, and explores policy and resistance at the stages of design and implementation of ICT and also performance monitoring. Again, this is of importance to the study in determining who's interests and objectives are manifested within the technology (Wilkinson, 1983:21). A distinction is made in the chapter between resistance at the design and implementation stage and resistance post implementation around particular working practices, including whether pressure is applied by members on their unions. The chapter details research around industrial action in terms of its use and also how ICT may affect its effectiveness including its potential effects on union organization particularly due to any incidences of increasing geographical dispersion of workers. The chapter also considers, however, that ICT could actually be utilized by unions as a tool of resistance (Greenbaum, 1998:139).

The final consideration of this chapter relates the issues raised in Chapter 4 on potential alternative, non-technological, reasons for the absence of worker resistance, to the findings of the fieldwork. The chapter considers what the fieldwork indicates regarding the following potential explanations for the absence of resistance that may not stem directly from the properties of the technology itself. Firstly, workers may believe control exercised through ICT is fair and desirable (Challykoff and Kochan, 1989:811), secondly, ICT is progressive (Burnes *et al*, 1988:7) and should, therefore, not be challenged, and finally, there is a level of fear relating to job losses (Dyer-Witheford, 1999:196) as a result of financial cuts. Whilst the reasons listed could be seen as being facilitated by ICT it may result in a situation where it does not translate into resistance against its use

Chapter 9 is the final chapter of the thesis, bringing together the theoretical considerations from the literature with the fieldwork findings to arrive at a view of the motivation for, and use of, ICT as a tool of management control and how this has affected workers' capability to exercise resistance to this in the areas of local government being researched. Although the fieldwork was only carried out at two sites, this chapter places the findings of this research within the wider context of the local government environment raised within the literature. The findings would also indicate the areas being researched related to issues many of those participating in the research were cognizant of, and could clearly articulate their views on. Workers were often clear about how their day-to-day experiences relate to the wider issues raised, whilst managers were also clear on the motivations for seeking to control the labour process in the way they did and how this had changed over time.

Some main themes that have become apparent in the thesis are detailed in this chapter around why control of the labour process is sought within the area of the public sector researched, how this is applied through the utilization of ICT and the effect this has had on workers' attempts to resist this. An important issue is around the motivation for control of the labour process within this area of the non-profit making public sector and this is detailed. The chapter also highlights how the model of control types as advanced by Edwards (1979) can be applied to the control exercised through ICT but that the capabilities of the technology have also allowed for these types to be integrated into an overarching system of control. However, the chapter also details why the issue of control in this area should not be seen as technologically determined but is rather a matter of management choice and potentially contestation and also linked to the relationship between central and local government. This chapter also details the real and problematic effects the

development of ICT as a tool of control has on the actuality of resistance for workers seeking to counter management control of the labour process. The conclusion will, however, place this within the context of a continually shifting frontier of control.

Chapter 2 – Why Are Workers Subjected to Control?

2.1 Introduction

This chapter seeks to establish the reasons for employers to control the labour of their employees by taking a Marxist perspective of the labour process. Particular attention is paid to the work of Marx K. (1990) and Braverman (1998) and commences by exploring the human capacity for separation of the conception and execution elements of task performance. It is advanced that in this ability resides the potential for the establishment of an employment relationship between employers and employees. It is proposed this relationship is formed to meet the requirements of the employing party and explains how the potential for profit is the driving force within the capitalist mode of production. The chapter proceeds to highlight how the distinction between labour power and actual labour and also necessary and surplus labour are crucial to understanding how profit is derived from labour. The chapter also highlights how these aspects are not determined by the contract of employment which is usually indeterminate in nature. The chapter highlights the problem employers have in converting potential labour, as in labour power, into actual labour but also proposes the opportunities that may accrue to the capitalist employer if effective control of labour power can be achieved. The chapter, following the work of Braverman (1998), explains how it is not only 'productive' labour that can be exploited and controlled for profit but also 'non-productive' jobs, including all but the most senior managers. The chapter proceeds to explain the differing interest between employers and employees, and using the concept of a 'frontier of control' originally articulated by Goodrich (1975), expounds the view control is not merely accepted but can be subject to challenge and negotiation.

The chapter then examines an alternative explanation for workplace control emanating from the work of Foucault (1995). This perspective offers a more subjective view of the employment relationship as opposed to the structuralist class-based view of labour process theory previously explained. This allows for some consideration of the two positions, but the chapter concludes the Foucauldian position loses the specific character of control and resistance springing from the essentially antagonistic employment relationship. As such the Marxist Labour Process Theory (LPT) perspective clearly articulates the motive for control of the labour process. However, the work of Foucault (1995) and his discussions around surveillance and the panopticon were felt to be of interest and could be of relevance to a Marxist LPT perspective if motivated by a potential intensification of labour.

The chapter then moves on to examine the first central aim of the thesis, why, in the absence of a profit motive, control of the labour process is sought in the public sector. In doing this, the chapter moves on to explore the state in its dual role as a collection of institutions and as employers of staff. In respect of its first role, the chapter draws on the work of Miliband (1969) in proposing that the state acts as an instrument of the dominant group in society and here we are talking about capitalists. In this role it is seen to act in the interests of the capitalist class, including combatting any challenge to this group from the working class. The chapter goes on to consider the role of the state, particularly local government, as an employer. This section draws on the work of Gough (1975;1979) in establishing an explanation for the control of labour in the public sector as a component part of the capitalist system that, through control of the labour process, can directly benefit the capitalist class.

As such it dismisses the view that the state saw its role as a 'model employer' and here draws on the work of Coffey and Thornley (2009;2014) and whilst it recognizes the change in approach following the election of the Thatcher government in 1979 in terms of labour management, sees this as a continuity not a rupture. However, the chapter draws particularly on the work of Ironside and Seifert (2000) and Gill-McLure (2014) to highlight the critique of the public sector that led to a tightening of management of the labour process, and in doing so lay the foundation for the following chapter which looks in detail at the types of control and technology's role in their facilitation.

2.2 Task Conception and Execution

Prior to considering why employers would want to control the labour of others it is important to understand how one human being can employ another. Marx K. (1990) highlighted a distinction in the work humans and animals perform.

"We presuppose labour in a form in which it is an exclusively human characteristic. A spider conducts operations which resemble those of a weaver, and a bee would put many a human architect to shame by construction of its honeycomb cells. But what distinguishes the worst architect from the best of bees is that the architect builds the cell in his mind before he builds it in wax" (Marx K., 1990:284).

This highlights the point human labour is not simply instinctive but there is conception prior to any execution of a task, so by "the end of every labour process, a result emerges which had already been conceived by the worker at the beginning, hence already existed ideally" (ibid:284). Although the conception must precede, there is no reason why the execution cannot be performed by a different person to

the individual who conceived of the required result. Human beings then, possess the potential for the "unity of conception and execution [to] be dissolved" (Braverman, 1998:35). As a result, it is possible for one human being to be employed by another (ibid:35). Indeed, it is also possible to divide functions resulting in a final execution of a conception by a number of individuals who need not be aware of the final conceived result (ibid:34). This would not be possible if human labour was purely instinctual, a "spider which weaves its web in accordance with a biological urge cannot depute this function to another spider" (ibid:34).

There exists then a potential for a social relationship between an employer of human labour and an employee who performs the actual labour itself, this can be seen as a class relationship. This thesis is approaching the issue of control of labour through technology from a labour process theory perspective and it is important to state here it is not work in general terms that is of interest but rather to "locate working arrangements inside the wider system of production and class relations" (Thompson, 1989:4). Marx is clear it is the mode of production that shapes the labour process (Sakolsky, 1992:238). It is also true the distinction and ability to separate conception from execution existed prior to capitalism. Indeed, there is "an immense interval of time [that] separates the state of things in which a man brings his labour-power to the market for sale as a commodity from the situation when human labour had not cast off its first instinctive form" (Marx K. 1990:283). This is not in itself considered a sufficient explanation for control of the labour process within the state sector with its specific role within the capitalist mode of production, as considered in Section 2.5.

2.3 Labour-Power and Labour

The previous section established the potential for one human being to be employed by another. Having done this, we can now move on to consider why, when such a relationship is established within a capitalist mode of production, the employing party would wish to control the labour of the employee.

Once the employment relationship exists within the capitalist mode of production the employment of the worker sets "in motion the labor process, which, while it is in general a process for creating useful values, has now also become specifically a process for the expansion of capital, the creation of a profit" (Braverman, 1998:36). It is in the desire for profit from the capitalist employer that the motivation to employ another individual in this mode of production can be located. In determining how profit is realised from this employment relationship a number of factors need to be understood and these are also relevant when considering control of the labour process within the public sector. The first of these is the distinction between labour power and labour.

What a worker sells on the market as a commodity is not labour but *labour-power* (Braverman, 1998:37; Edwards, 1979:11). Marx K. (1990) viewed the distinction as follows, "Man himself, viewed merely as the physical existence of labour power, is a natural object, a thing, although a living conscious thing, and labour is the physical manifestation of that power" (Marx K., 1990:310). The capitalist employer purchases this labour-power on the market. This can only occur if the owner of the labour-power is prepared to sell it. To have the ability to sell this commodity on the market it is necessary for the individual to be able to dispose of it freely. In this process the seller of labour-power and the capitalist purchaser:

"meet in the market and enter into relations with each other on a footing of equality as owners of commodities, with the sole difference that one is a buyer, the other a seller; both are therefore equal in the eyes of the law. For this relation to continue, the proprietor of labour-power must always sell it for a limited period only, for if he were to sell it in a lump, once and for all, he would be selling himself, converting himself from a free man into a slave, from an owner of a commodity into a commodity" (ibid:271).

The worker's labour-power must always be treated in this way and it is handed over to the employer for a set period of time only and the ownership of it is never renounced (ibid:271).

What is purchased, therefore, is not "an agreed amount of labor, but the power to labor over an agreed period of time" (Braverman, 1998:37). For this reason, whereas when buying tools or machines that can be evaluated precisely in terms of their place in the production process, labour cannot (Braverman, 1998:39) due to the indeterminate nature of the contract of employment (King, 1990:76) and the fact it is embodied within the workers themselves (Braverman, 1998:35). This can be understood in the distinction between going to work, which is related to the capitalist's purchase of labour power, and actually working, where the labour power is transformed into actual labour. The 'cash nexus' in the form of wages does not guarantee this as it only achieves the worker's presence at the workplace (Burawoy, 1979:139).

The second aspect relevant here to an understanding to how capitalist employers realise profit is in the distinction between necessary and surplus labour. The working day can be seen to be divided into these two elements (Marx K., 1990:325).

Necessary labour is the time required to produce the goods consumed by the worker and their family for a day and necessary for their reproduction. However, the "fact that half a day's labour is necessary to keep the worker alive during 24 hours does not in any way prevent him from working a whole day" (ibid:300). The remainder comprises the latter part of the working day, surplus labour. In terms of the capitalist's exploitation rate of labour we can see this is the ratio of surplus to necessary labour. The capitalist employer only pays for the necessary labour and, therefore, the surplus labour performed is unpaid (King, 1990:187). Although the worker has achieved what was needed for their subsistence for the day during the period of necessary labour and has been paid for this, during the period of surplus labour, labour is still carried out thus producing more than it consumes (Braverman, 1998:38). However, this surplus labour does not create any value for the worker, but rather creates surplus value for the capitalist employer and is the employer's legal property (Marx K., 1990:325; Thompson, 1989:40). In effect the capitalist is obtaining more labour from the worker than is being paid in wages (Gintis, 1987:69). So, all "other things being equal, the greater the intensity of labour the more surplus value (and hence the more profit) will accrue to the capitalist, per hour of labour power which is purchased" (King, 1990:82) or equally how long the working day could be prolonged past the point where necessary labour was completed (Marx K., 1990:429).

We can see from the position articulated above, motivation for control of the capitalist labour process is located in the quest for realisation of profit. It "is the struggle for profitability that impels capital to transform and control the labour process" (Thompson, 1989:23) and needs to be understood from this viewpoint as not merely a technical issue around a mode of labour (Braverman, 1998:37). The

capitalist will "take up every means of increasing the output of labor power he has purchased when he sets it to work as labor" (ibid:38-39). This is so, as any surplus value produced belongs to the capitalist and not the supplier of labour power and as such the capitalist has an interest in directly controlling and subordinating the labour element in the production process to their objectives (Thompson, 1989:40-41). Given this, the question arises as to why an employee would enter into such a relationship? A further condition of this relationship is that the seller of labour-power, "instead of being able to sell commodities in which his labour has been objectified, must rather be *compelled* [my italics] to offer for sale as a commodity that very labour-power which exists only in his living body" (Marx K., 1990:272). In other words, the seller of labour-power only has this to sell and the only access to the means of production is therefore to sell their labour-power to others (Braverman, 1998:35-36). The answer to the question then, is a worker enters into this arrangement because of the absence of any other way to make a living (ibid:36).

The process as described above can be seen as a system in which the realization of employees as individuals with their own interests is unimportant to the capitalist (Marx K., 1990:273; Grint,1998:21) but the appropriation of surplus value is paramount (Thompson, 1989:5). Herein lies the basis for control and conflict as employers try and control and impose their will, in areas such as pace, amount, time, conditions and pay, on workers who have no direct interest in the production process (Edwards, 1979:11-13) and are therefore alienated from production (Thompson, 1989:72).

The discussion above may raise concerns about the type of labour being performed and Marx K. (1990) made a distinction between *productive* and *unproductive* labour. With this distinction a factory worker would perform productive labour but domestic

servants would not. From this perspective, only productive labour creates surplus value and unproductive workers are effectively paid from expenditure from this (King, 1990:189). When looking at employers and the motivations for them attempting to control the labour process this may become an interesting point to consider. Whilst the discussion above may indeed appear to be only of relevance to material production in that the result of labour is "that a tangible, vendible object takes shape as a commodity" (Braverman, 1998:248), Braverman (1998) came to the view that the fact a person's labour does not result in a material object only means the person's labour is directly provided to the consumer resulting in a simultaneous occurrence of production and consumption. What happens in this case is "the useful effects of labor themselves become the commodity" (ibid:248). If this labour is not supplied directly to the user but is sold to a capitalist who re-sells it in the market, we have a "capitalist form of production in the field of services" (ibid:248). We can see in specific circumstances the labour of a worker in the service sector can be equally exploited within the capitalist system. Indeed, in terms of the modern capitalist system this form of labour that may have been considered unproductive is not seen in such pejorative terms, "but is rather, since it has been developed as a prime sense of profit, celebrated" (ibid:252). Ultimately then, as far as the capitalist is concerned it is not what a worker actually does that is of importance but the production of value and surplus value (ibid:284).

In the early capitalist system, according to Braverman (1998), "unproductive labor employed in small quantities was generally speaking a favoured stratum, closely associated with the employer and the recipient of special privileges" (Braverman, 1998:288). In this group could be included those who performed functions for the capitalist such as sales and accounts who were employed to guard and expand the

capitalist's capital and "were in fact associates in the exploitation of productive workers, even if they themselves were only employees" (ibid:288). Braverman (1998) citing Marx K., made the distinction that due to the privileges this stratum of unproductive workers had, it was the productive workers in comparison who were the unfortunate ones (ibid:289). However, as capitalism has developed, these unproductive workers have expanded in numbers into divisions and departments within corporations and apart from those at the head of these, now "occupy positions" akin to those workers in production" (ibid:289). This situation is particularly pertinent to this thesis in terms of control of workers and the extent to which management can be seen as a homogenous entity or as a group having contrary interests to the employer (Wardell, 1990:157; Hyman, 1987:28). In effect, workers in whatever category were wage workers (Braverman, 1998:290). However, Braverman (1998:280) was clear those executives in high managerial positions, even though on the payroll, "are the rulers of industry [...] and are themselves part of the class that personifies capital and employs labor". The power "of management is not ownership as such but organisation" (Flanders, 1970:135).

We have seen employers pursue profit and the employee's interests are not part of any consideration within this process. It is therefore an antagonistic relationship in which workers may not voluntarily give of their best and hence the need for control of the labour process (Wilson, 1988:66-67). The idea of a 'frontier of control' advanced by Goodrich (1975) in the 1920s is felt to be useful in conceptualizing this structured antagonism. This frontier is fundamentally a matter of power relations within the workplace with management and workers potentially ceding a degree of control to the other depending on the cost and sanctions that can be applied by either (Batstone, 1988:223). It should also be noted here that power relations within

the management structure itself with managers seeking to further their own individual or sectional interests may make this a more complex dynamic (Hyman, 1987:28). The frontier of control can be seen to be "a fluid and imprecise borderline between workshop autonomy and managerial control" (Hyman, 1975b:viii). This moves the debate on from a situation where managers control, to one of a contested line "shaped by the interaction between employer strategies and the particular strategies followed by workers" (Edwards and Scullion, 1982:273).

The concept points to a line that, with conflicting interests, is not finally settled even with better wages and conditions but can be drawn at a particular time by such things as collective agreements, policies, rules and customary arrangements (Goodrich, 1975:56). It is then, "neither static nor unidimensional" (Edwards and Scullion, 1982:63). This 'frontier of control' has shifted and will continue to shift as long as worker resistance remains possible, influenced by market forces and other external pressures, such as legislation and government policy, but also as a result of struggle at the point of production (Edwards, 1990:144; Friedman, 1990:204; Batstone, 1988:224). For the purposes of this thesis it is also important to be aware of the potential technology has in terms of it affecting workers ability to resist management control, either positively or negatively, and therefore, how it affects the frontier of control (Batstone, 1988:228).

2.4 An Alternative Explanation

Other perspectives, most prominently, the Foucauldian view have advanced criticisms of the Marxist labour process theory, that subjective aspects of the social relations in the workplace have been underplayed (Ackroyd and Thompson, 1999:160). From this perspective, the position advanced within LPT is seen as

overly reductionist, simplistic and narrow, reducing "the complexity of social life into a polarisation where the 'free', expressive and creative actions of voluntary subjects are seen to be struggling against, or determined by [...] oppressive forces" (Knights, 1990:297). The Foucauldian view shifts the emphasis as advanced by the Marxist perspective "from structural class-based analysis of power" (Spicer and Bohm, 2007:1670) where the labour process is determined by the mode of production (Sakolsky,1992:237-238) and which sees "economic class antagonisms" as the basis of control and resistance (Spicer and Bohm,2007:1670) to a position where the application of disciplinary technology is part of a wider system than the workplace (Martinez, 2011:202) and is "destined to spread throughout the social body" (Foucault, 1995:207), being embraced by institutions and organizations such as schools, hospitals, factories, and a range of other institutions (Martinez, 2011:202).

Hassard et al (2001:347) cited Knights (1990) and Willmott (1990) as writers from a Foucauldian perspective who saw the dominant aspect of the labour process as power rather than exploitation. From this perspective, "power is never monolithic, rather it is polyvalent and dispersed" (Sakolsky, 1992:236). Capitalism from this viewpoint is a "site" rather than the "source" of power (ibid:236). Foucault does not deny these technologies of disciplinary power are used by capital but that should not mean they should all be reduced to the mode of production (ibid:248). From this perspective capitalism could only happen because the "human body was already implicated in a network of power relations which both disciplined its unruly forces and increased its capacity for controlled productivity" (McNay, 1994:92). However, as Ackroyd and Thompson point out, from this perspective the workplace is treated "as just another terrain" (1999:164) whereas it needs to be understood "there are

conditions and struggles specific to the labour process and the employment relationship" (ibid:164). The workplace *is* based on the employment relationship in a capitalist mode of production. It is not simply another place where disciplinary power is exercised with a view to creating docile and obedient subjects but is focused on making a profit (Bain and Taylor, 2000:5).

Even though power may not always simply be exercised through "techniques of repression or ideological inculcation but also through less visible strategies of normalization" (McNay, 1994:105), if the workplace is treated in the same fashion as disciplinary practices employed in institutions such as prisons "the specific character of employment relations in a capitalist society is lost" (Thompson and Ackroyd, 1995:625). It also needs to be stated that where the relationship between employers and labour can be examined at the micro-level in terms of individual accommodation and consent, it is still within the context of a productive system based on the exploitation of labour by capital. However, this Foucauldian view is not necessarily a total rejection of the Marxist position (Schwan and Shapiro, 2011:39). In Foucault's (1995) view, "as a force of production [...] the body becomes a useful force only if it is both a productive body and a subjected body" (Foucault, 1995:26). It has been suggested the debate around the labour process issue discussed here has become bogged down in arguments around hypotheses rather than the divergent views accepting the position that the workplace in capitalist societies are places of contest between capital and labour (Lewis, 2007:400). Surveillance, which as a management tool for achieving control is considered in the next chapter, and the idea of the panopticon which is a central concept in the Foucauldian perspective, in the view of this thesis still makes sense from a Marxist LPT perspective of employers seeking to gain control of the labour process. An employer seeking to

gain a more effective exploitation of labour, leading to greater profits, is in itself an adequate explanation for the existence of workplace domination of workers by employers (Hassard *et al*, 2001:347). However, it may also be fruitful to recognize ideas from the Foucauldian "branch of LPT can further guide exploration of the relationship of macro-level processes and local-level perceptions" (Nord and Doherty, 1996:208).

In conclusion, the position taken in this thesis, whilst recognizing the issues discussed above, can be stated as:

"core LPT holds that capitalist labour processes are characterized by capital's need to control labour; a logic of accumulation that impels refinement in technology and administration; a fundamental structured antagonism between capital and labour; and because it is the place where labour is valorized, the labour process, the point of production, is privileged for analysis" (Jaros, 2010:71)

This is felt to be an adequate explanation for the motivation of employers to control the labour of their employees within a capitalist mode of production. Having accepted the privileged status of the workplace as the site of control within the capitalist labour process the thesis moves on to examine how this may be applied to labour carried out in the public sector by examining the role of the state within a capitalist system and as an employer in its own right.

2.5 The State

We have seen in the previous sections an explanation advanced as to the motivation for the control of labour from a Marxist perspective and why this is seen as a more appropriate explanation when considering the workplace than the Foucauldian view.

The view has also been advanced that in the act of employing a person, the employer, in pursuing the greatest benefit from this relationship, seeks to control the labour process. Within a capitalist mode of production, the drive for profit has been put forward as the reason for employers of labour seeking to control the labour process. However, as this thesis is considering the control of workers within the public sector this explanation may be problematic. As public sector organizations are not profit making, there needs to be some analysis of the motivation for control by examining the role of the state. It should be noted whilst this form of labour may be categorized as unproductive, it does form a significant part of employment in the UK economy (Gough, 1979:82). In examining the role of the state, we look at how it operates from two angles. Firstly, how does the state act in its relationship to the capitalist mode of production and what relevance does this have for public sector employment. Secondly, and importantly for this thesis, how the state acts in its role as an employer and why it may have adopted practices of control over its employees in the same or similar ways to the private sector.

2.5.1 The Role of the State in Capitalist Society

In defining the state, we can say it can be viewed "in terms of the 'idea' of rule; a set of *public institutions* — government, parliament, armed forces, judiciary, administration; and a set of *public functions* — law making, maintaining order and security" (McGrew, 1992:68). Government is not the state but operates in "the name of the state and is formally invested with state power" (Miliband, 1969:47). However, this does not mean it necessarily controls that power (ibid:47). The state has been seen by some as a neutral actor in its relations between employers and labour within the capitalist mode of production. However, this view is mistaken (Wedderburn, 1995:32), as in practice the "state has historically served class interests" (Hyman,

1975a:121), and is rooted in the economic base (Carnoy, 1984:95). Institutions of the state support the dominant class in the social order and where necessary, suppress "acts of resistance and revolt by subordinate classes" (Hyman, 1975a:121). Some writers view the state as an entity used by the dominant class in society and from this perspective can be seen as an instrument of control (Miliband, 1969:23) although this has been highlighted as problematic by writers such as Jessop (1990) pointing to how this essentially indicates neutrality and having the capacity to be used "by any class or social force" (Jessop, 1990:27) and also encounters difficulties "where the economically dominant class does not actually fill the key positions in the state apparatus" (ibid:27). This potentially instrumental aspect of the state, however, can be seen to historically pre-date capitalism, for example the legal sanctioning of slavery (Craton *et al*, 1976). In other words, the state appears to act to support the currently existing dominant class.

Where there are forms of democratic processes within the state this should not be read as control exercised from below. From this perspective, the electoral system in place in the UK, whilst appearing to place power in the hands of the people, is in effect a tool used by the ruling class to maintain control while at the same time legitimating the capitalist system with its superficially democratic nature (Miliband, 1982:28;38). It should also be noted, elected representatives can act in a largely autonomous fashion once elected and therefore the electorate assume an inactive role between elections. Hyman notes a correspondence between this and "the managerial structure of control in the capitalist enterprise" (Hyman, 1975a:123). Even where, historically, there has been a tri-partite system in place between capital, labour and government, it should not be assumed this indicates neutrality on the part of the state. In essence, the co-option of powerful elements of labour is

in reality "the state [in] acting on behalf of capital, appreciates the real power of the labour movement and seeks to harness this power in the ultimate interests of the capitalist class" (Gough, 1979:147).

The history of nations with a capitalist mode of production show even where governments have been elected under a socialist banner, they have never challenged the capitalist system and so there has been a de facto acceptance of the capitalist order (Miliband, 1969:65). Citing Lynd, Miliband (1969) makes the point that democracy "has never dared face the fact that industrial capitalism is an intensely coercive form of organisation of society that cumulatively constrains men and all of their institutions to work the will of the minority who hold and wield economic power" (ibid:68). Governments do have power but "given the degree of economic power which rests in the 'business community' [...] any government with serious pretensions to radical reform must either seek to appropriate that power or find its room for radical action rigidly circumscribed by the requirements of business confidence" (ibid:137). The first option has never been taken up by Western governments (ibid:137). As an example, if we look at the election of a Labour government in 1945, whilst there may have been a public call for a radical transformation of society, in effect the response was measured and put in place by the more moderate wing of the Labour Party with consensus from the Conservative Party as a means of conceding only enough, whilst leaving in place a broad acceptance of free enterprise (Miliband, 1982:34). The setting up of the welfare state in this sense should not be seen in any way as a replacement for a capitalist system and rather it had become a component of modern capitalist society (Gough, 1979:1-3).

In societies where the capitalist class is dominant, state policy will be oriented towards providing the economic conditions to enable the capitalist economy to exist in a stable environment (Hyman, 1975a:125). From a Marxist perspective, the state exercises its coercive power to guarantee "social relations of production which are inherently repressive, adding the sanction of law to management prerogatives, forcibly resisting working-class challenges to the social order" (ibid:126). However, as well as the coercive function there is also the hegemonic nature of the capitalist state achieved by the "social, cultural and ideological dominance of a social group" (ibid:127) and relevant here is the state's involvement in education, both in acting on individuals to subjugate them to the dominant ideology and also to equip them with the skills required by the capitalist class (Carnoy, 1984:94). We see then a role for the state in developing "consent given by the great masses of the population to the general direction imposed on social life by the dominant fundamental group" (Hyman, 1975a:127). It is important to note those who will go on to work in the public sector are also subject to this educational process (Carnoy, 1984:94). The view has been encouraged that the national interest is served by the efficient functioning of the capitalist system and in this sense, we can see why the state would side with business rather than labour (Miliband, 1969:69). This means even where economic or social problems would point to policy requirements opposing the interests of capital, these are unlikely to be forthcoming (ibid:71).

It is also the case we are not talking here solely about the capitalist class within the geographical boundaries of the state itself. There is also a requirement for the state to take account of the external pressures from global capital and its firms and institutions, as capitalism is international in nature. As such, not only internal considerations are of importance to the office holders of the state and these in

themselves may actually become subordinate to the global interests of international capital (Miliband, 1969:137-138).

From this instrumentalist perspective the state intervenes in the economy principally to aid capitalist interests (Miliband, 1969:72). The state does get involved in disputes between employers and labour but not from a neutral position. In industrial relations terms, the coercive power of the state is more often used against workers, for example, through strike breaking and incomes policies. The state may appear neutral in that workers may be granted rights but these are often intended to individualize workers thus lessening the likelihood of any class struggle (Carnoy, 1984:99:116). Thus, the state actively seeks to hinder the effectiveness of organised labour (Miliband, 1969:74; Wedderburn, 1995:200) and this is a crucial point in that it is the state that has acted to detach workers from the wider class struggle as a result of this process of individualization (Carnoy, 1984:99). Ultimately the state has ensured "law displaces the class struggle from the economic to the political arena" (ibid:118) and therefore, designates where the struggle may legitimately take place. As a result of this we can see labour is placed in a weaker position than capital because of greater state support for the latter (Miliband, 1969:75). Workers' struggles culminating in victories, for example in nineteenth century acts limiting the working day, may well be opposed by individual capitalists, but in this example reducing the sheer exhaustion of the labour force had benefits for capitalism overall (Gough, 1979:55). Individual capitalists may have opposed this, seeing it as a brake on their attempts to intensify the labour of workers. The state then, can be seen to act in the overall interests of capital in organizing it as a "power bloc" and not necessarily in the interests of individual capitalists, whilst simultaneously acting to disorganize labour (Hall, 2000:ix). Poulantzas (2000) also put forward this less instrumentalist view, arguing the state "is rather the strategic site of organization of the dominant class in its relationship to the dominated classes" (Poulantzas, 2000:148). Whether an instrumental view, as advanced by Miliband (1969) or a more structural view posited by Poulantzas (2000) is correct we can see the state is not neutral in terms of its support for the capitalist class and system. This includes how it deals with its own employees and it is to this employment relationship we now turn.

2.5.2 The State as Employer

This section considers why, given the absence of the profit motive, workers in the public sector are also subject to management control. It highlights changes in management of the public sector from 1979 onwards but places this in a context of continuity in terms of labour management within the sector. It also pays attention to the complex dynamic existing in this sector where, additional to the employer and worker, there is also the issue of central government priorities and policies to consider. The section shows there is a clear imperative for the labour process to be controlled in the public sector that may result in benefits within the capitalist sector itself.

Section 2.3 raised the discussion around productive and unproductive labour, with only the former producing surplus value (Marx K., 1990; King, 1990). This raises the question as to why labour is controlled within the public sector where workers in a Marxist sense are classified as unproductive as they are not employed by capital and therefore do not produce surplus value (Gough, 1979:104; Braverman, 1998:285). Local government can be seen as a "mechanism for effective administration and the delivery of services" (Byrne, 2000:156) and as such

management control of workers appointed to deliver these services (Fredman and Morris, 1989:29) can be understood for this reason in itself. However, a further motivation can be seen as whilst the services provided by the state are not necessarily purchased by individuals, they may be seen to "contribute to the daily and generational reproduction of the working class" (Gough, 1979:117) or necessary labour as detailed in Section 2.3 (Marx K., 1990:325). As such when calculating the labour necessary to reproduce workers and their families, labour from both the private *and* public sectors need to be included (Gough, 1979:117). This can be seen as relevant to the welfare state but we also see state provision of infrastructure with "public projects and services that increase the productivity of labour" (Gough, 1979:51) thereby benefitting the private sector.

The cost of the public sector is paid for by taxation produced within the capitalist sector, and there is a view, therefore, the higher the cost of labour within the public sector the lower the surplus value available to the productive sector (Gough, 1975:82). Gough (1979:119) addresses this argument by advancing the position that workers in the public sector will perform surplus labour. The service that is provided by the public sector, therefore, is what is paid for by taxation *plus* unpaid surplus labour performed by public sector workers. As such, any increases in productivity within the public sector benefit the capitalist sector due to a net flow from the public to private sectors if surplus labour is performed. This leads to a decreased tax requirement on capital and workers for the supply of necessary labour performed by the public sector, with the latter meaning a reduction in pre-tax wages is possible, with capital then able to appropriate a greater amount of surplus labour (Gough, 1975:83). The previous section detailed the state's role in defending and promoting the interests of the capitalist class (Hyman, 1975a:121) and therefore

there is a clear interest in it seeking to control the labour process within the public sector. As Harvey and Hood stated, writing in 1958, "for the last hundred years the struggle has been one of trying to get the local authorities to be *efficient* [my italics] servants of the capitalist class" (Harvey and Hood, 1958:242). Related to this is "labor processes subjected to mechanization release masses of labor for exploitation in other, generally less mechanized, areas of capital accumulation" (Braverman, 1998:265) leading to the depressing of wage rates in these areas (ibid:265). This can be seen as relevant to labour employed within the public as well as private sectors and is particularly relevant when considering the adoption of ICT within the areas researched.

Whilst workers in local government are employed by individual local authorities with potentially different political objectives there exists a central-local dynamic that influences labour management in this area (Gill-McLure, 2014). We have seen in the previous section the state plays a role in the maintenance of the capitalist system and in terms of local government we can see at work "two contradictory tendencies: an urgent need for a local state *and* an equally urgent need to ensure that the local state act[s] ultimately in the interests of the central administration" (ibid:367). Ultimately this means in the area of labour control the desires of the actual employer may be secondary to the central imperative due to the importance of the public sector because of its size and the impact it exerts over the whole economy (Allen, 1960:88) and therefore we have seen opposition whenever local authorities have sought to become servants of the working class rather than of the capitalist class (Harvey and Hood, 1958:242). A historical example of this can be seen following the First World War when left-wing councillors in coalition with local unions attempted to increase low wages. When this was attempted by the London Borough of Poplar,

a council decision to implement a minimum wage for its employees was overturned by the House of Lords (Gill-McLure, 2014:371). When we consider, even following austerity measures, local government accounts for over a quarter of public spending and of this, 70% is taken by labour costs, we can understand the "central imperative to control labour management" (ibid:370) in line with the benefits to capital of increasing productivity within the sector. An example of this is that a "central aim of the 1974 local government reorganisation was the reform of labour management along private sector lines" (ibid:370). We can see in local government the control and resistance dialectic is not limited to employer and employee but intertwined with this is a central-local dynamic with local authorities always being susceptible to the priorities of central government (Gill-McLure, 2014:378; Ironside and Seifert, 2000:43).

Whilst writers such as Fredman and Morris (1989:1) have proposed the government perceived its own role as being a model employer with the rationale of providing an example for the private sector to follow (ibid:10) until the election of the Conservative government in 1979 (ibid:11), this thesis does not accept this view. The previous paragraph highlights the problems individual local authorities may have if they intended to operate as a model employer. Writing in the late nineteenth century the Webbs (1897), indicated little difference between the public and private sectors in terms of concentrating on lowering the "expense of production" (Webb and Webb, 1897:819). Miliband (1969) believed the public sector was managed in a business-like fashion and so could not be expected to lead to new standards in employment (Miliband, 1969:74). It would appear then any sense of the public sector being a 'model employer' is rhetorical rather than real (Coffey and Thornley, 2009:93). We can see actual historical examples that would also lead to this conclusion. NALGO

(National and Local Government Officers Association) was formed in 1905 (Ironside and Seifert, 2000:36) in response to the situation where the "vast majority of workers [in local government] were low paid clerks [...] subject to the tyranny of the town clerk" (ibid:37). In 1908 the local authority at East Ham sacked 22 workers and reduced the pay and increased the hours of those remaining (ibid:38). Around this time a borough accountant at Paddington cited by Spoor (1967) opined that "when 'economy' was in the municipal air, attack was always directed first at the officer and his salary" (Spoor, 1967:26).

Whilst NALGO persuaded the National Whitley Council to adopt equal pay into the first national pay scales achieved in 1945, unequal pay persisted (ibid:470-472). Whether national level collective bargaining was used in determining wages was largely dependent on the strength of labour in terms of its bargaining position (Coffey and Thornley, 2009:94). By the 1960s, economic problems led the government to seek pay restraint within the public sector and attention was focussed on controlling public sector pay and performance (Gill-McLure, 2014:371-372) and during this period, as earlier, the public sector was used to set an example to the private sector (Coffey and Thornley, 2009:99-100). During the period of the 1960s and 1970s we see increasing militancy of public sector workers including the professional bureaucrats (Gill-McLure, 2014:372). On a particular day in January 1979, 1.5 million public sector workers were on strike (Coffey and Thornley, 2014:203). Historically, any concessions granted by the state were generally as a result of struggle by workers and unions and not the gift of a beneficent 'model employer' (ibid:202). Many aspects attributed to the Thatcher government as novel, such as cash limits and hostility to trade unions and collective bargaining were actually not new (ibid:204) but can be seen to be consistent with the role of the state in promoting

and defending the interests of the capitalist class. The foregoing does not seek to be a comprehensive history of labour management and relations in the public sector but does provide examples that would support the view there has not been a disjuncture from what was previously a 'model employer' following the election of the Conservative government in 1979, but rather we are seeing a continuity of objectives (ibid:204).

Whilst this thesis rejects the view of a fundamental shift in the public sector moving from a pre-Thatcherite 'model employer' (Coffey and Thornley, 2014), governments from the late 1970s on clearly critiqued public services as a sector where the interests of the producers, the staff, came before the interests of the consumer (Kirkpatrick and Martinez Lucio, 1995:8). These ideological critiques led to:

"a programme to tackle the perceived problems of British capitalism buoyed up by the rhetoric of laissez-faire free market economics. Private enterprise powered by the motor of profit, was viewed both as the sole source of wealth and as the best means of distributing that wealth throughout the population. Public spending was consequently seen as a drain on wealth creation." (Thornley et al, 2000:140)

Managers within local government, mainly consisting of professional bureaucrats, had also become increasingly militant and "were thus seen increasingly as part of the *labour problem* (that is to say, the problem of controlling pay, productivity and politicisation) rather than as a solution to it" (Gill-McLure, 2014:372).

The solution to these issues from the government perspective was the adoption of New Public Management (NPM) which, although often definitionally ambiguous (Pollitt, 2007:110), is used here to signify policies that shifts the "focus from

processes to targeted outcomes" (Seifert, 2018:111) by way of introducing market type mechanisms of competition through competitive tendering; moving away from national terms and conditions and job security; adoption of flatter organizational structures; and an increased focus on performance by measurement of outputs (Pollitt, 2007:110; Gill-McLure, 2014:373), to curtail the powers of local councillors and staff in challenging central government (Gill-McLure, 2014:373).

The profit motive in the private sector, explains its drive for efficiency. Whilst this section has posited why increased efficiency is sought, there is no equivalent indicator in the public sector (Ironside and Seifert, 2001:2), resulting in the government requirement for public sector organizations to produce performance indicators to measure performance against the set targets and objectives of service delivery (Ironside and Seifert, 2001:3; Pollitt, 1990:112). Thus, reforms to the public sector have sought to "emulate [the private sector] through the introductions of mechanisms that mimic private sector competition" (Ironside and Seifert, 2001:2). Performance indicators also formed part of New Labour's modernization agenda, with the aim of raising the level of effectiveness of management within the public sector by way of measurement and increased control of workers (Hewison, 2002:556-557; Martinez Lucio and MacKenzie, 1999:156). This has led to a proliferation of performance indicators, measurement and associated inspection regimes across the public sector (Kurunmaki and Miller, 2006:97; Martinez Lucio and MacKenzie, 1999:164-165).

The labour process in the state sector is different from the capitalist sector "given that the *raison d'etre* is the provision of social needs, it is defined through political relations with the state rather than competition in the market" (Thompson, 1990:110). The labour process within areas where management followed a

professional-bureaucratic line could be seen as delivering a "rational administration of bureaucratic systems, and professional expertise in control over the content of services" (Harris, 1998:843) and this difference is precisely why the Conservatives used reduction in cash, performance indicators and privatization to drive change (Thompson, 1990:110). As a result of this, labour management practices in the public sector have been changed to be more akin to practices used in the private sector by the introduction of competition and regulation (Ironside and Seifert, 2001:3). Managers in the public sector have become:

"locked into a system that requires them both to minimise the cost of the workforce, and to maximise the effort of the workforce devoted to hitting performance-targets – they must manage labour as if they are running a profit-seeking private business" (Ironside and Seifert, 2001:4).

In essence, we see central government seeking to ensure managers in the public sector behave in a way that will maximise surplus labour performed.

The performance targets and indicators are underpinned by a regime of regulations and audits (Gill *et al.*, 2003:261). Some writers have claimed these developments led to changes in the management of labour within the public sector that were Taylorist or neo-Taylorist in nature (Gill *et al.*, 2003:262; Bolton, 2004:318; Pollitt, 1990:168-169). In a practical sense this has meant using ICT as a means of achieving an:

"emphasis on performance management, supported by an array of management information-gathering techniques through computers, video cameras and generally tighter supervision. The search for 'best practice' smacks of the worst forms of scientific management, as service delivery

becomes a set of technical issues driven by the stopwatch and the performance indicator rather than as a set of social, political and economic issues involving human beings" (Thornley et al, 2000:152).

We can also see the development of a clearer division in conception and execution (Martinez Lucio and MacKenzie, 1999:165) where "what is new for the public services is a more rigid division of labour between those who decide how, when, and where work is done, and those who do the work" (Ironside and Seifert, 2001:12). We can see here a specific link between the development of work within the public services and the earlier discussion around the separation of conception and execution facilitating a greater control of the labour process. In effect we have seen a policy push, whereby the desired improvement of quality in public service delivery is linked to increased managerial control (Kirkpatrick and Martinez Lucio, 1995:8). We can see, therefore, a developing congruence between labour management practices in the private and public sectors with employment becoming "increasingly routine and controlled" (Martinez Lucio and MacKenzie, 1999:165). However, this is not to say private sector management techniques were unknown in the public sector, where according to Gough (1979:166) we have often seen the application of private sector management techniques and the influence of the dominant capitalist mode of production within this sector.

The discussion above has shown public sector workers are also subject to control and why this is the case, namely an increase in surplus labour within the public sector is of benefit to the capitalist class. As such, this thesis takes the position that "the defining quality of being a worker is not being exploited for profit but having to sell your labour power" (Seifert, 2018:107). As such, a labour process approach is appropriate as it highlights "the degradation of professional work under this regime,

pointing to the deskilling associated with tightening performance management systems and increasingly centralised managerial control over work organisation" (Bach and Kessler, 2012:13). This should be seen as a historically ongoing process.

2.6 Conclusion

In explaining a motive for the control of labour, this chapter starts from a Marxist perspective in explaining how, because of the human capacity to separate task conception from execution, it is possible for one human being to be employed by another. It has proposed the reason for this employment is to satisfy a specific objective of the employer. In the capitalist mode of production, the employment relationship is entered into with the expectation the employer will generate profit from the labour of the employee and the chapter put forward the following explanation as to how this is achieved. Two main factors were identified in this process. Firstly, the chapter explained the distinction between labour power and labour. The capitalist purchases the former which is sold by the worker on the market for a set period of time. The distinction between the labour power purchased and actual labour is important as once the worker attends work the employer needs to convert the former into the required amount of the latter. The second aspect is the distinction between necessary and surplus labour. Necessary labour is the amount of labour required for the worker to achieve the required level of subsistence. This is the labour the capitalist pays for. However, the worker continues to work after this period as surplus labour. It is important to note this surplus labour creates no value for the worker, the surplus value created belonging to the capitalist employer as profit.

It could be asked, given the above as to why workers would enter into such an arrangement. In effect workers have no other means to earn a living and only have their labour to sell. The contract of employment is generally indeterminate as far as the intensity of effort is concerned and this is, therefore, why the employer seeks to control the labour process. We can see here the different interests between employer and worker and this means the issue of labour control is neither simple or uncontested and within the employment relationship we can see a 'frontier of control' that shifts according to the relative strength of capital and labour (Hughes *et al*, 2018:2). The chapter has also advanced the position that the above argument does not only apply to labour where physical marketable products are the result. Here the work of Braverman (1998) detailed how 'unproductive' workers, those who do not produce these marketable products, are included in the analysis. In effect their labour can also be exploited by the capitalist in the pursuit of profit. This includes managers at all but the most senior level.

Whilst, as has been stated, this thesis takes a Marxist labour process view in establishing a motive for control of labour, the Foucauldian perspective, was also considered and whilst in general dismissed, provided some potentially useful insights. The Foucauldian view focusses on the subjective aspects of employment rather than accepting what is seen as the overly deterministic structural class-based analysis of the mode of production. The view from this perspective is it is power not exploitation that is the dominant quality in the employment relationship. This power may be used by capital but it cannot be reduced to the mode of production. From this point of view this power to discipline the recalcitrant is why capitalism exists rather than the motivation to control springing from capitalism itself. This thesis does not accept the view the workplace is just another site of power but rather, a place

where *specific* struggles occur due to the employment relationship and the structured antagonism springing from it. However, it has been noted and accepted Foucault was not totally dismissive of the Marxist position and accepted discipline was required to make the individual worker productive. The chapter also noted the centrality of the idea of surveillance and the panopticon in Foucault's thinking and advanced the position that as a technological tool of control this would potentially lead to an intensification of labour and therefore, fits within a Marxist perspective of the labour process. The Foucauldian view may also have some value in ensuring structural forces are considered from the way they play out at a local level.

The chapter has advanced the view that the motivation for control of the labour process within the capitalist mode of production can be explained by the drive for profit. However, this thesis is examining control within local government where no such profit motive exists and so attention was turned to the role of the state, including crucially, as an employer of labour itself. However, the explanation here firmly located the basis for labour control in the public sector due to its role within, and as a component of, a capitalist system, where although not subject to a profit motive itself could be seen to be beneficial to the capitalist class overall.

The state from a Marxist perspective is not impartial but serves the interests of the dominant class. Even governments coming from a left-wing perspective have, in the UK, accepted the notion of free enterprise. The state plays a coercive role in ensuring any working-class challenge to the dominant class is resisted. Along with these coercive aspects it is also the case it has a role in maintaining the hegemonic status of the capitalist mode of production by promoting a cultural and social backing for this. Included in this is the education system which public sector workers are also exposed to. Whether, as some have believed, the state is an instrument for those in

the dominant class to use or whether it is more structural in providing a more strategic support for the interests of the capitalist class in general, either way it can be seen to defend capital over the interests of labour.

Workers within the public sector are subject to management control in order to ensure the effective administration of services. The chapter has also posited, largely by utilizing the work of Gough (1975;1979), a further reason behind this control. The state sector needs to be recognized as being an element of a capitalist system. Workers in the public sector provide services that can be seen to contribute towards both greater productivity within the private sector and the reproduction of the working class. Whilst this is paid for from taxation extracted from capital and labour, workers in the public sector can and do perform surplus labour meaning the services provided are greater than that paid for in taxation. This ultimately results in a benefit to the capitalist class where any increase in the productivity of the public sector leads to a potentially greater appropriation of surplus labour by capitalists within the private sector. Employees within local government, although employed by individual local authorities, may often find, regardless of any motives of their employers, their employment conditions largely determined by central government policy in seeking to maintain or increase productivity in the public sector for the reasons detailed above. The employment dynamic in this sector is, therefore, more complex than with a simple employer/employee relationship.

This thesis resists the 'model employer' view of local government and historical examples have been provided to highlight the fallacy of this position. Even where local authorities may wish to follow such a model there are examples of central government blocking such initiatives and again this can be understood by the explanation regarding the benefits of increased public sector productivity within the

private sector. It also needs to be recognized workers within the public and private sector are not hermetic and there is movement between the two sectors. Given the points made regarding the imperative for control within the public sector it would be unlikely for employees to be treated significantly more favourably than those in the private sector. However, it is also clear there was a highly unfavourable critique of the public sector from governments from the 1979 Thatcher government onwards. This led to the adoption of techniques from NPM such as privatization, including through CCT, a clearer focus on performance by way of targets and performance indicators. As part of this we can see the importation of private sector management techniques and an increased focus on management control of labour assisted by the adoption of ICT. As such we can see management of labour in the public sector is increasingly akin to the profit-making private sector. The position advanced by this thesis is it is the fact of being an employee that such control is applied, given there is a clear motivation from the viewpoint of the capitalist class to increase productivity in both sectors. The labour process, including the control of workers, will reflect the objectives of the management, including where external pressure may have been instrumental in shaping these, and as such may have been seen to have changed in the areas under research over time. The research considers the extent to which technology has played a role in this within local government, whether by facilitation or implementation for this purpose.

Chapter 3 – Forms of Control and Delivery Through ICT Systems

3.1 Introduction

Following on from the previous chapter that examined the reason employers would seek to control the labour process, including the relevance of this for the public sector, we now move on to discuss the literature around the second main theme of the thesis, namely how this is pursued in terms of the forms this may take and how this affects the design, implementation and use of ICT systems.

The chapter commences by drawing on the work of Edwards (1979) with an examination of different forms of control applicable to the workplace. Firstly, is what could be termed simple control. This form of control is utilized in situations where the owner of a business, or a small group of employed managers, directly and personally control the workforce. The chapter considers the applicability of this form of control, particularly from the point of view of large-scale organizations such as the ones being researched. It is acknowledged there are problems in employing this form of personal control with a large workforce delivering complex products or services, particularly around the expansion of the supervisory function required for a large number of employees. As such, different structural forms of control, namely technical and bureaucratic may be implemented. The former, initially felt to be applicable only to production jobs, is considered in terms of how control may be sought through the physical and technological settings of the organization. The chapter considers how organizational rules may be embedded within the machinery utilized by the organization, thus limiting or removing the autonomy workers may have had prior to this method. The second structural form of control, bureaucratic, is considered, particularly as advanced as a means that was developed due to the

inapplicability of technical control for non-production jobs. The chapter considers the way organizational rules and policies are formally adopted, hence making this a structural rather than personal form of control. The final form of control considered is where management seek to foster the consent, cooperation and participation of workers. It considers this in the context of whether this form would be sought by managers if technology alone could perfect control.

The chapter moves on to discuss issues around the design and implementation of ICT systems. Of interest is why ICT is designed in the way it is. It argues technology is not deterministic but is designed with the interests of the dominant group in mind. This is not to necessarily say this is done without challenge, and the chapter examines the issue around the extent to which outcomes in design, implementation and use are negotiated and contested between and within groups. Following consideration of the design and implementation phase the chapter goes on to consider how the ICT systems are used in respect of the control imperative in practice. The first aspect considered is monitoring and surveillance and the extent to which ICT systems have achieved the implementation of an electronic panopticon. It considers the effect this may have on the management of the labour process from both the point of view of the workers subject to it and managers, who as well as administering this form of control also appear to be increasingly subjected to this. Monitoring and surveillance in the workplace is also considered in a historical context, including the role technology has played in this and the extent to which ICT may have improved the effectiveness of such methods.

Technical control has been seen as a means of controlling labour through the technology of production. The chapter considers the potential that ICT provides in extending this form of control from production to non-production jobs through the

embedding of rules and regulations into the systems used. The issue of the impact this may have on skills and how this may affect control is also considered here. The final aspect of control considered, in terms of ICT facilitation, is bureaucratic control implemented through peripheral systems, that whilst not involved in the delivery of the actual product or service, do contain personnel policies and organizational rules, such as attendance and timekeeping management and performance targets and norms. These systems then integrate with other systems in allowing management to make judgements on behaviour and performance. The chapter shows the adoption of the forms of control discussed do not happen exclusively, but it is the extent to which ICT systems can integrate effectively these forms that is of interest when we move onto the next chapter on resistance.

3.2 Simple Control

The first type of control considered is control in its simple form. Edwards (1979) put forward the view systems of control in firms developed over time in "response to changes in the firm's size, operation and environment" (Edwards, 1979:18). Small businesses, often with a single owner and possibly a small number of managers and/or foremen controlled the firm directly (ibid18-19). The owners of the firms "had a direct stake in translating labor power into labor" (ibid:19) and this was often achieved by bullying and threats (ibid:19). This simple form of control persisted, and persists, in small firms and businesses (ibid:19;34) with direct control exercised personally by intervention in the labour process with direction of work tasks, performance monitoring and discipline (ibid:19). This form of control was achievable given the small number of workers working in close proximity, requiring a limited level of close supervision. Due to their numbers, workers would have had difficulty in resisting this form of control (ibid:19). However, growth in the size of firms, both

in terms of employees and product complexity may render ineffective these simple forms of control (ibid:19). Maintaining a simple form of control, given the increased space between the growing number of employees and capitalist employers, would require an increasing number of foremen and supervisors (ibid:19). An example of this was seen at US Steel who by 1910 employed 4,000 supervisors, resulting in tiers of supervisors with supervision of supervisors, not necessarily with interests matching those of the employer (ibid:54-55). Growth in the size of firms also increased the likelihood of collective organization of workers (ibid:19). Edwards (1979) believed a crisis of effective control using this method led to employers in larger organizations moving away from simple forms of control towards more structural ones acting on the physical and social structures of the labour process. In effect a development where employers moved to a technical form and then to a bureaucratic form of control, and it is to these structural forms we now turn.

3.3 Structural Forms of Control

Edwards (1979) argued there were two possibilities in delivering structural control. Firstly, "the control mechanism could be embedded in the technological structure of the firm" (ibid:110), that is a technical form of control, or "it could be embedded in the firm's social-organizational structure" (ibid:110), that is a bureaucratic form of control. These are considered here.

3.3.1 Technical Control

As organizations increase in size, often accompanied by an increasing workforce that may become spatially dispersed, along with a potentially more diverse range of processes, simple control would require an ever-expanding supervisory tier. A potential solution for management to this problem is to implement technical forms

of control, effectively attempting to gain control of the labour process through its physical structures. Technical control is applied through the introduction of modern technology (Dawson, 1988:120) which assumes a central role in the labour process and the organization of work (Hall, 2010:171). In essence, technical control can be seen to be where technology and/or the layout of the plant sets the pace and directs the labour process (Edwards, 1979:113; Littler, 1990:60). Marx K. (1990) articulated the shift in how technology has developed to a stage where it controls the worker:

"In handicrafts and manufacture, the worker makes use of a tool, in the factory the machine makes use of him. There the movements of the instrument of labour proceed from him, here it is the movements of the machine that he must follow" (Marx K., 1990:548).

In respect of the control element achieved by technical control it can be seen, therefore, machinery is designed in such a way that it, the machinery, and not the worker determines how the work is carried out and its pace (Frenkel *et al*, 1999:14; Mackenzie 1982:81). An example of the solution to this problem was mill owners approaching Richard Roberts, an engineer, to design a fully automated mule, thus leading to the employment of what was perceived as a more docile female workforce. In this example we can see technology being designed for a social purpose leading to technical control with fewer overseers (Daunton, 1995:183). Technical control should not be confused with mechanization, which may increase labour's productivity without altering the elements of control. Edwards (1979) gives the example of a manual versus electric typewriter to illustrate the point. In this example the latter technology allows the operator to perform at a higher speed but does not control how the job is performed. However, mechanization and technology may bring technical control if it means the worker loses control of the work process

in terms of pace and when or how tasks are performed, and this tends to be because of design of the technology rather than its intrinsic character (ibid:112). It was Edwards (1979) view that technical control applied to production workers only and other structural forms, specifically bureaucratic control "originated in employers' attempts to subject non-production workers to more strict control" (ibid:121).

One of the advantages for employers in moving to a technical mode of control is it provides the potential for a reduction in the requirement for direct supervision and also the implementation provides a physical situation where any direct supervision of workers becomes easier. An example here could be that of the production line, where control is achieved "through technical means which are built into the physical structure of the labour process" (Dawson, 1988:140 n1). In this case there is an assumption the line, or technology, assumes some of the control functions (Edwards, 1979:119) with the result there is a reduction in the requirement for the presence of a disciplinary figure as workflow techniques themselves provide the necessary discipline (Belanger and Thuderoz, 2010:141). We can also see the 'tying' of workers to a machine, or desk for those working on computers, has the effect of reducing the social interaction workers may have with each other. It follows from this whilst the machine itself may contain aspects of control, this tendency for workers to be static may also make simple control through physical supervision easier (Bradley et al, 2000:106). Here is an example of technology not only having a direct controlling effect on workers but also influencing other forms of control. This adds weight to the view that these forms of control may exist in conjunction with one another rather than being part of an evolutionary process (Thompson, 1989:152). Indeed, the extent of technical control that can be achieved may be overstated. As an example to illustrate this point, the production line at Ford's in the 1920s where work was moved to the workers rather than *vice-versa* (Murray, 1989:39) was certainly an example of the use of technical control, in that the line and not the worker determined what work was done, as well as the order and pace (Edwards, 1979:145), but it should also be remembered other mechanisms were employed, including high wages (Allen, 1992:234) and company welfare schemes and the threat of their removal should the worker be deemed to be behaving in an unacceptable way (Edwards, 1990:142-143). It is the case employers are not only interested in control whilst at work but may need to consider other aspects such as high labour turnover and absenteeism resulting from the application of technical control (Murray, 1989:40). Indeed, one of the areas of interest in the research carried out for this thesis is the extent to which control exercised through ICT means employers no longer need to rely on anything other than technological systems to maintain effective levels of control and whether it allows management to fully incorporate control of labour supervision "into technical systems of control" (Dawson, 1988:121).

There can be seen to be a potential link between the utilization of technical control and its effect on skills. As is seen below, there is even the possibility new technological innovations and processes may at first appear to replace or enhance existing skills. Technical control transfers decision making concerning the labour process and how it is to be conducted from the worker to the machinery employed. This is considered with specific regard to ICT when we discuss this in relation to the technical control employed by computerized systems in Section 3.6.2 but historically examples can be seen, with technology clearly playing a role (Crompton and Reid, 1982:167). Production jobs have historically been subject to deskilling via technology, for example the development of jigs, gauges and single use machine

tools allowing unskilled workers to turn out uniform parts (Allen, 1992:232). A further example was seen in the textile industry in the early capitalist period with technology introduced with the intention of removing skills seen as the monopoly of disruptive groups of workers (Armstrong, 1988:144).

A central plank of labour process theory is related to the role of deskilling as a means of cheapening and ensuring tighter control of labour (Elger, 1982:26). The requirement for management rather than labour to control the labour process, has been discussed in terms of the indeterminate nature of the employment contract (Burawoy, 1979:139; Gintis, 1987:75). We can see, therefore, why management would seek to remove the requirement for skills by subsuming them into the technical fabric of the work environment. It is the case if skill was solely in the hands of the workers, they "could and did [...] obstruct capitalist innovation and rationalization" (Wood and Kelly, 1982:75). It is, therefore, the case where skill is a requirement of the job and this is possessed by the worker this can be an impediment to the employer in terms of utilization of labour and deskilling and simplification of the work tasks would remove or reduce that impediment (Knights and Willmott, 1990:11; Bosquet, 1980:374). This led Braverman (1998) to the conclusion equating management control of the capitalist labour process with a "degradation of work and decline in worker skill" (Sturdy et al, 2010:113). Without skills being present in the job it becomes easier for managers to impose their will on the activities of workers (Wilkinson, 1983:13). The fragmentation of tasks and "the technical division of labour" we see as part of this process is one element of how managers extend control of the labour process and effectively expropriate the knowledge of the worker (Giddens, 1982:39).

Another way deskilling has been said to facilitate management control is not due to the reduction or removal of skill technology has played a part in but the result of that process. In effect the reduction in the skill requirement has made workers' position in the workplace more precarious and this has led to a situation where the worker may choose to behave in a way management desire rather than mount any resistance. The fear of unemployment is effectively "a sword held at the throat of labour" (Dyer-Witheford, 1999:196) as the bargaining power of employers increases as its level rises (Goodrich, 1975:72). A component of this power can be due to the ease of locating substitutes now skill is less of a requirement for the performance of the task (Edwards, 1979:126).

The above discussion is premised on the view that deskilling is the inevitable outcome of using technology in the way described (Grugulis and Lloyd, 2010:91). There is, of course, a contradictory view that just because some skills have been lost does not necessarily preclude the possibility other skills will have replaced or enhanced them. This is particularly pertinent to the issue of ICT and is, therefore considered in greater detail in this respect later in this chapter. However, it may be valuable to articulate here a more nuanced view between the two polarized points of a loss of skill on the one hand and replacement and/or enhancement on the other. That is, there is a tendency to deskill, but "the emergence of new forms of expertise around specific phases of technical innovation may, for example, be tolerated by capital [...] predominantly on the basis of increasing productiveness" (Elger, 1982:45-46). Braverman (1998:119) accepts a new process of production may mean "new crafts and skills and technical specialties which are *at first* [my italics] the province of labour rather than management". What we appear to see in terms of deskilling then is not necessarily uniform (Wilkinson, 1983:8) in terms of how it

affects or is experienced by individuals (Thompson and Bannon, 1985:111). However, those claiming the presence of new skills disproves Braverman's thesis concerning the inevitability of deskilling would only be correct if the class as a whole could be seen to have achieved unvarying or increased levels of skill. The discussion above appears to fit in with an overall tendency for deskilling within capitalist economies (Armstrong, 1988:146-147). It could certainly be said even where enhanced skills may have occurred as part of an uneven and polarized process, these new skills will, over time, themselves become subject to deskilling as this is "the major tendential presence within the development of the capitalist labour process" (Thompson, 1989:118). The tendency has been articulately described by Gorz (1976):

"As a whole the history of capitalist technology can be read as the history of the dequalification of the direct producers. The dequalification process is certainly not linear: at the beginning of each technical revolution it seems partially inverted. But the general tendency immediately reasserts itself: the new qualifications demanded by new techniques are redecomposed. The most qualified production workers' professional skills are carved up into sub specializations shorn of autonomy." (Gorz, 1976:57)

3.3.2 Bureaucratic Control

Edwards (1979) believed bureaucratic control was part of an evolution of control techniques developed to allow management to obtain control of non-production staff. However, there has also been some criticism of this approach, highlighting the view these forms of control do not necessarily supersede one another and are often found in combination (Thompson, 1989:152).

Bureaucratic control can be seen as "a form of structural control achieved through bureaucratic means" (Dawson, 1988:140n1). These bureaucratic means are sets of rules and procedures that become a formal part of the social and organizational structure of the organization. These may include personnel policies, disciplinary procedures, work rules, grading and wage scales, and job descriptions among others (Dawson, 1988:120&140n1; Edwards 1979:131). Whilst Edwards (1979) viewed the development of bureaucratic forms of control as a solution to the deficiencies in attaining technical control for non-production jobs, examples can be found historically, and would, therefore appear to not simply be a development in response to deficiencies in technical control. Bureaucratic rules can be found in Ancient Egypt with the use of work rotas on public projects (Ezzamel, 2004:509), accounting and administrative techniques in workplace discipline (ibid:532) and hierarchical pay structures (Carmona and Ezzamel, 2007:192). Medieval craft guilds exercised control on workers within them by making a condition of membership the adoption of rules of the guild (Kieser, 1989:547). We can see bureaucratic control has existed for some time and certainly pre-date capitalist modes of production. This form of control can be viewed as impersonal and less visible to the employee as it is the company rule or policy that forms the basis of authority rather than what they may perceive as the arbitrary actions of a supervisor or manager under simple control (Dawson, 1988:120; Edwards, 1979:131). In this form of control then, the rule of the company replaces the rule of the supervisor (Greenbaum, 1998:132).

In terms of management attempting to gain control of the labour process, however, it should be clear there is a distinction between different types of bureaucratic rules. Littler (1982), citing Crozier (1964) makes the point there "is an important distinction to be made between rules prescribing the way a task must be performed and rules

prescribing the way people should be chosen, trained and promoted for various jobs" (Littler, 1982:45). However, in terms of the research carried out a further aspect is considered in that some policies and rules may not fit into either of these categories but may have an impact on control of the labour process. Such policies may include attendance management policies intended to maximise the amount of time an individual is performing their tasks and remove absenting themselves from the workplace as an optional means of resistance from employees.

3.4 Control Through Consent and Participation

The research carried out has been interested in the extent to which forms of control other than those utilising technology may be used by employers and managers. One of the reasons for this is the view that if control has been made absolute by the use of ICT then why would other forms of control be used (Grint and Woolgar, 1997:119)? The employment relationship according to some may not just be a place of conflict and resistance but also of "co-operation and consent" (Gaines and Domagalski, 1996:182). This section looks at how employers and managers may seek to gain control of the labour process by obtaining the consent and participation of the workforce. This view has, therefore, extended the issue of control from one of purely coercive measures, which has been considered by the Marxist perspective as the only way to increase the effort of the worker (Burawoy, 1979:27) to a point where the labour process "must be understood in terms of the specific combinations of force and consent that elicit co-operation (my italics) in the pursuit of profit" (Burawoy, 1979:30) and that surplus value can be achieved through means other than direct coercive control (Sturdy et al, 2010:5). This element of building consent has been posited as a means of obscuring the true nature of the exploitative relationship between employer and employee (Burawoy, 1979:135). This can be seen to be a normative form of control that is not directly coercive but rather is achieved through "indoctrination of shared corporate beliefs and values" (Sturdy et al, 2010:116). Management participation schemes are a form of this type of control (Dyer-Witheford, 1999:223) and the research has been keen to establish whether these are present in the workplace and how they may have been used over time, particularly has any change in methods of control employing ICT affected their use. The techniques of eliciting worker consent and participation should not be read as a diminution of management control and to be understood, need to be viewed from within the framework of the capitalist mode of production (Burawoy, 1979:4; Frenkel et al, 1999:135). Within the framework of obtaining consent it may also be the case employers seek to provide benefits to workers that are only maintained by compliance with management requirements. An example of this was seen at Ford's with the 'five-dollar day' policy which effectively doubled the pay of some workers (Allen, 1992:234). Historically we can see manipulation of the working environment can have a powerful effect on whether workers consent to their exploitation. Where the alternative may be considerably worse, as was the case for example in the workhouse system, workers may consent through the fear of alternatives (Thompson, 1980:295). In this sense workers are free to consent or not, however what this may mean is "the freedom to starve" (Marglin, 1976:37).

One of the ways a satisfactory level of consent and co-operation is achieved is through organizing the activities of workers in such a way they appear to give the worker an element of choice, even if this choice is severely constrained it is the "participation in choosing that generates consent" (Burawoy, 1979:27). Participation, in this sense can be seen to be a tactic of management to incorporate labour (Ramsay, 1980:382), and effectively restoring management authority and

recruiting workers into the cause of increasing productivity and efficiency by participating in the rationalization of the labour process (ibid:390). The research addresses this by considering the extent to which workers have been included in any design and implementation of technology and its use in labour control. This level of 'responsible autonomy' could be seen as treating workers as if they are not alienated by the labour process and is focussed on them recognizing a unity of purpose with the employer (Friedman, 1990:178). However, even where these aspects of participation and consent are seen, these still need to be viewed from the perspective of a "work process, the transformation of people issuing from the same capitalist need as the transformation of other production inputs" (Lewis, 2007:402). Management participation schemes need to be seen in the context of managers exercising power and indeed could be viewed as totalizing in as much as they seek to involve workers in their own control rather than simply imposing control upon them (Dyer-Witheford, 1999:224).

In terms of the attempt to engender consent from employees the view of a move from coercive to more consensual and participatory strategies have been put forward. However, there is also a view economic recession has "seen employers use new economic and technical conditions to restructure the labour process and attack shop-floor organization" (Thompson, 1990:97) thus heralding a new era of more despotic forms of management control (ibid:118).

3.5 Design and Implementation of ICT Systems

Having looked at the main types of control identified above, we now turn to how technology, and specifically ICT is used in terms of its application as a tool of control. If control of labour, through any of the forms discussed in the previous sections is

an intention of the use of these systems then it follows this will be addressed in terms of the design and implementation of the systems employed. This section examines these two aspects of design and implementation in terms of the inputs, interests and negotiations that may inform them (Noble, 1979:19).

If we consider computerised systems, these can be designed either in-house or externally. Generic provision of software developed externally for sale to several organizations means a shift in the balance of work with internal IT departments increasingly concerned with "upgrading, amending and customising existing or acquired applications" (Beirne *et al*, 1998:151). Should the systems be procured from external software suppliers it is not uncommon for the systems to then be rewritten and adapted by the users (ibid:151). The design process may inform not only whether technology is specifically designed with the intention of achieving greater levels of control but also whether employees involved in such design and development may achieve some level of resistance, thus subverting management intentions, at the design stage. It may be the case that "software specification, design and implementation are all matters of contestation between different individual and group interests" (Beirne *et al*, 1998:157).

However, systems are designed and implemented, it will be with the aim of meeting the requirements of the employers or managers procuring them, and "such requirements generally reflect the organisational philosophy and objectives of upper management" (Greenbaum, 1998:124). Even so, there is always more than one best way of designing, implementing and utilising technology (Wilkinson, 1983:18). Technology in this sense then can be seen to be "an objectification of the intentions and expectations of its creators and managerial sponsors" (Rosen and Baroudi, 1992:221) and implementation follows management decisions as to how work

should be organized (Baldry *et al*, 1998:169) and so can be seen to be conforming to a technical form of control.

It should be noted here though that managers may not be a homogenous group and, in this sense, may have interests of their own and be in positions where they can mediate between "potential" and "actual" technology (Wilkinson, 1983:19). In this sense then it may be too simplistic to view design and implementation of technology as simply a decision management take but should rather be seen as "an *outcome* which has been chosen and negotiated" (Wilkinson, 1983:20).

The motivation for installation of technology may not be concerned with any control aspect, but genuinely as the best tools available to do the job (Garson, 1989:208) although the control aspect may be inherent in this. In the private sector, employers may effectively be forced into using specific technologies in order to remain competitive (Wilkinson, 1983:9) a situation not naturally apparent in the public sector. A systems approach that may be relevant for both private and public sectors views technology as a solution to problems, that is as a purely technical issue (Knights and Murray, 1994:12). The opposite may also be true, however, in that efficiency or purely technical solutions to problems may not be the main consideration in design and implementation of information and communication, or any other, technology. It may be more effective control of labour is the driving motive, in which case this will be reflected in the design of the technology and how it is used once implemented (Wilkinson, 1983:21). The view has been advanced that microelectronics, by its nature is inherently already in the form required by employers to allow control and domination of the labour force (Robins and Webster, 1985:37). However, in terms of the motivation for the design and implementation of technology it should be borne in mind it only makes things possible and it is the mode of production that determines why it is deployed in the way it is (Noble, 1979:36-37). From this point of view, it is the interests of dominant groups and the social relations of production that shape technology rather than technology autonomously shaping society (Knights and Murray, 1994:24; Noble,1979:18; Dyer-Witheford, 1999:40). However, there is also a need to "explore the accidental, unintended and often contradictory nature of the global context within which particular organisational and technological changes take place" (Knights and Murray, 1994:24).

Labour process theory highlights the political nature of implementing technology and the results of this implementation are largely influenced, if not determined, by the main actors here, labour and management. From this perspective management implements technology to achieve greater control over the labour process which may include replacing labour, the separation of conception and execution of tasks, as a means of performance monitoring, or to weaken trade unions, or indeed any combination of these (Hall, 2010:160-161). However, we can see in terms of design and implementation of technology there may be a complex set of contestations and relationships going into decisions relating to this. "These encompass both relations between systems suppliers and users and shifting alliances within user organisations that include managerial, trade union and shopfloor actors" (Knights and Murray, 1994:25). Even where the positions of labour and management may be considered rigid and determined, the outcome of the struggles are not (Hall, 2010:161). Labour process theory holds technology is part of the labour process and how it may be deployed, implemented and designed by management will be used in organising work in their interests, but given the potential contestation and uncertain outcomes this does not indicate a narrow technological determinism in that the technology itself does not determine the labour process but rather how it is set up and used will vary according to struggle and accommodation between the various actors involved (Hall, 2010:164). It is clear then technology is not neutral in its design or implementation (Dyer-Witheford, 2015:29) it is always as a result of choices from a range of potential outcomes (Noble, 1979:18-19; Wilkinson, 1983:18). However, it also needs to be recognized that in choosing to implement certain ICT systems managers may be making the decisions on "whimsical grounds [...] with little understanding of the technical issues involved" (Hyman, 1987:37). The thesis, recognizing how technology is used is a matter of choice, however arrived at, and potential contestation, now turns to consider how it may be used as a tool of control.

3.6 Control Through ICT

This section considers the main ways ICT is used as a tool of control. The first aspect to consider is how it is used to monitor and surveille staff. It examines this in the context of the concept of the, oft used by those of a Foucauldian perspective, panopticon and whether this view is compatible with the Marxist analysis of the labour process. The second part of the section considers how ICT is used as a means to direct the labour process itself by removing or curtailing worker decision making or appropriating within the systems the knowledge required to perform the tasks. The section relates these aspects to the forms of control discussed in previous sections in this chapter. However, whilst this section considers the types of control that may be delivered *via* ICT systems, it should also be borne in mind ICT has now developed away from individual personal computers to integrated

packages and networked systems (Garson, 1989:214-215; Beirne *et al*, 1998:159; Taylor and Bain, 1999:102)

3.6.1 Monitoring and Surveillance – The Electronic Panopticon and Simple Control

In considering the capability of ICT systems to monitor and surveille workers the concept of the panopticon is used, including how some writers have advanced the view that new technology has effectively created an electronic version of this. Some writers have put forward a Foucauldian perspective as an alternative to what they see as the narrow determinist Marxist view of why management seek to control the labour process as discussed in the previous chapter. Even though the panopticon was only a small part of what Foucault wrote it has been an area which those utilizing a Foucauldian perspective have concentrated on to provide an explanation of control in the workplace (Sewell, 1998:404). The panopticon was conceived as a structure of incarceration. It was designed to have a central viewing tower surrounded by cells that can be seen into but whose inmates cannot see into the central tower. The inmates are thus permanently visible (McNay, 1994:93; Akella, 2003:48; Desai, 2010:797). However, this only needs to be permanent in as much as the surveilled are aware they can be potentially observed at any time (Sakolsky, 1992:238), thus understanding "the impossibility of avoiding the supervisory gaze of an all-seeing, but unseen, observer" (Doolin, 2004:345). So even though the observer cannot be seen, the subject must assume observation is taking place and therefore their behaviour must conform to the expected norms due to the psychological effects of presumed observation (Jacobs and Heracleous, 2001:126; Zuboff, 1988:321). In this way observation does not need to be constant but its effects will be permanent (Foucault, 1995:201) and therefore "organizational control will become less apparent and more powerful" (Barker, 1993:435). Foucault believed the panopticon was not to be "understood as a dream building [but rather as] a figure of political technology that may and must be detached from any specific use" (Foucault, 1995:205). The issue for this thesis, however, is whether the concept of a panopticon is useful in terms of the control of labour for the very specific requirements of the workplace and as such is not detached.

Workers being subjected to observation is not new. In pre-capitalist times we can see the use of overseers for slaves (Garson, 1989:215) and there are "accounts of mill owners in the early 1900s using telescopes to watch workers arriving at their factories" (Bradley *et al*, 2000:105). Babbage (1832) had a clear admiration for machines providing a check on the performance of individual workers. An example of this was a machine called a 'tell-tale' where a night-watchman had to pull strings from machines placed at various points on his rounds, thus showing he had completed them at set times (Babbage, 1832:67). The idea of surveillance can also be linked to Taylorism and Taylor's view that left to their own devices workers would naturally shirk (Jacobs and Heracleous, 2001:123). However, these earlier methods were constrained by technology available at the time and has been noted in why employers may have had problems using a simple form of control with an expanding and dispersed workforce.

It is now the case "IT has provided a set of tools for surveillance in contemporary workplaces that [...] significantly increase the power of the watcher" (Bradley *et al*, 2000:105). ICT can be seen to satisfy the principles of how the panopticon works (Sewell, 1998:404) and the architectural design of the panopticon is mimicked by

this technology (Berdayes, 2002:35). An advantage from a managerial point of view is, "electronic monitoring doesn't interfere with the workflow. Statistics are collected unobtrusively, seemingly as a by-product of the work" (Garson, 1989:223). It can be seen the more effective the panoptic regime, the lower the numbers of managers required and the higher the number of people subject to management power (Foucault, 1995:206; St. Pierre and Holmes, 2008:355) and consequently the lower the cost to the employer (Foucault, 1995:218-219).

Whilst the previous paragraph has argued the use of computerized systems, in terms of their surveillance capability, can be seen to mirror the panopticon, there is an argument to say it extends this in that there is no need for the simultaneous presence of the observer and the observed (Zuboff, 1988:322). To achieve the level of surveillance made possible by ICT "the company would have had to hire a full-time foreman for every worker" (Garson, 1989:223) and would, therefore, be costly and intrusive, hence the problematic nature of simple control. ICT provides for the potential to utilize this form of control at a level that would be unrealistic in terms of its application through simple human observation.

It can also be seen whilst the panopticon could be said to work due to the potential for the individual to be observed, ICT systems mean "monitoring is performed automatically through a computerized system; hence the actual occurrence of monitoring is certain" (Hunton *et al*, 2008:1555). ICT systems in conjunction with telecommunications technology give managers the potential to carry out remote monitoring of employees (Taylor, 1998:93; Shaiken, 1985:9) and means the technology can "decentre work from a single physical site and open up working to any space" (Thompson and Smith, 2010:21). This means there is now the potential

for workers to work from home despite there being a spatial separation from their supervisors, one of the problems identified with simple control, with supervision being applied from a distance, thus solving the problem for managers of not being able to control and motivate remote workers (Baruch, 2000:38; Castells, 1992:208).

When we look at why employers would seek to monitor and surveille their employees, two, not necessarily mutually exclusive, reasons have been given. There is a distinction in whether management may use surveillance and monitoring punitively, due to lack of trust in employees or whether management use monitoring to move towards an environment where employees can be encouraged to learn and develop, and managers may make better decisions (Frenkel *et al*, 1999:142-143; Zuboff, 1988:317; Sewell, 1998:407). However, managers may highlight this feedback potential of surveillance in an attempt to gloss over its use as a coercive tool of control (Chalykoff and Kochan, 1989:809).

Management have made the argument "that electronic surveillance and monitoring leads to increased employee productivity" (Oz et al, 1999:168). This is because machines in this type of monitoring regime can be seen to be carrying out a form of performance appraisal resulting in an intensification of work (Bradley et al, 2000:105-106). Indeed, systems for electronic surveillance are positively marketed on the capability of the system to produce exact measures of output and cut costs by reducing the time workers are idle (Kidwell and Sprague, 2009:196; Garson, 1989:214-215). However, it should also be noted here that a survey shows workers in the public sector often do not believe their work can be easily measured (Marsden and French, 1998:9). Modern information technology has the capacity for detailed surveillance of all aspects of a worker's work (Salaman, 1992:367) at a minute level

including entries onto the system, keystrokes, customer service interaction and interception, email communications, unproductive periods and breaks (Oz *et al*, 1999:167; Kolb and Aiello, 1996:408). However, it should be made clear here it is not only visibility that achieves the required behavior from employees, it also requires assessment and judgement in respect of norms set by management (McNay, 1994:95).

Whilst it has been suggested the fact monitoring is taking place may increase performance due to the worker perceiving the work as important due to it being monitored, it is generally assumed to be effective it must be accompanied by other managerial actions with consequences for the employee (Larson and Callahan, 1990:530). Whilst deployment of ICT systems may lead to an intensification of work and a reduction in the requirement for managers, it should not be assumed the requirement for human supervision has disappeared. "Where IT is used to monitor employees' output the data is still required to be interpreted by supervisors and line managers and utilized in disciplinary and other ways 'to encourage others'" (Baldry et al, 1998:174). There is a requirement for norms and targets for workers to be set and revised (ibid:173) and where the work performance is considered to be substandard the usual methods of direct control would be used (Edwards, 1979:121), namely punishment and reward (ibid:126). A further aspect of performance monitoring has been employers choosing to share performance information, perceived as legitimated by being system generated, with other members of the team thus exerting peer pressure on those deemed to be performing poorly (Sewell, 1998:420). Some managers may try and avoid the possible confrontation arising from performance monitoring by allowing workers to continue to shirk, so there may be observation but no action (Zuboff, 1988:334-335; Hyman, 1987:41). However, if no action is taken workers may ignore the fact of surveillance completely (Sewell, 1998:425). If workers feel the need to avoid sanction then evidence would show increasing monitoring will have the effect of curbing behavior management deem inappropriate (Hunton *et al*, 2008:1555). However, this brings us on to the possibility managers themselves are now subject to surveillance, monitoring and control by technology (Thompson and Bannon, 1985:107) to ensure that, given the potentially different interests within the management group, senior management policy is more effectively transmitted downwards through the managerial hierarchy (Hyman, 1987:41), and the extent to which this may alter the dynamic between manager and worker. Managers may have shared interests with subordinates because both groups are subject to decisions of more senior managers. However, "in other respects they do not [as their] interests are driven by their ability to meet [...] their performance targets by controlling the work of others" (Edwards, 2010:34). The dynamic here can be seen to be management "as control [...] [and] subject to controls" (Thompson and van den Broek, 2010:3)

This section has discussed the use of technology in respect of surveillance and monitoring of employees. It has noted the use of the concept of the panopticon as advanced by writers from a Foucauldian perspective. However, the view surveillance has the effect of increasing the intensity of effort means it is consistent with the Marxist Labour Process view of the employer seeking to gain tighter control of the labour process to increase surplus labour. The surveillance of workers is not new, either by direct observation or *via* technology, but the use of ICT can be seen to fit with and indeed extend the panoptic regime of employers and management. There may also be a cost benefit to employers as the use of ICT in surveillance may reduce the numerical requirement for managers whilst increasing the number of

workers subject to management. It was also felt the dynamic between managers and subordinates may be affected as managers themselves may begin to be monitored by the technology concerned. Whilst the use of this type of monitoring may also be viewed as a way of attaining a learning environment it was felt the control element was central.

3.6.2 Technical Control by Embedding Rules and Regulations in ICT Systems

Whilst Edwards (1979) viewed bureaucratic control as being developed to achieve control over non-production staff, where technical control was deemed problematic due to the nature of their work, Braverman advanced the view that computers would provide the technical control of clerical and administrative workers the production line provided for manual workers (Thompson, 1989:80).

One way of implementing technical control is to design the system to embed rules, regulations and procedures within it. An example of this could be the embedding of rules, regulations and procedures such as scripted responses that must be followed by call centre operatives (Hall, 2010:167) or systems allocating work to individual employees (Button *et al*, 2003:54-57). Control is therefore achieved using ICT systems by removing options in terms of what can be input by the employee. In this way "business processes are embedded within the routines" (Hall, 2010:172-173). What this means in effect is there is a requirement for standardized information input or response. The information must be input in a specific format required by, or respond according to the diktat supplied by, the computer system. Workers are, therefore, to be subject to technical control when ICT is designed in this manner, as the machinery, in effect, becomes home to the actual decision-making process (Crompton and Reid, 1982:171). As such it could be said what is shaping the labour

process in many organizations is ICT rather than production technologies such as production lines and this has facilitated technical control moving into the services sector (Hall, 2010:167). This may result in a decreased need for direct supervision but cannot be seen to lead to an increased level of worker autonomy as this is strictly curtailed by the pre-programmed parameters set by management during implementation and its subsequent use (Glenn and Feldberg, 1979:57; Rosen and Baroudi, 1992:225). We can see here the autonomy of managers can now be replaced by computer algorithms designed to dictate how work must be carried out (Grugulis and Lloyd, 2010:105). The effect of this form of control is it also standardizes behavior without the need for any explicit organizational rules, which even though not necessarily recognized by the worker, are integral to the system itself (Rosen and Baroudi, 1992:215). In effect it increases control by reducing or eliminating any worker discretion (ibid:223-224).

The link between deskilling and technology has been introduced in Section 3.3.1 on technical forms of control. Prior to the implementation of ICT systems there was a view deskilling through technical control was generally not applicable to non-production jobs. However, this is no longer seen to be the case as the "same principles that transformed craftsmen into factory hands are now being applied to make white-collar workers cheaper to train, easier to replace, less skilled [and] less expensive" (Garson, 1989:11). Information technology has enabled what were once non-routine jobs to be routinized through the embedding of rules and processes into ICT systems, leading to a reduction in skill and a centralization of management control (Crompton and Reid, 1982:173). Data and information can now be stored and processed by electronic information systems with their embedded rules, regulations and procedures, previously the domain of professionals (Rosen and

Baroudi, 1992:227; Crompton and Reid, 1982:173) "thus facilitating the erosion of professional autonomy and authority" (Rosen and Baroudi, 1992:227-228). "If a worker is empowered by the knowledge and skill they possess, then expert systems, by codifying this knowledge, may facilitate the disempowering of workers" (ibid:228) and consequently increasing the power of management. We are now seeing ICT affect jobs, in terms of the control of labour, once felt to be outside its influence. In effect skilled operatives have been transformed into a "minder of technology" (Wilkinson, 1983:7).

ICT when used as a means of technical control has not resulted in more skilled and satisfying work but it has been in effect, "another extension of Taylorist authority" (Dyer-Witheford, 1999:49). ICT is seen here as achieving a sharper separation of "conception from execution, diluting skills and transferring them to a combination of non-specialists and machines" (Beirne et al 1998:146). There have been criticisms of this view, particularly around the implementation of ICT mirroring the discussion in Section 3.3.1. In essence this criticism is whilst some skills have indeed disappeared as a result of ICT they have been replaced by others and what we have actually seen is the appearance and requirement for new skills and what could be classed as 'upskilling'. This view contends that from the 1980s onwards we have witnessed a move away from rigid bureaucratic structures to more flexible patterns of work facilitated by ICT which has led to upskilling and a reunification of conception and execution (Greenbaum, 1998:135; Grugulis and Lloyd, 2010:91; Hyman, 1988:49). As new technology allows for production with an instantaneous response to the demand for new products, the view has been advanced that control systems have moved away from Taylorist solutions and bureaucratic regulations as neither

management or workers will know a solution to any given problem in advance (Negrelli, 1988:90).

We have discussed in relation to skills, there may be a less polarizing view and consideration is required around the differential effects ICT may have on the skills required from different groups of workers (Grugulis and Lloyd, 2010:94). It may be the case the implementation of ICT requires a new and different set of skills. However, these skills may be easier to acquire and be more generic than those they replace. As such, upskilling may be an inaccurate description of what is in effect a net loss of skill (Hall, 2010:164-166; Glenn and Feldberg, 1979:61) and therefore would still accord with Thompson's view (1989:118) of a tendential aspect of deskilling. It should also be borne in mind within this debate management will still decide on the selection and implementation of technology and therefore emphasis will still be on managerial objectives and not autonomous workers (Wood, 1988:119-120).

3.6.3 Peripheral Bureaucratic ICT Systems

We have seen how bureaucratic control can cover such areas as personnel policies, disciplinary procedures and work rules such as attendance policies and performance norms (Edwards, 1979:131). This section notes how ICT has become involved in the operation of this method and "has proved to be an unusually powerful tool in exercising bureaucratic control" (Rosen and Baroudi, 1992:215). Centralized ICT systems have assumed an increasing role in administering these bureaucratic rules and policies as part of an integrated 'enterprise resource planning system' (Hall, 2010:174) and "fits well with centralized bureaucratic processes" (Greenbaum, 1998:134) and its use in implementing these. These peripheral

systems involved in the delivery of bureaucratic systems of control can be seen as separate to the core systems delivering the actual service, in this case the administration of Revenues and Benefits.

One aspect to be considered is if simple or technical control can ensure standardized behaviour within non-production jobs, does there remain a requirement for explicit bureaucratic rules (Rosen and Baroudi, 1992:223) or does the extension of this form into ICT based systems extend the level and range of control that can be applied?

3.7 Conclusion

This chapter has considered the issue of control and how technology, particularly ICT, has been used by employers and management seeking to achieve this. The chapter commenced by examining different forms of control and why certain ones may be used over others, before moving on to the issue of design and implementation of ICT systems and how this is related to control. Finally, the chapter considered ways in which ICT systems were used in terms of delivering control, including how they may relate to the typology of control discussed.

The first form of control considered was simple control. This is where there is usually a direct personal relationship between the owner of a company and the workers and the control is applied directly. It may often be arbitrary in nature according to the whim of the owner or a small coterie of managers and so can be inconsistently applied from worker to worker. This form of control may be effective for small organizations but problematic as the size of an organization increases. The increase in size results in a requirement to raise the number of supervisors until this becomes

impractical. Because of this, larger organizations may implement structural forms of control, particularly technical and bureaucratic in nature.

Technical control is embedded in the technological and physical structures of an organization. Workers must follow the requirements of the machine and as such there will no longer be several ways to complete a job. The employee, therefore, loses control of the execution of the task. This form of control was initially deemed applicable only to production jobs. There is a clear link between technical control and skills and where a reduction of skills can be seen to follow its implementation there is also a reduction in worker control over the labour process. A reduction in skills also potentially increases the substitutability of workers making jobs more precarious, and because of the fear this may engender may make control easier for managers. The chapter has considered the argument that, particularly with the implementation of ICT, there has been an initial requirement for upskilling, as new skills are required. There may be a polarization of skills required and lost between groups of workers. However, it is likely any new skills will become subject to deskilling over time as this appears to be the tendency within the capitalist mode of production.

The problem of applying a technical form of control to non-production staff was a reason given for the second form of structural control considered, that of bureaucratic control. This form is where rules and procedures are adopted formally as part of the organizational structure. Examples of these relevant to this thesis are personnel policies covering areas such as attendance management, disciplinary procedures and work rules. The view was advanced in the thesis that it could not be simply assumed there has been an evolutionary development in terms of forms of control. None of the forms considered could be seen to be new as historical

examples were given of their use. It is also the case, far from one form replacing another these often coexist.

The chapter went on to consider the view advanced that control may not be applied by purely coercive means. Management may seek to maintain control by fostering consent, co-operation and participation among its workforce. This may not simply be a replacement for coercive forms, however, but may be used in conjunction. It was the view this should not be considered a reduction in managerial control or an increase in worker autonomy and often may be a means of obscuring the true nature of the exploitation existing within the employment relationship. A question was posed to be considered in the research, if the effectiveness of control has been increased by ICT, including by subsequent displacement of labour, does this mean management's desire for consent is superfluous?

The chapter then moved on to consider the issue of control within the design and implementation of ICT systems. The design of ICT systems can be carried out inhouse or externally and where it is the latter this reduces the input of workers, at this stage, who will use the systems. Technology is designed to reflect the motivations of those who commission it and therefore control would be designed into the systems and not determined by the technology itself. Its design and use as a tool of control will be subject to negotiation and contestation, with and between managers and workers, and the outcomes may vary according to conditions at the time and will reflect the desires and motivations of the dominant group. Technology cannot be considered neutral in either its design or its use, but neither can it be considered inevitable, and so the chapter turned to the issue of how technology is used.

The first area examined was how ICT has been utilized to mimic the panopticon in an electronic format. It was also detailed that observation of workers is not a new phenomenon and the difference here is in the capability of the technology used. ICT has reduced the need for the physical presence of supervisors with geographical separation of them from workers becoming less problematic than it would be under a non-technological simple form of control. In terms of workers being subject to observation it can be seen to be more of a simple rather than technical form of control as it does not in itself determine how the job must be performed. As a tool of monitoring and managing performance it would appear to intensify the effort of workers if consequences exist for failing to perform satisfactorily or transgressing organizational rules. This means, therefore, human supervision cannot be dispensed with altogether. Indeed, managers are now subject to monitoring and surveillance to ensure they are delivering these consequences and it may then follow managers at certain levels may feel they have more in common with workers than with more senior managers. There are aspects of structural, bureaucratic control in that the monitoring measures performance and behaviour against managerially set targets and norms.

ICT was also felt to provide a level of technical control by requiring a standardization of input and response, thus extending this form into non-production jobs. A consequence of this was a reduction in the requirement for supervisors but no increase in worker autonomy. As the rules of the organization are embedded in the ICT systems it may also be workers do not recognize them as such. The embedding of rules and regulations was felt to have a negative impact on skills as jobs become routinized, cheaper and workers more easily replaced with a subsequent reduction in the bargaining power of labour. The view ICT has replaced, or enhanced skills

was considered with the conclusion again being that even where this was so, there was a tendential process of deskilling present.

The chapter finally examined the issue of ICT systems that could be viewed as bureaucratic and peripheral to the core systems delivering the actual product or service, but may be linked to them, raising the possibility of different forms of control being utilized in an integrated manner. Whilst the forms of control discussed have been seen to be present in conjunction historically, the consideration in this thesis is whether ICT systems can now provide an overarching network of systems with control capabilities designed in, including control of managers themselves. The following chapter considers the literature around whether these developments in ICT have rendered management control impervious to worker resistance.

Chapter 4 – Resistance to Management Control

4.1 Introduction

Following on from the previous chapter's consideration of management control, this chapter examines worker resistance to this. As one of the central concerns of this thesis is the extent to which ICT may render resistance impossible or ineffective, it is necessary to define what resistance is. This is particularly so as various terms are used, sometimes interchangeably, in literature around this subject. Once this has been considered, the chapter moves onto examining the forms resistance may take. The previous chapter contained a discussion on the issue of skills and whether technology in general and ICT in particular, can be seen to have had a deskilling or upskilling effect. As such there is little need to restate the argument here around an increase in management control resulting from a reduction in worker resistance as skills are removed from the work carried out. Issues around skills are raised however, where pertinent and are considered from both a management control and worker resistance perspective in the later findings chapters.

The chapter considers aspects of individual acts of resistance. It notes and discusses the problems in revealing this form of resistance. This is particularly so due to the, often invisible, nature of such resistant acts. Individual resistance is also considered in terms of the difficulty in categorising acts as such due to the potentially differing meanings attached to the same act. However, as this thesis is concerned, in terms of resistance, as to whether ICT has rendered management control impervious to such action, an explanation is given in as much as it is the potential for the category of an act, for example absence or unsatisfactory performance, to be potentially an act of resistance and it is whether ICT can prevent it, that is being

judged. In exploring individual resistance this chapter also advances the view that the position of management control *versus* worker resistance is overly simplistic and highlights the issue of management being a potentially heterogenous group, members of which may engage in acts subverting the control of other managers.

Collective resistance is the next aspect to be considered in this chapter. Formal collective responses through trade unions is a particular focus. The chapter explores claims trade unions have, when it comes to ICT, lacked policies on resisting implementation and involving themselves at the design stage. As such, as far as ICT is concerned they appear to have largely accepted management prerogative. However, the chapter raises historical examples of resistance towards previous technologies. Consideration is given to how unions approach ICT once implemented as it does appear any formal collective resistance is more apparent *post hoc*. However, the chapter also notes the possibility strong union organization may have the effect of tempering management behaviour prior to any action taking place. The chapter notes the potential for ICT to increase geographical dispersion of workers and the potential problems this may have for collective action and organization but also considers how the very technology itself may be used by unions as a tool of communication and resistance.

Finally, the chapter considers the absence of resistance and posits this may not be due to the essential properties of technology but other reasons may explain its non-appearance. However, recognition is given to the influence technology may have in creating an environment where the absence of resistance has been identified even where its essential characteristics are not the direct cause.

4.2 What is Resistance?

This section seeks to explore a working definition of resistance, as there is not necessarily an agreed terminology when considering oppositional practices to management. As well as resistance (Collinson, 1994), the following terms have been used, misbehaviour (Ackroyd and Thompson, 1999; Thompson and Ackroyd, 1995), deviance (Robinson and Bennett, 1995) and conflict (Edwards and Scullion, 1982). At times these terms are used interchangeably. Some consideration should therefore, be given to how the concept of resistance is to be used as different labels indicates "differences of view about the relevant terminology and how the field should be defined" (Belanger and Thuderoz, 2010:143). Firstly, there needs to be discussion on how the different terms have been used and any criticism of how they are applied or assumptions that may stem from them, before concluding on how resistance is treated within this thesis.

The first term considered is misbehaviour (Ackroyd and Thompson, 1999; Thompson and Ackroyd, 1995). Ackroyd and Thompson (1999) include a range of behaviours including failure to work, or not working very hard, restricting output, absenteeism and sabotage as examples of misbehaviour and posit workers can, by engaging in these acts, achieve some control over their work (ibid:23). Their position is misbehaviour can be classified as any action at work where a worker does something they are not supposed to (ibid:1-2). If management is trying to impose control on the behaviour of workers then this concept of misbehaviour could be seen to apply to acts of resistance that are by nature, outside of the required behaviour from a management perspective. However, a criticism has been made that there can develop a tendency to equate every act of misbehaviour with resistance (Martinez Lucio and Stewart, 1997:64; Belanger and Thuderoz, 2010:138) although

Ackroyd and Thompson (1999) accept there is a distinction in that some acts of misbehaviour may not constitute resistance (ibid:165) although these are not specified. However, we can see there appears to be a view that not every act of misbehaviour, in the sense of workers acting in ways which they are not supposed to, is an act of resistance to management control of the labour process.

Misbehaviour has proved problematic for some as it appears to privilege subjective individual responses and conflict over the collective (Martinez Lucio and Stewart, 1997:65) and this term has led to an "absence of labour and the collective worker [that] has been assumed within key studies" (ibid:50). Whilst there may be some truth in this concern, the significance of individual acts of resistance should not be played down or necessarily seen as unorganized (Collinson, 1994:55; Edwards and Scullion, 1982:275). A solution to this proposed by Martinez Lucio and Stewart (1997) is a "recognition of the relative autonomy of the employee, an individual with his or her own specific agendas, sometimes of class, sometimes of a whole host of other structural and non-structural determinants" (Martinez Lucio and Stewart, 1997:52). Whilst workers have a choice in what actions they take, it needs to be recognized this "occurs in the context of constraints" (Edwards and Scullion, 1982:280) such as, for example, labour market conditions (ibid:280). This chapter considers individual and collective action although the distinction between the two may not be as clear as one may assume. For example, collective forms of resistance may occur for a multitude of different, sometimes individualistic reasons (Collinson, 1994:55). Likewise acts carried out by individuals may have a collective aspect to them (Taylor and Bain, 1999:112).

Another term appearing in the literature is deviance. Robinson and Bennett (1995:556) define deviance in the workplace as voluntary behaviour that "violates

organizational norms". They divide deviance into two types. Firstly, property deviance which relates to the damaging or stealing of an employer's property. Secondly, production deviance which is "violating organizational norms regarding the quality and quantity of work performed" (ibid:557). The deviant behaviour is voluntary to the extent "that employees either lack the motivation to conform to normative expectations [or] become motivated to violate those expectations" (ibid:556). Within this term failing to perform an act, particularly within production deviance, may be seen as deviant. Property deviance would almost certainly be a criminal act, for example stealing, however the relevant consideration for this thesis is whether an act can be classified as resistance to management control of the labour process. Some forms of property deviance such as sabotage may be carried out with the purpose of disrupting management control and would clearly fall within this remit (ibid:565).

The term conflict is used by some writers in this area, as workers seeking to resist management control would be engaging in a conflictual situation (Edwards and Scullion, 1982). From a Marxian perspective "conflict is structured into the labour process, that is the process in which labour power is translated into effort" (ibid:4). The "process of production involves continuous conflict over the terms on which employers extract effort from workers" (ibid:5). The employment contract does not generally determine the level of effort and with different interests being present, this struggle over the effort bargain is played out within the workplace. Examples such as absenteeism, when seen from this perspective, may be a rational attempt to address the effort and wage imbalance from the view of the worker, rather than as a negative behaviour (ibid:7).

Other writers use the term resistance and locate actions of workers in this respect as a response to management control (Collinson, 1994:26). From this perspective resistance is something generated by management control (ibid:51) and is "always inextricably linked to organizational discipline, control and power" (ibid:50). We can see here a circular process where resistance is a response to control which may then lead to changes in control strategies from management and further resistant acts with control and resistance becoming "intertwined" (ibid:51). Thompson and Smith (2010:19) have criticised this reactive view of resistance, highlighting the potential for positive action carried out by workers to gain a degree of autonomy over their work. However, it does seem logical that resistance implies something to be resistant to. A more plausible view is it should not be read as a simple response determined by management ideas and action but rather is conditioned by the individual's experience within the particular workplace, (Martinez Lucio and Stewart, 1997:62) manifested over a range of actions (Thompson and Ackroyd, 1995:615) and is not necessarily devoid of strategy (Edwards and Scullion, 1982:273). However, to be classed as an act of resistance it does not necessarily have to be "fundamentally subversive" (Collinson, 1994:50) and individuals carrying out these acts may not "recognize their actions as explicitly oppositional" (ibid:51).

We now turn to how, for the purposes of this thesis, resistance is to be determined in judging the extent of its potential or otherwise. In defining an act as resistance there needs to be an examination of the act itself. To illustrate this point, we can take the example of absence as the most common action resulting in disciplinary sanctions applied to individual workers (Edwards and Whitston, 1989:3). An employee absenting themselves from the workplace may be considered an act of resistance, unless there is a reason such as illness sufficiently serious to warrant

the absence, in which case it would not then be considered so (Edwards and Scullion, 1982:2; Edwards and Scullion, 1984:556). Likewise, an individual falling short of a required output or performance may be deliberately restricting effort as a challenge to management or may genuinely be unable to meet the targets set and is, therefore, not subversive (Ackroyd and Thompson, 1999:9). It is the individual performing the act that attaches meaning to it (Edwards and Whitston, 1989:3; Giddens, 1982:29) and so the same action may be considered an act of resistance or not, with the intention being far from clear. It can be problematic, therefore, "to explain specific behaviour in terms of resistance [...] without exploring the relationship between the behaviour and its context" (Edwards and Scullion, 1982:257). Specifically, that resistance "implies some attempt to alter the terms on which effort is expended" (ibid:258).

The motivation for the action may be explicitly to achieve control of the labour process with a direct challenge to managerial authority. In "its most extreme form to establish workers' control, or in milder variants merely to give the workers temporary control over a specific situation, control wrested from others" (Taylor and Walton, 1971:234-235). Other actions may not seek to achieve this, however, and a number of motivations have been described for acts of resistance (Taylor and Walton, 1971). Although this thesis takes a Marxist view of the labour process, workers may not see their resistance as transformative in the sense of directing it at the "relations of production" (Thompson, 1990:119) but it still may have the effect of challenging management control of the labour process. This is not to ignore the relevance of class in respect of resistance, as whilst acts of resistance may not be borne of class consciousness, they "can still be seen as an aspect of class relations, that is, in terms of the relationship between workers as sellers of labour power and employers

as users of that power in the labour process" (Edwards and Scullion, 1982:281) with their separate interests (Ackroyd and Thompson, 1999:21). Workers may resent being controlled but this does not necessarily mean they wish to take control and so acts of resistance do not necessarily stem from this motivation (Goodrich, 1975:34). Acts may not be motivated by a desire to redistribute power; they may not actually make work any easier; they are often not a direct challenge to authority but are performed to alleviate stress and tension; and may often have an element of spontaneity. Behaviour can, therefore, sometimes appear as being without meaning and thus fail to be recognized as resistance (Edwards and Scullion, 1982:226-227). Likewise, some actions directly challenging management authority may be motivated by a desire to improve work practice and so may not be recognized as resistance by the worker (Edwards, 2010:39). An example of this may be workers' superior knowledge of the technology used meaning they can adjust it to achieve a faster or easier work process but deviate from management's instructions or diktat (Taylor and Walton, 1971:232-233).

The way in which acts of resistance by workers have been portrayed has often been to place them within a framework of being "aberrant, deviant and unjustifiable" (Collinson, 1994:58) as opposed to management control, which is portrayed as "normal and legitimate" (ibid:58). This has led to the portrayal of the potentially resistant act as one of 'wrongness' or 'badness' (Martinez Lucio and Stewart, 1997:63). This has meant much of the literature around resistance has been in respect of a problem to be remedied (Edwards and Scullion, 1984:547-548; Knights and Murray, 1994:4). This thesis does not attempt to engage with this pejorative view of oppositional behaviour and seeks to place these actions in respect of their relationship within an overall structure of control (Edwards and Scullion, 1984:566;

Edwards and Whitston, 1989:23) and recognize it is management who promote the view that it is the workers' response to their direction requiring change and not *vice-versa* (Ackroyd and Thompson, 1999:12). In terms of the labour process this thesis takes the position that management is not a "neutral technique" and workers' resistance should not be seen as "irrational or misguided" (Thompson and Bannon, 1985:2). Rather, the consideration here is not an ethical one but one of whether an act carried out by a worker or group of workers has the potential to be defined as resistance to managerial control of the labour process or not (Robinson and Bennett, 1995:556).

The situation in terms of judging resistance may be further complicated by the following considerations. Whilst some acts of resistance may consist of overt actions or demands, for example in strikes or work-to-rules (Taylor and Walton, 1971:221), others may be covert (Collinson, 1994:52; Hall, 2010:167). They may also not be actions as such, as discussed, the oppositional practice may be a failure to do something. For example, if the motive for management control is accepted as an attempt to increase the effort of workers, failure to achieve this may potentially be evidence of resistance exercised by the worker (Ackroyd and Thompson, 1999:90). In these cases, it may be management control has been subverted without managers recognizing resistance has taken place. It is not as simple as gauging acts as resistance by comparing them to other eras or actions. The intertwining of control and resistance (Collinson, 1994:51) results in the repertoire of employee resistance changing as technologies and management control strategies change (Belanger and Thuderoz, 2010:153).

To conclude this section there is an attempt to clarify how this thesis deals with the concept of resistance to management control of the labour process. As we have

seen there are a range of actions, behaviours and terms, that may or may not constitute resistance. This section has highlighted that it may not necessarily be simple to classify an action as resistance from the act itself. In determining whether an action can be classed as an act of resistance towards management control there is a need, given the above discussion on terms, meanings to individuals, and the effect and effectiveness of actions, to identify the object of oppositional behaviour in practice. The question here is whether that object is "the regime of managerial controls over the labour process" (Ackroyd and Thompson, 1999:47). In other words, in terms of resistance there is concurrence with Edwards and Scullion (1982:274) that actions carried out by workers need to be related to the frontier of control between management and employers on the one hand and workers on the other. In defining an act as an act of resistance for the purpose of this thesis, it needs to threaten or influence employer or management control of the labour process at least to some extent (Jaros, 2010:74). As Chapter 2 highlighted, the motivation for control of the labour process within local government as part of the public sector operating as a component of the capitalist system is the maximization of effort and surplus labour and the rational administration of services. As such, this thesis takes the position that resistance is an act that challenges, prevents or diminishes management control in these areas, including by an employee removing themselves from the employment relationship completely. However, as the same type of act, for example, absenteeism, may in certain circumstances be an act of resistance and in other cases not, the very fact that, using this example, absence takes place at all would indicate its potential to be used as an act of resistance.

4.3 Forms of Resistance

The previous section located resistance in terms of actions that challenged or subverted management control of the labour process. This section moves on to consider the forms resistance may take. As detailed in the previous section, similar or the same actions can be deemed either resistance or not depending on the context and circumstances underlying them. As this thesis is attempting to examine the extent to which ICT has curtailed resistance, the issue is not assessing whether individual acts constitute resistance or not but rather that the category of acts may potentially be considered resistant have been rendered more difficult or impossible by ICT. In doing this we firstly examine individual forms of resistance from the perspective of workers subject to management control. Whilst the debates around control and resistance often take the form of a dichotomy between managers and workers, it is the view of this thesis managers cannot be simply assumed to constitute a homogenous group. Prior to going onto consider collective resistance from a worker perspective, this chapter considers how, far from acting as a group with a unified strategy and purpose, managers themselves may engage in acts that may be considered resistant.

4.3.1 Individual Worker Resistance

This section considers different types of individual worker resistance that may occur (Sale, 1996:270) as opposed to resistance taking organized collective forms. Individual resistance generally does not seek to change management behavior but rather to escape it (Knights and McCabe, 1998) and as such does not challenge management practice (Lukacs, 1971b:193). However, this section also addresses the issue that individual action can at times have some collective characteristics

(Collinson, 1994:55). Not all individual resistance is necessarily visible, and "can assume nondirected or covert forms and hence be difficult to detect, particularly in front-line work settings" (Frenkel et al, 1999:162). It may be difficult to obtain a true picture as workers may not be inclined to admit to carrying out acts that, by their nature, would be outside of what management would consider acceptable (Taylor and Walton, 1971:220; Ackroyd and Thompson, 1999:3). This section should not be considered, and does not require to be, a comprehensive list of all individual behaviours that may be considered acts of resistance. This is partly because it is the case that acts of resistance may be specific to the particular technological systems and regimes of control employed (Hall, 2010), but also because the issue to which the thesis addresses itself, in terms of resistance, is whether the use of ICT has rendered resistance impossible (Fernie and Metcalf, 1998; Delbridge et al, 1993), and as such it is not whether an act in itself can be determined resistant but rather whether, in certain circumstances, it may have the potential to be, as defined in the previous section. Some broad themes have been identified where specific individual behaviours may be categorized as resistance. These are sabotage, absenteeism, output or effort restriction and falsification or what may be colloquially termed as fiddling. It also needs to be recognised these categories are not necessarily discrete, and behaviours may fit into one or more of them.

The term sabotage has been quite broadly defined by some to include any acts that are intentional and "which result in the reduction in the quantity or quality of the product; this includes absenteeism [...] and even voluntary unemployment as well as destruction" (Edwards and Scullion, 1982:152). However, this would appear to be too wide a definition and a more useful one would be to use the term "to refer to deliberate behaviour leading to the destruction of, or damage to, the company's

property" (ibid:154), destroying existing work or non-destructive action such as deliberately producing poor work (ibid:154). Discrete sabotage consisting of what may appear accidental breakages or production of sub-standard products (Bosquet, 1980:370) and breakdowns that "are in fact consciously contrived 'break-times'" (Taylor and Walton, 1971:220) to restrict output or effort, may make this form of resistance difficult to identify. The particular act of sabotage may be encouraged or discouraged by the technology employed (Edwards and Scullion, 1982:166). One possibility is sabotage may be enacted simply because it is enjoyable to, or relieves the boredom of, the worker (Ackroyd and Thompson, 1999:25). Therefore, whilst it may not be an attempt for workers to assume control of the labour process, it is clearly opposed to management control at least in terms of the aspect that the sabotage is aimed at and is therefore a potentially resistant act.

We now turn to absenteeism as a form of individual resistance. A worker absenting themselves from work can have an array of meanings and reasons (Edwards and Scullion, 1984:550; Ackroyd and Thompson, 1999:25), and only the workers concerned will know if the absence can be placed in the context of manager-worker relations in the workplace (Edwards and Scullion, 1984:449-451). The recorded levels of absence may be problematic in judging incidences of it in terms of resistance. For example, some absence may be unavoidable due to illness (ibid:556). Absenteeism will also be unrecorded if it is not linked to sick leave but occurs as workers absent themselves from work surreptitiously during the working day. A study found in one British factory, "workers had established a system whereby they took it in turns to leave the factory for a few hours without their being recorded as absent. The absence figures do not, therefore, measure the 'true' extent of absenteeism in the sense of the number of workers not at work" (ibid:553). As a

form of resistance, it may be absenteeism is an escape mechanism from the intensity of management control (ibid:553). However, it also needs to be recognized the opposite may also be true as absence may also occur as a result of failure of management to exercise control, meaning workers believe they can get away with absenting themselves from the workplace (ibid:563). A further aspect of absenteeism outside of any unauthorised absence is where an individual quits their job. This could be seen as a way of resisting management control (ibid:562) but would again require investigation into the motivation for the act. However, again the point is made that whilst it may be problematic in terms of research to attribute individual acts as resistant, the fact it may potentially be used as a means of regulating the effort expended by workers or removing themselves from the relationship with that particular employer or manager, is relevant to the question of whether ICT has rendered resistance impossible (Fernie and Metcalf, 1998, Delbridge *et al*, 1993). In other words, has ICT prevented workers from indulging in these activities?

If, as has been discussed, management seek to control the labour process to intensify the effort of the worker, it would seem plausible that in resisting intensification, workers may seek to restrict their effort or output. We have seen that employers engage in surveillance and monitoring of workers, setting normative levels of output. It may be output norms are not met for reasons of deliberate subversion but is due to the inability of the worker to achieve this (Ackroyd and Thompson, 1999:9). However, limiting work output and effort may be a way of employees gaining or regaining some form of control over the labour process (ibid:26). Again, with this type of behaviour the motivation behind it would need to be determined if classification of resistance is required. Workers' responses to the

use of technological and technical control systems has been to develop increasingly sophisticated ways to defeat them (Taylor and Walton, 1971:242; Thompson and Smith, 2010:16). This is not a new phenomenon, for example, Taylor and Walton (1971), give an example from their research where they had "been told by Woolworth's sales girls how they clank half a dozen buttons on the till simultaneously to win a few minutes rest from 'ringing up'" (Taylor and Walton, 1971:219) thus effectively providing some control over the effort expended. Workers' "interventions to defeat monitoring functions have been recognised for some time" (Beirne et al, 1998:157). For example, in a call-centre, in spite "of the existence of intense monitoring, a number of interviewees [...] reported to being able, albeit to a limited extent, to disengage the waiting queue of calls" (Taylor and Bain, 1999:112). Other examples have been noted in call centres where workers may "work their way round surveillance by manipulating measures by dialling through call lists, leaving lines open after customers [have] hung up, pretending to talk on the phone, providing a minimal response to customer queries and misleading customers" (Ball, 2010:94). These actions may not be an overt challenge to management authority but could certainly be classed as acts of defiance in the face of management control systems (Knights and McCabe, 1998:182). The question again, is not whether each individual act can be classified as resistant but whether ICT has precluded such activities from taking place.

Some of the actions noted above may be seen as involving falsification. Others are clearly in this category in as much as figures from surveillance or monitoring are falsified or fiddled. In a paper by Knights and McCabe (1998) the issue of whether increased levels of statistical information increased management control, it was reported figures could be fiddled (Knights and McCabe, 1998:183). We can see here

that workers could exercise some form of output restriction by fiddling the figures management receive (Edwards, 1988:190). In terms of how this may be achieved, there is the possibility, in terms of the job and how long it may take to complete, or the technology used to perform the job, the employee is in possession of more knowledge than the manager (Collinson, 1994:34-35; Ditton, 1979:162-163) and so as one member of staff reported by Knights and McCabe stated regarding the manager, "you can blind her with science, as to what you are doing" (Knights and McCabe, 1998:183). What this shows is whilst there may exist a high level of technological control, worker resistance still remains possible even when surveillance through technology is performed at the level it is in many workplaces (Belanger and Thuderoz, 2010:138).

This section has discussed the problems that may occur in classifying an act carried out by an individual as resistance or not and given examples to illustrate this. Whether an individual act is in itself resistance or not, does not necessarily pose a problem for this thesis where the issue is whether ICT has precluded resistance from happening. The relevant question, therefore, is whether ICT has effectively prevented these potentially resistant acts from being an option for workers. The point also needs to be made that these individual acts of resistance may, in themselves, only involve one person but may involve significant numbers of employees (Taylor and Walton, 1971:219). The case given by Edwards and Scullion (1984) where workers collude to take time off during the working day would be an example of this. The situation can arise, therefore, where "individual oppositional practices are deeply embedded in particular workplace culture and are supported, shared or emulated by other disaffected workers, they adopt a quasi-collective form" (Taylor and Bain, 1999:112).

The chapter now moves on from discussing individual worker resistance to discuss the potentiality for acts of resistance from individual managers.

4.3.2 Management and Resistance

There can be a tendency when looking at the control of the labour process to assume a coherent strategy on behalf of management. This strategy is only coherent, however, if middle managers pursue the same strategy as those more senior (Friedman, 1990:182). This may not be so and Chapter 3 noted managers themselves may be subject to control through ICT. It may be assumed therefore, managers themselves may be resistant to the policies and control of more senior managers (Thompson and Bannon, 1985:107) and as Hyman (1987:30) points out the "problem of discipline and control may well be far greater in the case of managerial labour than with routine employees". Much of the discussion around control and resistance locates managers as carrying out a control function. Whilst this is the case, it should not be assumed management is necessarily a homogenous group. Managers, in certain circumstances, may have shared interests with subordinates as both groups are subject to decisions of more senior managers and have to sell their labour (Wardell, 1990:157). However, the fact they are employed to control the work of others and this is how they may be performance managed and judged, means their interests can be viewed as separate to those they manage (Edwards, 2010:34), hence the distinction in this chapter. Managers strategies and behaviours cannot be simply assumed by referring to the structural features of an organization (Friedman, 1990:180). Rather, they are "individuals with their own goals and needs" and whilst these may be separate from those they manage, this may threaten the operation of the control regime (Ackroyd and Thompson, 1999:80). There may also be a disjuncture between senior and middle

managers where the latter's personal values conflict with the managerial control methods they are expected to follow (Friedman, 1990:185). As well as playing a role in the control function then, it may also be the case managers can indulge in resisting more senior management authority too (Ackroyd and Thompson, 1999:9). In terms of what ICT systems are implemented and how they are used, these decisions are "mediated by management choice and often quite intense struggles between and amongst various factions of management" (Hall, 2010:173). It has been stated that "one of the supposed benefits of computerization was to thin out [...] costly middle managers as personal computers gave a reduced number of higher executives digital access to vital command and control data" (Dyer-Witheford, 2015:140). It may be managers see themselves as threatened by this technology resulting in a motivation for some form of resistance. We can see then the potential for a more nuanced picture of resistance than a simple view of management *versus* workers. Managers' interests may not be limited to those as defined by their organizational function and so should not be simply assumed as such (Salaman, 1982:60). The argument workers can no longer resist the level of management control ICT affords (Fernie and Metcalf, 1998) assumes management functionaries are united in their values and goals but does not afford the same view to workers which are seen as "passive, cowed, acquiescent" (Salaman, 1982:61). Either position seems questionable and the research examined these views.

Management resistance may take the same characteristics as the individual forms of resistance highlighted in the previous section. One of these is middle managers may manipulate information accessed by more senior managers, thus communicating an unjustified message of competence, particularly given the potentially competitive nature of management politics (Knights and Murray,

1994:31-33). It may also take the form of omitting to perform the control functions expected of them. Section 3.6.1 highlighted the situation where managers employed in a supervisory function may take no action against workers who fail to perform to a managerially set performance target (Zuboff, 1988:334-335) thus subverting the system of control.

4.3.3 Collective Resistance

Whilst individual acts of resistance cannot be identified with the institutions of organized labour (Martinez Lucio and Stewart, 1997:74), "the potential clearly exists for the manifestation to be channelled into the more effective forms of trade union organization and action" (Taylor and Bain, 1999:112-113) and given collective expression (ibid:103). Whilst individual actions can have a collective dimension, it is also the case collective action can also be carried out, or not, for a multitude of different, sometimes individualistic reasons (Collinson, 1994:55). This section considers features of collective resistance, particularly those more formal aspects carried out by trade unions. It also considers the view unions may seek to foster compliance rather than resistance in respect of the implementation and use of new technology. This research examines this collective aspect of how workers may or may not respond to the imposition of control through technology regimes.

It has been argued unions lack policy on, and generally fail to resist electronic workplace surveillance (Garson, 1989:219). Unions tend not to be involved in design or deployment and so technology will not reflect their interests (Noble, 1979:45) and they rarely conclude new technology agreements but even when they do it is not common for these to exclude technology for monitoring purposes (Thompson and Bannon, 1985:130-131). The trade union view has generally been they

acknowledge this type of technology as inevitable and, therefore, accept its implementation but try and impose limitations and conditions on how it is used (Robins and Webster, 1985:29). It is the case unions do not necessarily promote resistance in this area and may promote compliance (Thompson and Bannon, 1985:102), feeling the future interests of their members depend on accepting these technological innovations (Goodrich, 1975:186). In this sense trade unions may play a role in marginalizing dissent of those subjected to these new technologies in the workplace (Robins and Webster, 1985:33). It is also unusual for unions to initiate the implementation of technology (Bamber, 1988:206). How technology will be deployed depends on the relative strength of the parties involved and here union membership density is of importance (Ball, 2010:89). "If there is an abundant supply of labor and low unionization, close monitoring is likely to meet with less opposition and resistance" (ibid:96). As unions have tended to refrain from resistance around design and implementation of technology there has, in effect, been little challenge to management prerogative in these areas (Noble, 1979:49; Thompson and Bannon, 1985:132; Wilkinson, 1983:85). An explanation for this has been put forward as, "trade unions [...] became involved in technical change only to the extent the change impinged on traditional collective bargaining issues" (Wilkinson, 1983:85). The pace of technological innovation and technical aspects of design and implementation of technology may also make it difficult for unions to respond at those stages in the process (Bamber, 1988:216).

Whilst the above has highlighted what appears a lack of collective resistance in terms of the design and implementation of ICT, historically there have been examples of such resistance to technology in the workplace which at that time will have been new. One example was the rise of Luddism in the early nineteenth

century, mainly in Lancashire, Yorkshire and the Midlands, and consisting of destroying power looms and shearing frames in response to changes in technology in the framework-knitting industry (Thompson, 1980:529). Luddite bodies, collective in nature, largely grew out of workshops and communities (ibid:537). There is evidence they were highly organised (ibid:636) with their opposition based on the ability of capitalists to use machinery, factories and competition to destroy customs of trades, force down wages and reduce standards of craftsmanship (ibid:600). As such it was not blind opposition but rather "a violent eruption of feeling against unrestrained capitalism." (ibid:601) To unfavourably compare, as some have, Luddism with modern collective bargaining rather misses the point. Luddism can be seen as working people who mobilized, using whatever strategies appeared appropriate and were available at the time (Landes, 2003:498). A more recent example can be seen in the introduction of Fordist factory systems where workers were treated as though they were part of the machines they operated (Murray, 1989:40; King, 1990:67) and there was a high turnover of workers and resistance including strikes (Murray, 1989:40). This also showed an example of technology potentially aiding collective resistance with "production concentrated in large factories [where employers] were [...] vulnerable to the new 'mass worker' they had created." (ibid:40).

Whilst the above shows historically there are examples of collective resistance to the implementation of technology, there appears to be little opposition to ICT prior to implementation. However, there is still potential for resistance and negotiation from unions *post hoc*, such as using existing Health and Safety legislation to impose some control over effort, for example BIFU using regulations to enforce risk assessments building in regular rest breaks for staff (Taylor and Bain, 1999:114) as

a response to rising stress levels (Martinez Lucio and Stewart, 1997:74) and carrying out representational work in disciplinary cases brought about as a result of these regimes (Taylor, 2013:71). Unions may also be reactive in that they need issues to be raised with them by workers before instigating any form of resistant action (Tullney, 2010:43). Research has shown the perception of some employees is their workplace representative shows little commitment in challenging workplace surveillance. This does not mean challenges cannot be made to management control and the CWU, for example, have negotiated a code of practice covering monitoring and surveillance, which whilst not eliminating it, does impose some controls on how it is carried out (Taylor and Bain, 1999:114).

Unions collectively challenging the implementation of technology challenges management prerogative (Wilkinson, 1983:99) in a way individual resistance cannot. However, the surveillance regimes set up to collect data for performance management processes have not usually been implemented following any form of collective bargaining (Ball, 2010:89). Nationally, however, there are examples, albeit rarely, of unions placing performance management regimes on the national bargaining agenda and threatening industrial action over their use (Taylor, 2013:70). To challenge issues around technology prior to implementation, particularly around the effects this will have on job content and skills would require these to be a component of the bargaining background (Wilkinson, 1983:93) as any technology emerges "into established bargaining environments" (Price 1988:256). *Post hoc*, the challenge for unions in this area is how to collectivize individual grievances (Taylor, 2013:74). It may be easier for employers to deal with individual acts of resistance *via* disciplinary means but this becomes harder for them if dealing with groups of workers acting collectively (Edwards, 1979:57). Whilst the previous chapter

highlighted the control motivation in employers seeking to deskill jobs with technology particularly around using it to expropriate the knowledge held by workers (Giddens, 1982:39), this may have contrary effects in terms of collective resistance. Whilst the level of collective resistance, particularly prior to implementation, may appear low, we also have to consider the view that employees in non-union workplaces are typically subject to regimes showing little restraint from managers. Of relevance here is the effect unions may have had in shaping an organization and its bargaining, negotiating and consultation procedures prior to the implementation of technology and so may be able to exert some influence on how technology is utilized (Scott, 2004:3). The presence of a trade union may result in some curb on management prerogative and behaviour without overt resistance being required to occur (Taylor, 2013:78; Edwards and Scullion, 1984:567-568).

In examining aspects of collective resistance, it is clear there is a distinction between resistance to the implementation of technology and resistance to how it is used following this. Once technology has been implemented the technology itself may influence the type and occurrence of collective resistance depending on how it impacts on the physical work environment and what acts may be effective. Historically the advent of the factory mode of production meant the implementation of machinery had the effect of altering the physical environment of work, including for example, some workers becoming geographically static within the workplace and this may have meant less communication between workers, with less sharing of common grievances (Edwards, 1979:113-115). However, it seems unlikely employers could totally isolate workers from one another and prevent all communication either within, or between, workplaces and it would seem to be the case that the "experiences of individual employees working together, whether

spatially contiguous or not, ensure, in addition to individual meanings, that these experiences can lead to a spectrum of collectively held orientations and narratives" (Martinez Lucio and Stewart, 1997:69). ICT on the other hand may have the effect of dispersing workers as the potential for them to work from home is realized. This may have a detrimental effect on how collective action can be organized as communication becomes more problematic (Orlikowski,1988:33).

However, the same technology having the effect of creating an increasingly atomized workforce may be used as a tool of collective resistance as workers use ICT to communicate with each other (Dyer-Witheford, 1999:126), particularly as many employees have now been trained to use it effectively (ibid:84). The dual properties of ICT have been highlighted:

"The communicative and co-operative aspects of the technology that is used in workplaces [...] can be seen as a double-edged sword: for just as it gives management the ability to put the pieces together, it also gives people in their roles as workers [...] the chance to communicate with each other about what they are experiencing and what they think could be done about it" (Greenbaum, 1998:139)

An example of this is a strike at Honda called and kept solid by use of text messages (Dyer-Witheford, 2015:156). New technology can also be used by employees "using counter-institutional websites which are away from internal corporate networks" (Ball, 2010:99). There exists a potential for informal networks and communication between workers as a tool for organizations such as trade unions and political parties to disseminate information. Increasingly, "cyberspace is important as a political arena" (Dyer-Witheford, 1999:128).

Technology may also have an effect on a union's decision to organize a withdrawal of labour through strikes. Certain technologies may make this less effective as a means of resistance. With automated processes and procedures, including those facilitated through ICT, a requirement for less skilled workers may mean other workers could be brought in or work transferred to a non-strike area (Shaiken, 1985:247-248) or certain computerized processes carry on regardless of any action. However, the opposite could be true and technology may provide unions with opportunities to launch effective strike action if it affords workers the opportunity to "paralyze highly integrated operations" (ibid:248). It has been argued that when production became concentrated into large factories, employers became vulnerable to the creation of the "mass worker" (Murray, 1989:40) and so it may be the case that technology facilitated conditions for collective resistance in this environment that are not so appropriate with other technological applications. We can see then the implementation of technology may not have a unitary effect in terms of resistance and the form of collective action taken may be contingent on the use of technology within specific circumstances.

4.4 The Absence of Resistance

Following on from considering the forms of resistance that may take place in response to management control, we now move on to consider potential explanations for any absence of resistance. One of the areas of research has been to examine the view ICT, particularly in respect of its use in monitoring and surveillance of staff, has rendered any form of resistance impossible and has placed workers in a position where they have no alternative but to submit to management authority (Fernie and Metcalf, 1998). In other words, the absence of resistance is directly attributable to the ICT systems used. However, consideration needs to be

given to alternative explanations that may not be directly attributable to the technology used as a tool of control. It also needs to be recognised workers may not be prepared to admit to researchers that they engage in acts of resistance, thus giving a false picture of compliance and that writers and researchers are guilty of downplaying the phenomenon of worker resistance, preferring instead to accept a narrative of omnipotent management control. This section, in turn considers arguments that absence of resistance is directly attributable to ICT, then considers alternative explanations, before finally considering the view that it has been downplayed in the academic literature.

There has been a debate regarding whether ICT systems used as a tool of management control has effectively ended worker resistance. If true this would be a sufficient argument for any absence of resistance and it is this position being considered here. An argument has been put forward that a supervisor's power has been made total by the use of "the computer monitoring screen" (Fernie and Metcalf, 1998:9). Citing the work of Sewell and Wilkinson (1992), Bain and Taylor (2000:4) give an example of a concurrence with this view in that "worker resistance whether expressed individually or collectively, has all but disappeared". Delbridge et al (1993) agree with this position in that "worker counter-control is effectively eliminated" (Delbridge et al, 1993:105). The argument advanced by Delbridge et al (1993) is there has been a shift in the frontier of control (ibid:97), whilst Fernie and Metcalf (1998) highlight what they see as a qualitative difference between new technology, as in ICT systems employed in call centres, and previous forms of control. According to them the "possibilities for monitoring behaviour and measuring output are amazing to behold – the "tyranny of the assembly line" is but a Sunday school picnic compared with the control that management can exercise in computer

telephony" (Fernie and Metcalf, 1998:2). From this perspective, the panopticon, as discussed in the previous chapter, has been realized (ibid:2). There is some agreement that technology used in call centres integrates telephony and computerised systems and this "takes the measurement of white-collar output to new levels" (Taylor and Bain, 1999:107) and allows for technical control through automatic allocation of work (ibid:107). The systems also allow for the technology to report on discrepancies, such as between work rates and schedules (ibid:108). However, it is important to note there are still aspects of human supervision with interpretation of data and intervention with workers. In other words, control is exercised through a combination of technology and human supervision (ibid:108). Whilst Taylor and Bain (1999) accept there has been an increase in the Taylorization of white-collar work (Taylor and Bain, 1999:108) as proposed by Braverman (1998:217-218) this should not assume the fulfilment of total managerial control. Bain and Taylor (2000) criticise Fernie and Metcalf (1998) in that they provide a "simplistic and false model which ignores the complexities of the employment relationship and the labour process, they have committed an equally serious error in underestimating, even eliminating, the potential for, and actuality of worker resistance" (Bain and Taylor, 2000:3). Quoting a union official from the MSF union, Bain and Taylor (2000) give a view from a union perspective, "call centres are not prisons and [...] trade unions are capable of organising within them" (ibid:3). Fernie and Metcalf (1998) are therefore criticised for neglecting how effective trade unions may be (Bain and Taylor, 2000:7). Citing McKinlay and Taylor's (1996) research in the electronics industry, they highlight the view worker resistance does happen on a daily basis but operates at "differing levels of consciousness, effectiveness and strength across a workplace and over time" (Bain and Taylor, 2000:5). Indeed, the

commitment of resources in dealing with the data output from this monitoring is "hardly illustrative of a management confident in its authority. Rather, it indicates a perpetual struggle for control over the workforce where control is ultimately dependent on successful human supervisory intervention" (ibid:12).

The view that management have achieved absolute control through technology is difficult to support and even Fernie and Metcalf (1998) admit in a somewhat contradictory fashion, that workers "still find ways of avoiding work" (Fernie and Metcalf, 1998:9). There also needs to be recognition that the potential exists for a "mismatch between technical expertise and hierarchical authority" (Hyman, 1987:28). The panopticon does not operate perfectly within the workplace where workers are "able to exploit both gaps in the system's functioning and supervisory inconsistency" (Bain and Taylor, 2000:13). Workers interpret any "ambiguous job controls and work situations [to find] spaces when necessary [to] escape management's more overt forms of control" (Knights and McCabe, 1998:186). Even with increased surveillance, this in itself cannot reveal if "employees are cheating the system" (ibid:187). The limitation to the potential of resistance to the level of individuals has also been criticised. Case studies have shown organising from unions can be successful where they offer a "multi-faceted appeal, tapping differing sources of discontent amongst the workforce" (Bain and Taylor, 2000:13). Individual workers may also come to recognise the importance of collective organization should they become singled out for management action (ibid:13). It is also important to note in terms of resistance that workplaces may start from different points in terms of existing union organization and activity (ibid:14).

Interestingly, the view that technology renders workers powerless is not new.

Quoting Babbage's statement from 1832, "when capital enlists science in her

service, the refractory hand of labour will always be taught docility" (Burnes *et al*, 1988:4). This view can be seen to be erroneous given the levels of resistance seen in workplaces in the nineteenth and twentieth centuries. It is clear, for example, the factory system did not mean employers were able to achieve total control over their workforce. It was always part of negotiation and conflict (Daunton, 1995:185). It should also not be taken as a given, that the frontier of control, if static at this moment in time, will not shift in the future (Edwards and Scullion, 1982:288). Given previous technologies did not achieve a level of total control, the question arises then, is the use of ICT qualitatively different than previous technologies to the extent to which it can provide an irresistible level of management control by itself or in conjunction with other management techniques (Townsend, 2005:47)? Whilst it may be the case that we have witnessed declining levels of industrial conflict during a time of increased use of new technology, Hyman (1988:55) argues that it is wrong to take the correlation and assume this is simply an effect of the use of ICT as a tool of control.

Due to this potentially erroneous correlation we now move on to consider alternative explanations where resistance may be absent. The first aspect considered are cultural factors. Computers are now an integral part of our culture, thus making resistance to their use appear irrational (Rosen and Baroudi, 1992:222). There is also a discourse in the media, education and the workplace, which positively links ICT with progress (Burnes *et al*, 1988:7). Much of the response to ICT has seen a technologically determinist stance in which it has been accepted as progressive without considering its use, particularly where the results of this use are negative from the viewpoint of worker interests. In effect it has been isolated from its social and organizational impacts (ibid:2-3). This view of science and technology being

progressive is not something born with the advent of ICT. Taylor (1947) believed his system of scientific management would be accepted because of its supposed scientific basis (Rose, 1988:28-29; Taylor, 1947:40-41). There is a historical thread in how opponents of technology are portrayed in a negative way, with those who seek to challenge the use of technology being accused of displaying "nineteenth-century Luddism" (Bamber, 1988:204). Whilst it has been shown Luddism was in fact a highly organized resistance to detrimental effects to employment (Thompson, 1980:529;600-601), the predominant view remains that of wanton vandalism and backwardness (Bamber, 1988). We can see therefore, how the absence of overt resistance may spring from a desire not be seen as backward or irrational in respect of perceived technological progress.

Fear of the consequences of resistance, such as lay-offs and redundancy, may also encourage workers to comply with management control (Jaros, 2001:35) as it is management that hold the power of these consequences (Dyer-Witheford, 1999:196). The fear of job loss in particular, may have become more acute in local government due to significant job losses (Office for National Statistics, 2018) resulting from budget cuts imposed by central government particularly since 2010 (Local Government Association, 2018a:2). An absence of resistance may be perceived as acceptance rather than as result of fear of sanction (Kidwell and Sprague, 2009:197). Workers may be seen to "respond to the real-life contexts they find themselves in" (Dundon and Dobbins, 2015:17). In any situation there is a possibility workers may perceive the balance of their interests best served by cooperation rather than resistance (ibid:2). In this sense workers may recognize the exploitative nature of the employment relationship but not necessarily seek to transcend this but rather "develop strategies and responses within the confines of

the system in which they labour" (ibid:17). As such conflict may arise in some circumstances and not in others (ibid:2). Labour market conditions, which can be affected by technology and its effects on skills or automation, can affect job security which may then influence the decision workers make in terms of resistance (Edwards, 1979:126). In this sense, the technology has a role to play in how workers may become fearful, without it being the technology in itself that prevents resistance.

It should also be noted technology may have been implemented and utilized following an existing bargaining procedure (Price, 1988:256). This may explain a lack of resistance if collectively, trade unions have agreed to the implementation or particular use of technology. Whilst the absence of resistance does not necessarily indicate successful bargaining, union involvement may have the effect of curtailing future resistance from workers. In case studies quoted by Price (1988) no unions "had challenged management's right to set the parameters of the debate about new technology or posed clear-cut alternatives to management's proposals" (Price, 1988:257) and whilst the process was modified by consultation "the outcomes were all within the bounds of managerially defined 'acceptability'" (ibid:257).

Managers may seek to obtain consent from workers in respect of the control regimes, including those of surveillance using ICT systems, with the outcome that resistance may be curtailed to the "extent that power and control can be made invisible in the structure of work itself" (Rosen and Baroudi, 1992:214). The fact workers are paid may lead some to see monitoring of their work to be a legitimate management practice (Oz *et* al, 1999:167). Challykoff and Kochan (1989) highlight the prevalence of workers who concur "with management's assessment on the general need for monitoring" (Challykoff and Kochan, 1989:811). Employees may also have a different perception of electronic monitoring if it is used to inform feed-

back and provide training rather than as a purely controlling or punitive tool (Kidwell and Achey-Kidwell, 1996:9). An employee's view of fairness has led to the assertion that "[t]echnical, hardware-based solutions are preferable to supervision [...]. Machines are cheaper, more reliable and fairer than managers. [...] Employees accept performance evaluation from an impartial system more readily than from a superior" (Marx G.T., 1990:13). The issue of whether workers resist monitoring, therefore, may be affected by whether they consider it fair or not and whether it is "thorough and accurate" (Stanton, 2000:132). An advantage of electronic performance monitoring is it is consistent in its application unless it is programmed to treat individuals differently (ibid:135). We can see therefore, the presence or absence of resistance may not be due to technology per se but rather how it is used (Challykoff and Kochan, 1989:812). There is also a view that electronic surveillance is not always conflicting with the interests of the worker due to the possibility it may provide objective evidence to support their claims regarding performance (Findlay and McKinlay, 2003:306) and this is another reason why workers may consent in this area.

Where alternative explanations have been posited that do not require technology to have eliminated the possibility of resistance, we are seeing in essence a situation where workers are not necessarily prevented from acting in a resistant manner but rather may actively choose not to. In this sense workers may be judging their interests are served by accepting the situation even though their interests clearly differ from management (Dundon and Dobbins, 2015:2).

Finally, we turn to the debate that the view of absence of resistance is related to the mistreatment of this aspect by academics. A criticism of Braverman (1998) and other writers from a labour process theory perspective is the neglect of the effects of

worker resistance on technology and work organisation (Thompson, 1989:87). Braverman (1998) was criticised for failing to fully consider worker resistance and acting as though management was "omnipotent and omniscient" (Knights, 2001:68; see also Thompson, 1989:87; Elger, 1982:24; Lewis, 2007:400; Hyman, 1987:34). A criticism of Braverman (1998) is whilst the working class is an object of capital, it is wrong to assume this indicates passivity. Workers are active agents (Elger, 1982:24). What we may be witnessing is not so much an absence of resistance, but a failure to recognize and take account of it (Thompson, 1989:187). A view has been advanced that technology is used solely for the benefit of the dominant class and its hegemonic control (Orlikowski, 1988:21-22). However, this view may be seen as too one-dimensional in that it does not consider the "contradictions, countervailing tendencies, resistance and even transcendence" and therefore neglects the role of workers and premises a view that managers determine a system, without opposition, that must achieve control to facilitate effective extraction of surplus value (ibid:24). The direction of technology should not be seen as inevitable due to resistance workers can, and do, carry out (ibid:41).

4.5 Conclusion

In arriving at a working definition of resistance it has been recognized the literature uses different terms such as misbehaviour, deviance, conflict and resistance itself, when discussing actions that may be perceived as resistant to management control. The terms themselves, whilst at times being used interchangeably, may privilege certain aspects of behaviour. Hence, for example, misbehaviour has been seen to be linked to individual actions and underplay collective forms.

For the purposes of this thesis, resistance is classed as an action that is resistant to, and generated by management control seeking to determine how work is performed and increase the intensity of labour but is not determined by it. It contains actions that may be included in the terms highlighted above that may fit into this definition. Whilst certain specific acts, particularly around formal collective action and overt destructive sabotage may be clearly seen to fit a definition of resistance, others can be more difficult to categorize without determining the reason attached to it by the individual. This has been recognized as problematic when researching this area due to the possibility workers may be unwilling to admit to acts of resistance. However, this thesis is concerned with the extent to which ICT may have rendered resistance unachievable and so the question is whether an act, for example a worker absenting themselves from the workplace, in certain circumstances could be an act of resistance generated by management control and whether ICT has removed this as an option for workers. As such each individual act does not necessarily have to be defined as resistant or not, but whether in certain circumstances it could be so.

It is difficult to provide a comprehensive list of individual behaviours that may constitute resistance due to the number of different ICT systems in use and such actions potentially being unique to each one. It is also the case that by their nature, many of these actions will be covert and difficult to detect. Acts of sabotage may appear accidental, absence may be for reasons of genuine illness or as a means of restricting effort. Failure to meet managerially set performance norms may be due to inability or deliberate output restriction. In other words, actions that may potentially be deemed resistant may have more than one possible explanation. However, as explained above, the fact they could, in certain circumstances, be seen

as resistant, is adequate to judge whether ICT has precluded them from occurring, therefore excluding them as an option for workers.

This thesis has taken the position that managers controlling and workers resisting is overly simplistic, and assuming management behaviour from a structural chart may lead to a false assessment. This position would only be this simple if management was a homogenous group with identical interests and a coherent control strategy. This would appear not to be the case and it is true certain managers and levels of management are now subject to control by monitoring *via* ICT systems themselves, with the same attendant threats experienced by subordinate workers, and so it would be likely given this they may also, as with individual workers, engage in actions resistant to more senior management control. As individuals, managers may have different interests to both the workers they are responsible for controlling and more senior managers. There is also a possibility existing systems of control may be inconsistent with their personal values. In general, the position advanced is opportunities and motivations may exist for managers as well as workers to subvert management control of the labour process.

In terms of collective resistance, this chapter has considered formal action taken by organized labour, particularly through trade unions. It also, however, acknowledges individual acts of resistance can take on a collective character as behaviours become part of a workplace culture and workers may collude in certain actions outside of formal processes. The chapter points to a lack of action and policy in terms of union involvement with ICT at the stage of design and implementation of these systems and a culture of assuming an inevitability around new technology has become usual, resulting in compliance with management prerogative. This leads to the conclusion that these aspects of ICT will not reflect the interests of workers.

Historically however, this has not always been the case and examples of collective sabotage has been given. Unions have engaged in what may be seen as resistance post implementation, including using existing legislation to make their case. *Post hoc* resistance may be influenced in terms of its effectiveness by the relative strength of unions, including the density of members within the overall workforce. It is also important to recognize in situations such as local government, unions have a national role that may overtake any local action.

The presence of trade unions may also temper what management may seek to achieve and therefore a lack of overtly resistant action may not be indicative of a lack of collective strength, particularly given existing bargaining structures. The chapter has also considered how unions may use the very technology used in controlling workers, to communicate and organize, what in some workplaces is becoming a more diffused workforce. As such the technology itself may adopt controlling or resisting properties depending on who is using it. It is also the case that ICT itself whilst making some previously effective forms of resistance less so, may also be vulnerable due to its highly integrated nature, to potential paralysis.

The thesis pays particular attention to the extent ICT has rendered resistance to management control unachievable. This chapter concludes that ICT may have had the effect of an increasing Taylorization of work but this does not necessarily result in an absence or potential of and for resistance. It is also the conclusion that an absence of resistance at a time of increasing use of ICT does not necessarily imply a causal effect. Historically there has been a view that technology leads to a docile workforce and this was plainly not the case then and the view has been expressed that it is also not true now. Other explanations have been considered for an absence of resistance that are cultural, stem from a fear of consequence, that workers may

agree with the control methods employed, that union organization may be poor or absent or paradoxically union organizational strength may mean action is not required. However, whilst these reasons may not be directly attributable to technology, an indirect relationship may exist due to the implications of its use rather than its innate qualities. Examples of these may be the ubiquitous nature of the technology or the increased potential for the displacement of labour.

Chapter 5 - A Contextual Overview of Local Government

5.1 Introduction

This chapter seeks to place local government within the context of the environment in which it exists and operates. How labour is controlled and managed, and what technology is implemented and how it is used is contingent within this setting and is considered in the light of the central considerations of the thesis, namely motivation for, and method of, control and how and whether resistance to such control as exercised through ICT is possible. As detailed in the introduction, this thesis is concerned with the employment relationship in local government, but excludes teachers and covers those workers employed under 'Green Book' terms and conditions (National Joint Council for Local Government Services, 2016).

The first aspect considered is the structure of local government and how this has changed over time. Attention is paid to the dynamic between central and local government in examining why and how these structural changes occur. The chapter moves on to examine how the services local government provide have changed over time and how these changes, in terms of services lost and gained, reflect central government priorities. The view is advanced, as well as deciding which services are provided, central government has also increasingly played a role in deciding on what terms they will allow individual local authorities to provide specific services, or if still provided may be performed within the private sector.

The chapter moves on to consider how local government is financed. To this end the relationship between central grants and local taxation is highlighted, including how a reduction in the former may lead to an increase in the latter and how central government has increasingly sought to curtail the ability of local government to

implement such increases. This aspect is examined to show how this can lead to a reduction in financial resources that results in changes to management practices, labour displacement and intensification of labour, and the role technology has played in this. The areas under research, namely the Revenues and Benefits functions, are considered, particularly in respect of the comparative complexity of their administration. Central government regulatory changes are explored and considered in the context of complexity and skills, how this affects labour management and the use and implementation of technology.

The chapter proceeds to consider the industrial relations model operating in local government. It looks at the adoption of the Whitley model, how this came about and the extent to which this led to industrial peace within the sector, by highlighting the struggle to achieve it, and examples of disputes and industrial action that have transpired whilst it has been in place. The chapter considers the extent to which this system has remained intact or broken down and been decentred following central government policies, including those of pay restraint, CCT and BV. Throughout this chapter the dynamic of central government, local government and labour is borne in mind in considering how this plays a role in the outcomes affecting labour management and the use and implementation of technology.

<u>5.2 Local Government Structure – A Historical Development</u>

The term local government relates to local councils as organizations administering public affairs within a specific geographical locality (Byrne, 2000:2; Wilson and Game, 2006:10). In essence local authorities are multi-functional bodies with a "variety of social, political and economic objectives" (Wilson and Game, 2006:10) that can be directly provided or funded by the authority (ibid:10). Councils are made

up of democratically elected representatives accountable to the electorate (Jones and Stewart, 1985:5; Beetham, 1996:35). However, even given this democratic legitimacy, local authorities are subordinate to central government (Wilson and Game, 2006:3) and "can exert only the powers explicitly assigned to them by an act of parliament" (Wollmann, 2000:34). To do otherwise would be acting *ultra vires* or beyond its powers (Wilson and Game, 2006:27). As such how it operates, is to a large extent, shaped by central government (Goldsmith, 1990:33).

The formation of modern local government can be traced to the *Municipal Corporations Act 1835* (Hay and Martin, 2014:228) and the creation of corporate boroughs with directly elected representatives (Wilson and Game, 2006:52). The "freedoms of local corporations were severely restricted" (Travers and Esposito, 2003:20) due to concern from central government around control of these authorities (ibid:20). However, in terms of administration there was "little direct supervision by central government" (John, 2014:690). The 1835 Act was followed by the establishment of elected county councils and county borough councils with the *Local Government Act 1888* and district councils with the *Local Government Act 1894* (Sandford 2017:16). The structure of local government was reorganized into a two-tier system with the *Local Government Act 1972* with county councils, including six metropolitan counties and the Greater London Council (GLC), a reduced number of counties, and 36 metropolitan district councils forming the lower tier (Sandford, 2017:16; Wilson and Game, 2006:52).

Further structural changes have occurred since the 1970's. The *Local Government*Act 1985 abolished the six metropolitan counties and the GLC, with some of their functions passing to metropolitan borough councils (Sandford, 2017:17; Wilson and

Game, 2006:52). All these authorities abolished by a Conservative government were Labour controlled, highlighting a clear party-political dynamic in central government decisions on local government (Wilson and Game, 2006:61; Byrne, 2000:52-53). Whilst often described as unitary councils, as they now formed a single-tier in the metropolitan areas, functions transferred from the abolished metropolitan counties, such as passenger transport, police, fire and civil defence, were controlled by non-elected joint boards often populated with appointed councillors from the constituent authorities, meaning "elected local government [was] now weaker and more fragmented than before 1986 [with] indirectly elected and appointed bodies [becoming] increasingly numerous and important" (Wilson and Game, 2006:62-63).

46 new unitary authorities were brought into existence between 1995 and 1998 and were added to the already existing 36 metropolitan districts (Wilson and Game, 2006:66). The current structure in England is a first tier of 36 metropolitan district councils, 46 unitary councils, and 34 non-metropolitan county councils with a second tier for these authorities consisting of 238 non-metropolitan district councils (ibid:78). As a result of the restructuring of local government there is a situation where the responsibilities and services provided by authorities that no longer exist may not be easily transferable to new or existing authorities and whilst some services are controlled by directly elected councils, others are administered by appointed or indirectly elected bodies such as joint boards, joint committees or contracting and agency agreements between two or more local authorities for joint provision of services (ibid:77-79).

After considering external local government structures we now turn to those internal to councils and how they run their day-to-day business (Wilson and Game, 2006:64). When multi-functional local authorities came into being in the nineteenth century, the structural model adopted in terms of their running was the committee system. Whilst committees, made up of elected councillors, did not take decisions, they reported to full council where the decisions were taken (ibid:94). In practice this was often ratification of conclusions reached by committees (Byrne, 2000:240-243). The committees convened were the choice of individual authorities, laid down in standing orders (ibid:243), with the exception of certain statutory ones, for example, education and social services (Wilson and Game, 2006:94). The committee system was flexible in that committee structures were easily responsive to changes in powers and services allocated to, or taken away from, local authorities (John, 2014:689). Interacting with this committee system, were council employees and officers staffing departments often mirroring the committee structure, with each one headed by a chief officer or director, who would normally be a qualified professional or practitioner within the discipline covered by the department (Wilson and Game, 2006:96).

This system prevailed until changes in this area were delivered by the *Local Government Act 2000* brought in by the then Labour government (Wilson and Game, 2006:98). A number of concerns had been advanced regarding the committee structure where councillors were felt to be diverted from their representational work due to the time spent on committee responsibilities, with the two roles becoming confused (ibid:100). The Act effectively forced local authorities to choose one of three specific executive models (ibid:101). The first option was that of a directly elected mayor who would then appoint a cabinet. The second option

was an executive leader, elected by the full council, normally the leader of the largest political party, with a cabinet appointed by them. Finally, a directly elected mayor with an appointed council officer acting as a day-to-day manager (ibid:102). Most councils adopted the second option (John, 2014:696). These changes were "an overthrow of almost two centuries of committee-based decision making" (Wilson and Game, 2006:93), leading within most authorities to a radically reduced number of directorates, "combining together several departments with linked interests" (ibid:96). As a result, most officers now heading directorates "will have been appointed primarily for their *managerial* skills and experience" rather than as a practitioner (ibid:96).

This section has considered structural changes within local government over time. It is clear central government, often acting to advance their own economic or political interests, have changed structures, that in turn have affected how services are delivered and managed. The size and breadth of departments in particular have impacted on the forms of management within them and this is something the research considers, including how this may affect the technology adopted and how it is utilized. It is to the provision of services we now turn.

5.3 Local Government Services – Provision and Management

Local authorities currently deliver or commission a range of services. These services may cover, for example, social services, education, highways, leisure and culture, finance and treasury services, environmental services and consumer services among others (Wilson and Game, 2006:31). Some of these services are provided for the public within its constituency, whilst others, for example accountancy and audit, are internal for the administration of the authority itself. This section does not

seek to identify and detail these services but rather looks at how services delivered by local authorities have been subject to change over time and also how the management and administration of these services may change.

The formation of local authorities can be seen as a response to issues arising from increasing industrialization and urbanization (Wollmann, 2000:36). Their creation "produced an entity that could potentially run a range of local services in an integrated fashion" (John, 2014:689). Local government developed because of the requirement to produce 'public goods' that could be seen to be of benefit to all but were not likely to be produced by the private sector (Travers and Esposito, 2003:27). However, services provided by local authorities have not remained static over time. For example, by the 1950's, local authorities ceased to provide electricity, gas, or roads, all of which moved into central control. Likewise, by the 1970's water, sewerage and local health services had been reallocated to the centre (ibid:31). Other services, such as social services became more of a requirement for local authorities. At any time, local government will have a wide-ranging array of services and responsibilities to discharge (Wilson and Game, 2006:5). The view of local authorities as major service providers is based on the situation where, from "the late nineteenth century and most of the twentieth, national governments passed legislation requiring or permitting the provision of all kinds of public services, mainly through the auspices of other bodies - and most significant by far of these other bodies were local authorities" (ibid:22).

One of the central planks in the post-1979 Conservative government's policy agenda was the introduction of CCT (Wilson and Game, 2006:354). This was introduced and extended over time to various services provided by local government

with the Local Government Act 1980 with building and road services, followed by further acts in 1988 and 1992 extending CCT to services such as catering and refuse collection and finally white-collar roles (Byrne, 2000:556). CCT compared the costs of in-house provision of specific services with interested private sector bidders. The lowest bid won and local authorities could not impose conditions, for example, on trade union rights or employee terms and conditions that could be seen to distort competition (Wilson and Game, 2006:354). Whilst between 75 and 80% of in-house bids won contracts (Stoker, 1991:221) it is important to note even where councils were successful, the service exposed to tendering became a Direct Services Organisation (DSO) and was "obliged to maintain separate trading accounts, which had to make a specified percentage surplus" (Wilson and Game, 2006:355). Therefore, we can see patterns of management would change even with retained in-house services (ibid:356) with managers having to operate within the budget quoted (Stoker, 1991:218). Whilst some councils embraced this policy and voluntarily contracted out, the majority did not (ibid:220). The policy had an effect on the services individual local authorities provide and the manner in which services were provided and managed.

The election of a New Labour government in 1997 saw the revocation of CCT to be replaced in April 2000 with Best Value (BV). BV required each authority to implement a Best Value Performance Plan to achieve continuous improvement. Every service provided by the local authority was required to be subject to this as part of a rolling five-year inspection regime carried out by the Audit Commission's Best Value Inspectorate. In effect what we see here is a centralized performance management system with the Secretary of State having considerable powers to intervene if inspectors deemed an authority was not delivering a best value service

(Wollmann, 2004:645). Part of the BV regime were "dozens of *Best Value Performance Indicators* (BVPIs). These BVPIs [were] mainly produced by central government departments, and each year councils [had] to publish locally [...] their audited performance measures against these indicators" (Wilson and Game, 2006:183). As there is no performance indicator of profit within the public sector this regime was meant to provide a measurement in terms of whether required service objectives are achieved (Ironside and Seifert, 2001:3). There were in effect, threats to "underperforming" or "failing" councils (Orr, 2005:377) with service provision becoming contingent on compliance with central government instruction (Rose and Lawton, 2001:21). This can be seen as "every bit as centrally prescriptive and potentially more interventionist" (Wilson and Game, 2006:364) than CCT and that "BV [...] can be seen as just another move of central government to impose on local authorities a degree of centralist guidance and control" (Wollmann, 2004:646). Essentially, New Labour continued with the trend of centralized regulation of local authorities (Wollmann, 2000:39).

This section has detailed some aspects of service provision by local authorities. Again, and relevant to this thesis, is how services provided by local authorities are not fixed but have been subject to change over time depending on the requirements of central government. The point made by Coffey and Thornley (2014) that "it is inappropriate to suppose that job security say, has ever been anything other than partly dependent upon the equally contingent issue of what is provided publicly and what is provided privately and what is not provided at all" (Coffey and Thornley, 2014:204), is particularly pertinent to this thesis when considering how workers' behaviour may be affected by their own sense of security.

5.4 Local Government Finance

This section examines local government finance in relation to how local authorities are funded. It pays particular attention to two distinct but related elements of funding, firstly from central government grants and secondly from sources of local taxation, namely council tax and business rates (also known as National Non-Domestic Rates (NNDR)) and how these have developed over time. Although grants and local taxation are distinct forms of funding they need to be considered together as they collectively form the total spending amount for local authorities. It is seen that central government does not just have control over the level of grants but has also wielded considerable control over how local taxation may be raised.

Local authorities can generally choose how to spend their income, unless ring-fenced. However, some central government grants are ring-fenced, for example the Public Health Grant (Sandford, 2017:13). The levels of grants from central government are decided annually *via* the Local Government Finance Settlement and is "consistent with overall public (state) spending plans" (Byrne, 2000:374). Local government spending can be one of two types, revenue or capital expenditure. The former is made up of grants and locally raised taxes and the latter by grants and borrowing (Department for Communities and Local Government, 2017:4).

Prior to the *Municipal Corporations Act 1835*, local corporations were funded solely from local sources. The act introduced the first grant revenues from central government (Travers and Esposito, 2003:10). In effect these were a reimbursement to councils for expenditure relating to national policies where services became statutory in nature (ibid:22-23). The local element of funding was initially raised *via* locally set up rates systems, in effect a local tax on property by way of valuations

carried out by local authorities. The *Rating and Valuation Act 1925* established one national rates system with local authorities performing property valuations. Local authorities' autonomy in valuation and rate setting effectively gave them control over the raising of revenue. However, some Labour controlled authorities used this autonomy to increase rates to provide greater levels of poor relief than was prescribed, drawing protests from the middle classes and a recognition from central government that the autonomy of local government may represent a problem in respect of national policies (ibid:30). In 1948 the power to carry out valuations was removed from local authorities, becoming centralized with the Inland Revenue. Effectively this meant local authorities could only control income from local taxation by setting different rate poundages (ibid:11). However, it can still be seen, whilst it may be subordinate to central government in the aspects detailed above, local authorities still had an amount of fiscal autonomy due to the local element of tax raising (Hay and Martin, 2014:228).

The 1950's and 1960's witnessed an increase in the demand for local authority services (Travers and Esposito, 2003:39) as a result of the formation of the welfare state (Wollmann, 2000:37). As a consequence, local government expenditure went from 6.5% of GDP in 1955 to 8.8% in 1963 (Travers and Esposito, 2003:39). Real terms expenditure increased by 300% between 1955 and 1975 (Hay and Martin, 2014:228). The consequences of this resulted in increasing rate charges and rising unpopularity. However, the system was not changed due to perceived administrative simplicity and central government responded by increasing the level of central grant funding (Travers and Esposito, 2003:39-41). By 1976, 47% of local government expenditure came from central government grants, compared to 25% in the mid 1930's and 35% in 1953 (Hay and Martin, 2014:228).

The Thatcher government's programme of "free market non-interventionist policies" (Travers and Esposito, 2003:50) was believed to be threatened by the financial autonomy and power of local authorities (Wollmann, 2000:37). One means of alleviating this threat was the reduction in public spending, including by local authorities where grants were reduced to 41% by 1989 (Travers and Esposito, 2003:50). The effect of this reduction was an increase in rates to make up the shortfall, leading to financial penalties from central government resulting in further increases in rates (ibid:51). The government response to this upward spiral was to prevent the issuing of supplementary rates with the *Local Government Finance Act* 1982 and the introduction of rate capping giving ministers the power to limit rates charged with the *Rates Act 1984* (Hay and Martin, 2014:229). This effectively meant, with no powers over valuation, local authorities "no longer had any real revenue raising powers at all" (Travers and Esposito, 2003:52) and the result was "what started out as a truly local system of taxation was gradually reduced to a sham, with central government having almost total control over local authority rating" (ibid:12).

The domestic rates system was abolished by the *Local Government Finance Act* 1988, replaced by the Community Charge (Hay and Martin, 2014:229). What became known as the Poll Tax, gave local authorities autonomy to raise extra finances locally, with a Government view that this would provide a public focus on the link between local decisions and poll-tax levels (Travers and Esposito, 2003:12). At the same time, the Government implemented NNDR. This was collected by authorities for the Exchequer but set nationally with a certain amount being returned as a central grant to local authorities from a central pool (Pope and Waters, 2016:36). The result of the changes overall was whereas councils had controlled around half of their income via local taxation this was now reduced to around 25%

(Travers and Esposito, 2003:55). The result of this was any desired increase in spending would need to come from the taxation element local authorities could control, hence an increase in the levels of Poll Tax bills, public disquiet and the extremely unpopular tax being scrapped (ibid:12).

The Community Charge was replaced by Council Tax by the *Local Government Finance Act 1992*. This was a form of property tax with properties placed in bands by the Valuation Office Agency. Local authorities set their own council tax levels (Sandford, 2017:13), with the ratio between rates for the different bands being set by central government. However, capping limits were set by central government giving them significant direct control of local authority expenditure (Hay and Martin, 2014:229). Following the election of a Labour government in 1997, powers were retained to limit council tax rises but with large increases in central government grants during their first two terms in office meaning around 66% of income was supplied centrally (ibid:230). The financial crisis of 2008 and the subsequent election of a Conservative/Liberal Democrat government in 2010 led to severe public spending cuts with the "deepest cuts to local authority budgets in three decades" (Wilks-Heeg, 2011:636).

From 2011 until 2016, grants as a percentage of local authorities' total income saw a decrease from 64% to 52% (Department for Communities and Local Government, 2017:7). This trend is likely to continue with cuts of £2.7 billion in central funding between 2018 and 2020 planned (Local Government Association, 2018a:2) and local authorities having to "find billions more in savings to plug ever widening funding gaps" (ibid:3). There is a view that there is a party-political element here, in that Labour controlled councils have generally had greater central grant reductions than

their Conservative counterparts (Wilks-Heeg, 2011:639). Simultaneously, we have seen local authorities' ability to raise money through local taxation limited by having to hold a referendum should an increase in Council Tax of 5% or more be proposed (Sandford, 2017:13). The effect of these funding cuts and ongoing privatization on employment in local government has seen reductions in staff employed as shown in Table 1 below.

Table 1 – Local Government Employment 2012 – 2017 (England and Wales)

| Year | Head Count | Full-time Equivalent |
|------|------------|----------------------|
| 2012 | 1,743,300 | 1,339,200 |
| 2013 | 1,783,500 | 1,250,400 |
| 2014 | 1,710,000 | 1,207,300 |
| 2015 | 1,640,800 | 1,169,000 |
| 2016 | 1,564,800 | 1,119,600 |
| 2017 | 1,476,600 | 1,064,700 |

(Local Government Association 2018b)

There are clear implications for labour management and the adoption of technology here, as managers try and maintain service provision within a reducing resource environment with automation and intensification of labour via tighter control of performance.

5.5 The Revenues and Benefits Functions

This section gives an overview of the two areas, namely Revenues and Benefits, being researched in this thesis in terms of the operational aspects of their administration. The purpose of this is two-fold. Firstly, it gives a general view as to the work carried out within the areas and secondly, and leading on from this, it gives a relative view of the complexities within the two areas. This latter aspect is of importance to this thesis when considering labour management and the use of ICT, particularly if one area can be seen as considerably more complex and requiring a greater level of skill than the other. However, this section cannot give a detailed account of functions subject to a considerable body of regulatory requirements.

We first consider the Revenues function which relates to the collection of income for the local authority. The first of these income streams is Council Tax which was introduced in 1993 (Murphy *et al*, 2014:731). Council Tax is a property-based tax (Pope and Waters, 2016:32) with each domestic property within the local authority placed into one of eight bands (A to H) established by central government, by a valuation based on a market value established by the Valuation Office Agency, an agency of central government (Sandford, 2017:13; Pope and Waters, 2016:33). Central government set a ratio between the eight bands, with Band D set at a value of one, with all the other bands set as a proportion of this (for example Band A is set at two thirds of Band D and Band H at twice the value of Band D) (Pope and Waters, 2016:33). Although the ratio is set by central government, each local authority set their own levels of council tax, within the constraints highlighted in Section 5.4, and keep all the money raised through this levy (Sandford, 2017:13).

All unitary and district councils, including the authorities being researched, are billing authorities responsible for issuing lawful, that is correct, council tax bills calculated as detailed above (Sandford, 2018:6). The bill also contains precepts from other bodies, such as fire and police authorities, forming the total council tax liability and will normally be paid over 10 monthly instalments (Sandford, 2018:6; National Archives, 2018). In calculating the bill, authorities also have to determine any requirement to take into account any reliefs and exemptions, for example a 25% discount if only one person occupies the property or up to 100% for unoccupied or vacant properties at the discretion of each council (Pope and Waters, 2016:34). This list is not exhaustive but illustrative of the aspects officers dealing with this tax have to take into account. The local authority is responsible for administering and collecting this tax, keeping up to date records of variations in liability due to changes in occupation and entitlements to discounts or exemptions throughout the year. The authority is also legally responsible for the collection of the tax by issuing reminders and potentially court summonses to recover unpaid amounts liable (National Archives, 2018).

Business Rates collection also forms part of the Revenues function. Whereas Council Tax relates to domestic properties, Business Rates taxes non-residential properties and was introduced in 1990 at the same time as the Community Charge. Each commercial property within the Authority area is allocated a rateable value by the Valuation Office Agency based on market rental value. The rate is based on a proportion of this value. It is calculated on a sliding scale and so the smallest properties within a local authority may have zero liability (Pope and Waters, 2016:34). Various other reductions and exemptions may be applied, for example charitable relief. Local authorities administering this tax may give discretionary relief

for any purpose at their discretion but have no powers to increase the charge (ibid:35). Unlike Council Tax, any monies collected are paid into a central pool and redistributed back to local authorities in the form of central government grants (ibid:36).

With respect to Benefits functions the current system of Housing and Council Tax benefits are income related and designed to help people with rent and Council Tax payments respectively (politics.co.uk, 2018). Housing Benefit administration transferred from central to local government, partially in 1982, and fully by 1989 (Murphy et al, 2014:731). Welfare and benefits is an area of political contestation and different governments have implemented differing policies in these areas and consequently "the arrangements grew to be highly complex" (politics.co.uk, 2018). Local authority officers therefore, "apply a complex set of deductions and premiums to calculate entitlements" (ibid). Examples of changes resulting from policy initiatives are the Housing Act 1988 and the deregulation of the private rented sector; changes to flat rate payments for private tenants in receipt of benefits in 2002; the commencement of the austerity programme requiring a reduction in Housing Benefit costs with regulation changes up-rating deductions applied to benefit entitlements, a cap on mortgage interest payments payable and an overall benefit cap to limit the maximum amount of benefit paid; in recent years we have also seen the roll out of Universal Credit and the implementation of what has become known as the Bedroom tax, making deductions from benefits if claimants are deemed to rent a property in the social housing sector with more bedrooms than they require (Harris and Rutledge, 2013:12). The extent of the complexity of this area can be seen by taking a single year as an example. In 1999 there were "85

government-inspired regulation changes [requiring] new computer software and a reorganisation of how claims were processed" (Salman, 2001).

The complexity of the system has led to issues around administration. In 2002-2003 new claims on average were taking 48 days to complete. The government target was 14 days. However, some councils were taking around 150 days (politics.co.uk, 2018). The administration of claims is now subject to performance indicators under the government's Comprehensive Performance Assessment, with claims being handled in less than 30 days classed as excellent, 30-36 days good, 37-48 days meeting minimum standards and over 48 days not meeting minimum standards (Murphy *et al*, 2014:740).

This section has given a broad overview of the work carried out within the Revenues and Benefits functions respectively. The overall position shows Revenues has had a relatively unchanged regulatory framework, with Council Tax relatively unchanged since 1993 and NNDR from 1990 respectively. In contrast Benefits have been subject to several regulatory changes.

5.6 Industrial Relations in Local Government

This section considers the industrial relations environment within local government. It takes a chronological approach to show the situation has not been, as some have described, a relatively peaceful industrial relations landscape until the early 1970s (Kessler and Bayliss, 1995:129). The section highlights that developments in the industrial relations environment are the result of struggle and negotiation between employers, workers and central government. This section is particularly relevant in terms of considering how contested issues between employers and labour may be

dealt with and again highlights how central government plays a role here in influencing outcomes.

The historical examination for the purposes of this section commences at the start of the twentieth century. What was to become the dominant union for white-collar local government staff, NALGO, was formed in 1905 (Spoor, 1967:17-18). NALGO, from inception had struggled to achieve national terms and conditions, along the lines of what became the Whitley model, for local government staff (Gill-McLure, 2014:369). The Whitley committee (1916) was not set up for public sector workers but was rather to report generally on improving relations between employers and workers. Importantly, however, the government position was its adoption was voluntary and so could be applied in local government (Spoor, 1967:81). A central plank of the proposals was that the best form of regulation of industrial relations was where pay and terms and conditions are determined jointly by employers' and workers' organizations collectively bargaining through joint national industrial councils (Fredman and Morris, 1989:144; Ironside and Seifert, 2000:15-16). Pressure from NALGO, but with resistance from employers wishing to maintain autonomy over employment matters, achieved its goal of establishing national terms and conditions with the formation of a Whitley National Joint Council (NJC) in 1943 (Gill-McLure, 2014:369; Ironside and Seifert, 2000:16; Spoor, 1967:80).

The Whitley system operated "codified national agreements [...] supplemented by bargaining at regional and employer levels" (Ironside and Seifert, 2000:16) and "would transform local government from a congeries of separate employments into the single national service [...] which NALGO had been aiming [for]" (Spoor, 1967:81). What was known as the Purple Book codified pay and conditions (Ironside

and Seifert, 2000:53). This left little room for local negotiations which were generally limited to how national agreement should be applied within local environments (Ironside and Seifert, 2000:53; Gill *et al*, 2003:260).

As a result of the adoption of this system there was a view that industrial relations, up to the early 1970's was generally calm (Kessler and Bayliss, 1995:129). However, a criticism of this position has been advanced by Ironside and Seifert (2000) as,

"limited by the pluralist preoccupation with collective bargaining as an integrative solution to temporary disagreements between the potentially equal two sides of industry [...]. Rather it brings about temporary outbreaks of peace between the parties to a fundamentally unequal employment relationship" (Ironside and Seifert, 2000:52).

As with the debate around local government as a model employer, discussed in Chapter 2, this thesis approaches the historical context in terms of a continuity of struggle, negotiation and accommodation that did not commence in 1979 but has its roots in the formation of local government. As we have seen, the adoption of the Whitley system was only achieved following a process of pressure and resistance. Further illustrative examples are as follows. A refusal for a claim for better gradings saw a strike in Glasgow in 1964 (Spoor, 1967:531). Two public sector strikes occurred in response to the Heath government's *Industrial Relations Act* 1971 (Ironside and Seifert, 2000:45). 1974 saw industrial action in the form of overtime bans and one-day strikes as pressure for pay increases grew and employers refused to negotiate (Ironside and Seifert, 2000:46; Newman, 1982:436). Between

1977 and 1978 "nearly 250 cases of industrial action went to [NALGO's] Emergency Committee" (Ironside and Seifert, 2000:47).

Whitleyism in 1979 was "the dominant model of public-sector industrial relations" (Ironside and Seifert, 2000:16). However, by this stage we were seeing an increase in the size of employment units as detailed when considering structural developments, and new technology was starting to affect job classifications and a more central role for personnel officers meaning the Whitley model was starting to look less stable. Pressure was also building from the union membership who began to perceive the national bargaining system as being unable to prevent cuts to pay, and in some quarters began to exhort the leadership to take collective action. However, at this stage there was an expectation this model would continue (ibid:56).

The reforms carried out by the Conservative governments of Thatcher (1979-1990) and Major (1990-1997) "were made in the name of free-market competition, rooted in neo-classical economic theory" (Ironside and Seifert, 2000:7) and their critique of the public sector as detailed in Chapter 2 (Kirkpatrick and Martinez Lucio, 1995:8). One of the central policies implemented, CCT, resulted in the decentralization of industrial relations in the areas subjected to it, to the level of the cost-centre at a sub-departmental level (Gill *et al*, 2003:261). However, public sector managers are constrained in the range of responses available. In essence, these are limited to cutting labour costs and will not have the option of reducing wages which will normally be set by national collective bargaining (Ironside and Seifert, 2001:3-4) as detailed above. This leaves them with the following options, reducing the number of staff employed; intensifying work rates; reducing the number of staff on higher grades; introduce flexible work schedules; and use agency staff to ensure utilisation

of labour only when required (Ironside and Seifert, 2001:3-4; Kessler and Bayliss, 1995:129). To achieve these changes there will almost certainly be requirement for the weakening of "the capacity and the resolve of trade union representatives to resist" (Ironside and Seifert, 2001:4). It should also be stated here that changes in work organization can often be achieved without the requirement for contractual change (ibid:5). The changes implemented by managers in the public sector can be seen as tactical rather than strategic in that they find themselves in an environment that severely constrains their discretion (Hyman, 1987:29).

Whilst there is collective bargaining at national level, the extent of financial control exercised by central government, as discussed in Section 5.4, means it can exercise a great deal of influence on local government terms and conditions, particularly pay. During the 1980's we saw a relative decline in local government pay in relation to the private sector resulting from the tight control central government exerted over local government expenditure (Kessler and Bayliss, 1995:130). It is the case at this time "many Conservative authorities were unenthusiastic, if not openly hostile, to the Government's policy towards local government" and this coupled with Labour control in most other authorities meant central government sought direct control via control of income and a push towards privatization (ibid:132). The election of New Labour in 1997 "continued to support a policy that all public sector pay increases must be funded from within existing budgets through efficiency or other savings" (Corby and White, 1999:20). We can see here although a collective bargaining system exists the outcome of any such bargaining can be fundamentally influenced by central government policy and intervention. Historically we have seen governments openly intervening in pay, for example, with outcomes influenced by

the government financial policy of the time and not simply as a collective bargain between employer and employee (Ironside and Seifert, 2000:56-57).

The "organizational capacity of trade unions to protect the interests of their members has undoubtedly been threatened by public service reforms" (Bach and Winchester, 2003:308) as, no doubt, was the Government's intention (Brown et al, 1997:74). Whilst, the decline of strike action seen in the 1980's continued into the 1990's, industrial action has not been eliminated (ibid:77). There has been a move from a centralized system of collective bargaining towards a more fragmented environment with a change in how unions need to respond to this, considering the inconsistent nature of trade union workplace organization that has resulted (Bach and Winchester, 2003:309). Reductions in numbers of employees classed as employed by local government increased from the mid 1980's to 1997 although many of these remained in employment having been transferred to the private sector (Corby and White, 1999:13). Outsourcing had the effect of placing increasing numbers of workers outside collective agreements and diminishing the bargaining position of those remaining (Coffey and Thornley, 2014:201). An issue with the fragmentation of local government service provision as a result of privatization is the situation where staff transfer to a new employer. Whilst the Transfer of Undertakings (Protection of Employment) Regulations (TUPE), may protect the terms and conditions of those transferring, at least for a limited time, these protections would not necessarily be afforded new employees. The situation may arise where there is a two-tier workforce, meaning those "who join private contractors after a transfer has occurred, and who are thus protected neither by public sector collective agreements nor TUPE, could be employed on worse conditions of employment from day one of their contract" (Ironside and Seifert, 2001:5). It would also appear terms

and conditions for the staff transferring will deteriorate over time (ibid:8). As discussed, even the staff who remain under local authority employment have been affected by the reforms considered, particularly due to changes in labour management practices and there is evidence from unions supporting the view that their terms and conditions have worsened, particularly for those on the lowest salaries (ibid:8).

The picture is not entirely negative, even accepting the detrimental outcome for workers due to Government policy as detailed. Trade unions have not been totally undermined in local government. Evidence shows "union activity reduced the incidence of contracting out and that unions overwhelmingly took the view that keeping services public was in the interests of the union, its members and the service users" (Ironside and Seifert, 2001:7). Coffey and Thornley (2014) point to a certain "resilience" in public-sector trade union membership since the end of Thatcher's premiership (Coffey and Thornley, 2014:207). There are also examples of industrial action being successfully utilized in the public-sector in defence of members, a particular example being where NALGO used selective strike action in 1989 to achieve an increased pay offer from 6% to 8.8% and succeeded in getting the employer to remove conditions attached to the original offer, including a proposal for performance related pay and local negotiations to be allowed to variations in the national agreement on working time and pay for weekend working (Kessler and Bayliss, 1995:131). Industrial action has been seen in local government in more recent times including the following which is not comprehensive but illustrative: national strike action by a number of local authority unions in 2006 over changes to the local government pension scheme (Lyddon, 2015:737); strike action by a number of local authority unions in 2014 over pay (Lyddon, 2015:738); and a

number of more localized disputes, for example strikes at Bristol City Council over shift patterns for library workers (UNISON, 2016) in 2016; Glasgow City Council over equal pay (UNISON, 2018a), strike action at Bath and North East Somerset Council over pay cuts for care workers (UNISON, 2018b) and at Dacorum Council over job losses and cuts to redundancy compensation (UNISON, 2018c), all in 2018. There has been, according to Coffey and Thornley (2014) a tendency for some to overstate the decline in collective industrial relations in the public sector. It still plays an important part and we still see national collective bargaining being largely protected by unions *and* employers (Coffey and Thornley, 2014:207; Gill-McLure, 2014:373). Whilst the earlier discussion has pointed to the transfer of workers from the public to the private sectors it is still important to recognize the state is still a considerable employer (Coffey and Thornley, 2014:207).

After looking at the chronological development of industrial relations within local government we now examine the current situation. The recognized unions currently operating in local government are UNISON (created from a merger of NUPE, COHSE and the aforementioned NALGO), GMB and Unite, and along with the employers, form the National Joint Council (NJC) (National Joint Council for Local Government Services, 2016:1). The functions of the NJC are set down as the negotiation of collective agreements on pay and conditions and anything the two sides agree to negotiate on; to encourage the application of national agreements by all sides; to promote co-operation between employers and recognized unions; as an advisory body; as the final arbiter of differences unresolvable at a local or provincial level; and to assist in the resolving of disputes (ibid:8). The employers have remained largely committed to the national framework of bargaining but persisted with pressure to achieve flexibility locally within it (Kessler and Bayliss, 1995:131-

132; Fredman and Morris, 1989:28) resulting in the Single Status agreement of 1997 (Bach and Winchester, 2003:303). This extant agreement effectively integrated manual and administrative, professional, technical and clerical (APT&C) workers. Both categories of worker have been placed onto a single pay spine by a job evaluation scheme, jointly agreed by employers and staff sides, covering all staff and the agreement also harmonized terms and conditions, such as working time and holidays (ibid:304). Although the agreement was made in 1997, implementation has been slow with the integration of manual and APT&C groups proving problematic. It should also be noted there was no funding from central government to facilitate the implementation of the agreement (ibid:304).

The agreement is laid down in what is known as the Green Book, which consists of four parts. Part 1 lays down the principles, the most important one being "to reach agreement [...] on a national scheme for pay and conditions for local application throughout England" (National Joint Council for Local Government Services, 2016:5). Part 2 contains "national provisions which are for application by all local authorities to all employees covered by the NJC" (ibid:5). Part 3, covers other "national provisions which may be modified by local negotiation" (ibid:6), therefore some local flexibility has been conceded by the staff side. Part 4 contains agreed guidance, most importantly the operation of the jointly agreed, but not compulsory, job evaluation scheme (ibid:41).

5.7 Technology in Local Government

This section examines the use of technology within local government from a historical perspective from the first implementation of computerised technologies. Whilst this was not the first technology to be used in local government, we could

also point to the use of telephones and type writers for example, (Local Government Association, 2014:6), the main focus of this research is with the use of ICT. As such, the section starts from the 1970s and concludes with technologies being applied in local government at the time of writing.

Councils made the first widespread and regular use of computers in the 1970s. This use tended to be "focussed on running individual back-office systems such as finance" (Local Government Association, 2014:12). There was little use of computers for customer services as such at this time, partly due to the lack of access the general public had to this type of technology and during this period computerized systems were, therefore, utilized more for internal interactions than with citizens (King and Cotterill, 2007:337). An independent research organization, The Foundation for Information in Local Government (FITLOG), was set up in the 1980s to advise on the use of ICT for the purpose of service improvement. During the same period the Society of Information Technology Managers (Socitm) mostly made up of local authority IT managers was formed. We can see then at this stage there was information regarding technology being shared among local authorities (Local Government Association, 2014:12) with an agenda starting to develop recognizing the potential for ICT to be used in the provision of services to the public.

Moving into the 1990s the major developments were the rise of the internet and a growth in the number of people having access to personal computing within the home (King and Cotterill, 2007:337). The Labour government's BV regime led to strong pressure for councils to become more user-focussed (Beynon-Davies and Martin, 2004:216) and this period saw developments in telephony, including its use in call centres (King and Cotterill, 2007:342). The use of ICT during this period was

articulated as a way of improving services to customers, advancing the agenda proposed in the previous paragraph. There is a major development here, in contrast to the first use of computerized systems, in that the technology now changed the way councils communicated and interacted with citizens (Local Government Association, 2014:12). We also see organisational performance as measured in terms of BV can be dependent on how data is handled, measured and dealt with and "much of the information they need is likely to be dealt with more effectively through electronic media than by conventional paper-based or manual information systems" (Beynon-Davies and Martin, 2004:217).

The Labour government in 1999 set up the Cabinet Office's Office of the e-Envoy, with the aim of improving service delivery in the public sector, along with significant cost savings (Local Government Association, 2014:13). The somewhat naïve target was for 100% of all government services, including local government, to be available electronically by 2005 (Local Government Association, 2014:13; King and Cotterill, 2007:337). However, this does illustrate the direction of travel the Government required from local government. Central government also provided £670 million between 2000 and 2005 for the Local Government Online project (LGOL), set up to aid councils in exploiting technology to improve service delivery and "realise quantifiable savings" (Local Government Association, 2014:13). LGOL supported councils in using technology for customer contact centres and customer relationship management systems, setting up websites and on using technology in priority services, one of which was Benefits (ibid:13). There was a financial inducement for councils when in 2001 central government invited them to report on how they would meet the 2005 target. Those who submitted satisfactory statements were allocated extra funding (Beynon-Davies and Martin, 2004:220). Up to this point there was a view that in terms of ICT, councils demonstrated "a general reluctance [...] to contemplate fundamental changes in business processes" (ibid:222).

By the end of the period of LGOL in 2005, councils were moving to two-way contact via the internet and phone. Technology at this time was considered transformative in terms of customer relations supporting such initiatives as 'Tell Us Once', where customers were able to inform the council of a particular event and technology would then contact all other relevant areas of the council and external agencies, rather than a member of the public having to contact individual departments separately. This has cut down on the requirement for back office processing by integrating it with front office systems (Local Government Association, 2014:15-16; King and Cotterill, 2007:343) and has seen a rise in one-stop shop type facilities (King and Cotterill, 2007:342). By 2014, more than two thirds of over 600 million contacts to councils from the public came through on-line and digital channels and 24% of visits to local authority websites are being made to conduct transactions (Local Government Association, 2014:22). We can see developments allowing local authorities and external agencies to link systems that would have once been deployed and utilized within separate councils, partially due to the problems of data security.

There is a recognition that financial cuts imposed on local government "have accelerated the drive in councils towards using technology and digital tools" (ibid:17). However, the target of having 100% of all local government services available electronically is not feasible due to a recognition that some services "can only be delivered using specialist expertise or customised approaches" (ibid:17). However, even some of these areas may be impacted by technological

developments in the future. "Artificial intelligence and robotics are becoming commonplace in local government [...]. There are already councils using virtual customer service assistants to handle basic queries" (Sivarajah and Irani, 2018:1). We have also seen the development of distributed ledger technology (blockchain) effectively recording when tasks have been completed by workers or contractors that allow citizens to register issues through the ledger to be automatically forwarded to the worker or contractor for resolution rather than have to go through the more traditional reporting channels (ibid:1-2). There is a recognition from Sivarajah and Irani (2018:2), that these artificial intelligence and robotic technologies, in particular, could threaten jobs to the extent an estimated 250,000 public sector jobs are at risk from these technologies over the next decade.

The research considers the motivation for the implementation of these systems over the period of their development and the effect this has had on the labour process in terms of control of staff. The developments seen in computerised systems, includes greater integration of systems and agencies, automating customer relationships and functions, and increasing statistical data allowing for greater levels of information to meet government target monitoring requirements and employer surveillance and performance management of employees. We have also seen a specific view of ICT as being linked with financial savings potentially facilitated by intensification and displacement of labour. This section has highlighted central government exerting pressure on local government in respect of its use of ICT.

5.8 Central and Local Government Relations

A common theme occurring in all sections of this chapter is the extent to which central government can decide or influence the actions of local government. GillMcLure (2014) has proposed a dialectical relationship of control and resistance between central and local government and this is felt to be useful in terms of the position of this thesis. However, this relationship is additionally complicated by "other organisations [that] cut across the relationship, including [...] trade unions" (Stoker, 1991:146) and also that local government has a "tenuous constitutional status" (Gill-McLure, 2014:366). Additionally, it needs to be recognized that the national system of local government is also influenced by individual local authorities as a "source of ideas and values" (Stoker, 1991:147). Therefore, substantive policy changes and initiatives may spring from local authorities themselves and do not necessarily originate from central government (ibid:147). This thesis takes the position that it is "oversimplistic to see local government as a creature of the centre: it should be seen rather as an active participant to a process of 'political negotiation'" (Gill-McLure, 2014:369). It is the case "one can discern identifiable historical periods during which the centre's predisposition to exercise formal controls has varied" (ibid:369) and this thesis does take the view from the election of the 1979 Conservative government, the centre "increased the intensity and strength of its interventions" (Stoker, 1991:149). However, whilst the Thatcher years could be seen as a period of confrontation and control (Wilson and Game, 2006:174), this should not be read that local authorities did not seek, and indeed on occasions were able, to resist as witnessed by an increase in the use of judicial review (Gill-McLure, 2014:369). Other eras were characterised by consultation, corporatism and conciliation according to the variable political imperatives of the time (Wilson and Game, 2006:174). The years following the Thatcher government including those of New Labour, did not see a reduction in the level of "central control and direction to

which local authorities were subject" (ibid:174-175) and ultimately the local is formally subordinate to the centre (ibid:3).

5.9 Conclusion

This chapter has examined the environment local government operates in and notes the relevance of issues within this to labour control. To this end the chapter has taken a chronological overview of the following areas, the structure of local government from both an external and internal perspective, the services it provides and has provided, the way local government is financed, the operation of the Revenues and Benefits functions and how these have changed over time, and technology used in local government, particularly the use of ICT. The chapter shows these elements are not static and all highlighted above have in common that they change and develop within an environment influenced and shaped by the relationship between central and local government and other agencies including trade unions. In this sense technology is not deterministic in nature, but rather its adoption, implementation and use will not be determined by the technology itself but within the outcomes of the dynamic detailed above.

Local government, in the absence of any codified constitution, is subordinate to central government. Any powers it has will have been granted by central government. The chapter has considered the structural changes within local government throughout its history. The first aspect of structural changes to be considered was in the national structure of local government. We have seen examples of this restructuring including mergers and the complete abolition of bodies. The general trend over this time has been structural changes leading to an increase in size of employment units with consequent implications for the

management of labour and technology used. The second structural aspect considered imposed by central government are internal, in particular the change from the committee system and the resultant reduction in directorates and increasingly meaning a shift from a professional bureaucratic form of management, as the services provided by each department become more diverse, to a more managerial approach focussed on people management.

The services provided by local government are those specifically required or permitted to be carried out by central government. We have seen this has not remained static and is subject to change. Of particular interest has been central government policies since 1979 including CCT requiring tendering of services where even services not transferred to the private sector resulted increasingly in private sector management techniques and the implementation of technological solutions to allow public sector organizations to compete with the private sector; and BV with its plethora of performance indicators and tighter control of performance, both facilitated by the use and development of technology.

The chapter detailed the relationship between central grants and local taxation in terms of the financing of local authorities. Again, the economic and political priorities of central government were highlighted in explaining the shifting levels of grants. The level of local taxation desired will be dependent on the political priorities and statutory requirements of the local authority. However, this may clash with the political and economic priorities of central government. As a result of these tensions the chapter has highlighted the legislative initiatives from central government limiting the ability of local authorities to raise local taxes beyond a certain point. This, in conjunction with cuts to public spending, including the level of central grants, has clear implications for local government service provision. Employers attempting to

provide a certain level of service with a reducing level of resources has clear implications for labour management and technology, with options available limited to the displacement and intensification of labour, in alleviating the effect of cuts and placing employees in a more precarious position *vis-à-vis* their employment status.

The chapter gave an overview of the Revenues and Benefits functions within local government. The common theme within this chapter of central government intervention also arose here. Changes in local government taxation were noted along with the political motivations that led to them. In operational terms there has been stability of regulations for around 25 years relating to Council Tax and longer for NNDR. Benefits administration, however, has been subject to continuous regulatory changes as governmental policies on welfare and benefits have changed. This administrative complexity coupled with a greater level of monitoring in terms of meeting of government targets has been an important area of the research in terms of how it may affect labour management and difficulty in applying technological solutions with potentially deskilling being less rapid in the Benefits function.

The chapter has examined the industrial relations environment within local government and dismissed the view that this was peaceful until the arrival of the 1979 Conservative government. Whilst the Whitley National Joint Council, with codified national agreements had been achieved in the 1940s, this was following a period of struggle where the employers had resisted, perceiving it as limiting their autonomy in employment matters. The view that industrial relations was peaceful until the 1970s ignores what came before the setting up of the NJC and also during the period many examples of industrial unrest can be found. Strains within the system had started to show before 1979 with periods of central government pay restraint and changes to the structure of local government highlighting the limitations

of employers and unions to conduct effective collective bargaining. It is true to say, however, tensions within the system accelerated post 1979 as a result of central government policies, including the implementation of CCT having the effect of decentring industrial relations as rigid national agreements limited employers' options in dealing with this. Whilst this thesis accepts the position that unions have been organizationally weakened by the post 1979 reforms, this has clearly not been fatal. Membership, whilst reduced is still considerable. It is also the view that the decline in collective industrial relations can be overstated. This is still the dominant industrial relations model within the sector and has been protected by unions and employers. It is true employers have continued to push for a more flexible approach and this was partly conceded by the unions with the Single Status agreement but this is within the context of an overall national mechanism.

Certain forms of technology have been used in local government since its inception. However, computerised systems did not become regularly used until the 1970s and it is this particular form of technology this thesis focusses on with questions of qualitative differences to other technologies in terms of labour control being to the fore. Whilst the initial computerized systems were used for what is known as back-office administration, once personal computers became more widely owned and the internet became commonplace, ICT became increasingly used for communication and service delivery. The potential for work to become geographically dispersed and greater automation of processes resulting from these developments has implications for labour management and control, including how the technology itself provides solutions to monitoring performance. Throughout the development of ICT use within local government, central government have encouraged its use as a means of improving customer service delivery whilst also stressing cost savings.

The research also considered the extent to which technology has been used by local authorities as a response to central government initiatives that resulted in cuts in resources and an increased requirement for statistics to show levels of performance, and how these have affected labour management and control.

The chapter has shown in the local government environment we are not looking at a simple relationship between employer and worker. A recurrent theme in this chapter has been the shifting dialectical relationship of control and resistance characterising the central-local relationship. This is further complicated by the fact within this national local government system, including the still existing and important area of national collective bargaining and industrial relations, individual employers do not necessarily hold the same views or act in a uniform manner. This indicates a complex dynamic of central, local and worker interests and imperatives that may collide and combine, including in the area of technology implementation and use, employment, and labour and performance management.

Chapter 6 - Methodology

6.1 Introduction

This chapter considers the process of designing a research strategy to address the research aims around the control of labour through the use of ICT and resistance to this. As such the chapter details the methods selected and why they were felt to be the best suited to effectively address these research aims. The chapter details why, given a primarily deductive approach, both quantitative and qualitative research methods were chosen within the boundaries of a case study over two sites and why this was deemed the most appropriate way to approach the research. A particular advantage of a case study approach was felt to be the ability within it to utilize more than one research method. Before the research method selection is discussed, the chapter goes on to consider aspects of reliability and validity within the research that informs how it was conducted and information gained dealt with in coming to any conclusion. The chapter highlights the research methods considered, ethnographic study, interviews, questionnaires and documentary research and explains why the first of these was rejected as not appropriate for this study particularly around operational aspects leading to concerns over reliability and validity but highlights why the researcher's background whilst not making this an autoethnographic study may have certain benefits in this respect, and why the last one was not rejected but proved unachievable.

The chapter then moves on to detail the two methods selected. Firstly, questionnaires are discussed in terms of strengths and weaknesses and how the latter may be addressed. The operational aspects of the questionnaire process are explained, including how the use of this type of survey linked to the second choice

of method by allowing participants to self-select for follow up interviews. The information from questionnaires was seen as supplementary evidence for the second method, the interview, and the chapter details how the results from the questionnaire are utilized. It was decided the semi-structured format of interview would be deployed and reasons around the balance of researcher control and participant expression are discussed. Again, the operational aspects of this process are explained. The chapter highlights how the two methods chosen can be seen to complement one another in terms of the qualitative nature of the interviews allowing an in-depth exploration of workers' experiences that the quantitative method exclusively would be unable to achieve. The chapter goes on to consider ethical aspects that need to be addressed in both of these methods. This is particularly around the protection of those taking part, especially due to the nature of the research around resistance to management control. The chapter explains the formal procedure required in this area that had to be completed prior to commencement of research. Finally, the chapter gives information on the two sites selected, including issues around access.

6.2 Research Aims and Methodological Aspects

This section looks at the aims of this research project within the context of aspects of methodology which informed the design of the research carried out discussed in the following sections. The overall aim is to explore the use of ICT as a tool of labour control within the Revenues and Benefits functions of local government. The broad themes within this overall aim are to consider the motivation for control within these areas, how, given this motivation, techniques of control are implemented, and how workers seek to resist, accommodate or accept these.

Before moving on to look at these broad themes in closer detail it will be useful consider the aims of the research in the context of the two major different methodological approaches adopted by researchers, the deductive and inductive. The deductive approach seeks to test established theory, whereas the inductive approach is concerned with the generation of theory (Ruane, 2005:49; Strauss and Whitfield, 1998:9). It can be seen that the deductive approach starts with, and the inductive approach ends with, theory (Ruane, 2005:49). This distinction is of importance as whilst it is common, it is not necessarily exclusively the case, that researchers approaching a subject from a deductive position adopt a quantitative approach and those tackling a subject from an inductive standpoint adopt a qualitative approach (Strauss and Whitfield, 1998:9-10).

This thesis clearly commences from a Marxist labour process theory position and also can be seen to seek the validity, or otherwise, of certain theoretical positions such as Fernie and Metcalf's (1998) view that management control when exercised through ICT eliminates the possibility of worker resistance. As such the thesis can be seen to adopt a primarily deductive approach starting as it does with well-defined theoretical positions (Saunders *et al.*, 2009:41) arrived at from the relevant literature (ibid:61). This would often indicate the use of quantitative methods. However, it also needs to be considered that qualitative methods may also have value here, particularly when considering the day to day actions and perspectives of workers with potentially different perceptions, experiences and interests that may differ over time, where purely quantitative methods may be deficient in fully exploring and explaining these aspects. Section 6.3.3 considers the selection of research methods within the context detailed above.

In terms of the motivation for the control of labour within this sector, the starting point was the absence of the profit motive within local government (Ironside and Seifert, 2001:2). The research, therefore, sought to establish what motivations would explain the control of labour within local government and how these may have changed over time. In considering this, the research needed to explore changes in aspects of control that may have occurred over time and relate these chronologically to the implementation of ICT systems. As such, a view can be formed as to whether these control techniques could be attributed to the development of technology and could be seen as deterministic in nature, or whether exogenous factors, particularly around central government policies, provided the necessary motivation or drive for the adoption of certain control techniques, potentially facilitated by existing technology, may provide a more satisfactory explanation. Once a motivation can be identified the research aim goes on to ascertain how actual control techniques using ICT are applied. A specific aim of the research was to examine if ICT is used as a tool of control in establishing the intensification and control of labour through means of surveillance and monitoring, paying particular attention to its panoptic capabilities; how it may institute a technological form of control by limiting or curtailing worker discretion; and how ICT may impact on skills and to what extent this may correspond or diverge from the deskilling aspect of labour process theory that would subsequently also allow for tighter control.

Following on from the control aspect, a further aim of the research was to explore the issue of resistance against the implementation of management control through technology, paying particular attention to the debate around whether new technology has effectively ended labour's capacity to resist (Fernie and Metcalf, 1998; Bain and Taylor, 2000). Resistance was considered from an individual and

collective, particularly as exercised through trade unions, perspective, as an aim was to ascertain whether ICT had resulted in different potentials for resistance in these areas as a result of its implementation or use. A further research aim was to determine the extent to which the use of ICT as a tool of management control impacts on managers themselves and whether the effects have been consistent across the group. The research, therefore, in the light of the decline in professional bureaucracy in local government, and the potential for ICT to provide an increased monitoring facility, sought to ascertain whether it could be possible that individual managers feel threatened by this form of technology and it is, therefore, not as simple as considering management as one homogenous group in a necessarily antagonistic relationship with labour (Zuboff, 1988) with the implications for resistance this would entail. Finally, in terms of the potential for resistance, the research looked at where resistance may be absent and why this was the case. The research was keen to explore reasons why workers may choose to comply, or make accommodation with, the type and use of technology used in the workplace (Bamber, 1988; Collinson, 2003). To this end, the research sought to examine whether the absence of resistance could necessarily be equated with the level of control facilitated by, or the essential qualities of, ICT or whether other explanations may be present.

6.3 Research Design

6.3.1 The Case Study Approach

In designing a means of research to address the aims and issues highlighted in the previous section, it was felt a narrative was required to be constructed from the perspective and insights of workers, managers and trade unions in studying the

motivation and techniques of control and resistance. To achieve this the researcher decided to adopt a qualitative case study approach. A qualitative approach was felt to be particularly suited to this study which has adopted a Marxist Labour Process Theory perspective. Certain assumptions have been made, including those being researched have "material or class interests" (Morrow, 1994:52) which are best addressed by a qualitative rather than quantitative approach. The study itself took the form of two case studies giving what was felt to be a more robust study than with a single site. This was felt to be appropriate in researching issues within the employment relationship and labour process, which is made up of complex processes where unequivocal objectivity is difficult to apply in situations where those being researched may construct their own meanings (Whipp, 1998:51-52). Adopting a case study approach, with participants at all levels of the organizations would allow the gathering of rich detail from those working in the area which would lead to a qualitative interpretation (Easterby-Smith et al, 2008:59). Although there is some definitional confusion as to what constitutes a case study (Gerring, 2004:342; Kitay and Callus, 1998:101), a definition used here, is a study focussing on some form of individual unit and it is this "demarcation of the unit's boundaries" (Flyvbjerg, 2011:301) that designates it as such and not the methods adopted (Bell, 2005:10). A case study approach allows the researcher to study a particular activity or process (Cresswell, 2003:15), and has been widely used within industrial relations research "to provide explanations and an understanding of complex social phenomena" (Kitay and Callus, 1998:101) and so was felt to be particularly suited to studying the issue of control and resistance within the workplace. Case studies are not research methods in themselves and do not necessarily require limiting to

one particular method. Indeed, one of the reasons this approach was taken is it would allow the researcher to use a number of methods concurrently (ibid:102-103).

There was no reason why multiple methods could not be used to address the same questions (Yin, 2009:63). Case studies were felt to be well suited to produce "context-dependent knowledge" (Flyvbjerg, 2011:303), meaning the real-life historical context and environment the organization being studied in, had to be considered in the final analysis (Flyvbjerg, 2011:301; Yin, 2009:18). It was felt, therefore, by pursuing a case study the "holistic and meaningful characteristics of real-life events" would be retained in the research findings (Yin, 2009:4). One concern was this attention to context may mean any knowledge produced is unable to be generalized. However, this does not mean it is valueless if the case study is carried out in sufficient depth (ibid:18) and the objects of study are studied at close proximity (Flyvbjerg, 2011:303). Whilst not totally solving the issue of generalisation, it was mitigated by the decision to conduct case studies over two sites. The analysis of evidence from case studies often does not rely on analysing statistically (Yin, 2009:34) and this is the case here due to the relatively small number of participants covered by this research and why a qualitative approach was felt to be appropriate. Given the nature of what is being studied here, it was also felt a descriptive case study approach would have value in respect of the knowledge produced (Flyvbjerg, 2011:305). Whilst it is the case results may not be generalizable it is possible a case study can show a proposition to be false, for example, in this research the presence of resistance would confirm its possibility in those specific circumstances rather than accepting the totality of control through ICT (ibid:305).

6.3.2 Reliability and Validity

Before moving on to discuss the methods selected and rejected for this research, this section considers the issues of reliability and validity that were considered within that design. Reliability can be defined as "the extent to which a test or procedure produces similar results under constant conditions on all occasions" (Bell, 2005:117). In terms of reliability, a "good guideline [is to] conduct the research so that an auditor could in principle repeat the procedures and arrive at the same results" (Yin, 2009:45). Validity can be seen as a more complex issue than reliability, as the issue here is whether the questions and the research measure what needs to be measured and when the results are interpreted the correct conclusions are made (Bell, 2005:118). It should be clear that if "an item is unreliable, then it must also lack validity" but just because reliability has been shown does not necessarily make the research valid, as it may not actually measure what it sets out to do (ibid:118). There are a number of aspects in relation to validity that were considered. The first of these was a consideration of internal validity relating to whether any causal relationships can be correctly established (Yin, 2009:40). Where information is uncovered that does not seem to fit, this should not be excluded but needs to be considered and explained. Rival explanations, if considered and addressed, can strengthen this aspect of internal validity (Cresswell, 2003:196; Yin, 2009:41). The aspect of external validity relates to whether the results can be generalised beyond the site being studied or attempting to generalise the findings to a particular theoretical position (Yin, 2009:43), in this case around the use of technology as means of achieving control of labour and the ability of workers to resist this.

In this study, the question considered was whether both sites would lead to findings that were able to generalise to this theoretical position (ibid:44)? As the research

being carried out here is qualitative and not quantitative it may be validity is more difficult to check and so it was seen as the task of the researcher to convince an audience that the research has been conducted properly and any interpretations are correct (Whitfield and Strauss, 1998:291-292). At all points of the research it was clear to the researcher that cognizance regarding the potential bias they may bring to the study needed to be recognized (Cresswell, 2003:196) and they needed to strive to conduct the research in a neutral manner (Brown, 1998:269). These issues of reliability and validity are important aspects when designing the methods to be utilized in a research study and it is to those methods we now turn.

6.3.3 Research Methods - Selection

The potential methods considered in designing the research for this study were interviews, questionnaire surveys, ethnographic study and documentary analysis. The methods chosen were questionnaires and semi-structured interviews and these are discussed in the following sub-sections. The method considered and rejected, ethnographic study, had some positive aspects that were recognized. Ethnographic studies are a popular method in the field of employment research (Whipp, 1998:55) and have "played a critical role in the study of work" (Friedman and McDaniel, 1998:114). This form of research involves the direct observation and study of the participants, with the researcher observing the people actually performing their jobs and interacting with others in the workplace (Friedman and McDaniel, 1998:115; Bell, 2005:16). This brings to the foreground of the study "the words, interpretations, and experiences of the people studied" (Friedman and McDaniel, 1998:116).

The benefits of this type of research are "broadly similar to those of interviewing" (Whipp, 1998:55) but also allow the researcher to be party to the experiences of

workers in the workplace (Bell, 2005:17). Ethnography can be seen as particularly valuable where it may be useful to open up new research questions or "new avenues of enquiry" (Friedman and McDaniel, 1998:118). Having considered the strengths of this type of research, the main reasons it was not felt to be an appropriate method was it was not clear what could be observed in terms of staff carrying out actions on a computer without this being highly intrusive. The presence of the researcher was also felt to be problematic due to the potential for interference with the research resulting from subjects amending their behaviour in response to this, particularly in respect to acts of resistance. Without this level of intrusion and potential interference, issues of reliability and validity would arise in terms of any information gathered. It is also a very time-consuming form of investigation and would have raised problems in gaining permission for access to the sites for this particular type of research (Friedman and McDaniel, 1998:121; Bell, 2005:17).

It should be noted that the researcher had been employed in the field of Revenues and Benefits for over two decades and also had experience as a trade union representative for much of this time. Following this the researcher also had the role of a trade union officer dealing with issues raised within this thesis. Therefore, the potential for the experiences of the researcher within the field of research may also need some clarification here with its conceivable links to the field of autoethnography. "Autoethnography is an approach to research and writing that seeks to describe and systematically analyze [...] personal experience [...] in order to understand cultural experience" (Ellis *et al*, 2011:273). As such it may be seen as a combination of autobiography and ethnography (ibid:275) that allows the researcher to go beyond the data available from other methods (Denshire, 2014:5).

Whilst there is a recognition that personal experience will influence the research process, including who and what is being researched (Ellis *et al*, 2011:274).

The researcher has at all times attempted to maintain a "neutral, impersonal and objective stance" (ibid:274). Having said this, it is felt that the researcher's experience and background was valuable, not in the sense of using it as data but rather in terms of a confirmatory facility, adding to the likelihood that the research is true and coherent and therefore increasing reliability and validity within the thesis (ibid:282). It is the case then that the presence of the self, in terms of the researcher's experience should not be viewed as "a contaminant" (Wall, 2006:147) as the researcher has sought to limit the extent to which they are part of the study itself (Wall, 2016:2).

It should be clear therefore, this is not an ethnographic study, however it should also be noted the researcher had been employed in the areas under consideration for over two decades. As such some of the benefits of ethnographic study, such as insight into the perceptions of those being studied may exist.

The research method of documentary analysis was not rejected but no relevant documentation was able to be supplied from either research site. Two main reasons were given for this in that historical documents that related to the initial implementation of computerized systems in the 1980s either no longer existed or could not be located and any more recent documentation relating to control systems would not be specific to this subject and so identification of such documentation would be problematic (Patmore, 1998:219-220). Even if some of this documentation could have been located or identified it would almost certainly have been incomplete (ibid:221). This lack of documentary evidence may be seen as problematic in terms

of reliability and validity discussed in the previous section. However, the researchers background was useful here in being able to contact and interview a retired head officer who was responsible for the implementation of the first computerized Revenues and Benefits system who could recall relevant and valuable information from this time. It also needs to be recognized that the presence of documentary evidence in itself needs to be treated with a level of caution due to the potential bias of researchers and a number of potential interpretations being possible (ibid:219-220). The chapter can now move on to discuss the methods that were selected and utilized.

6.3.3.1 Questionnaires

The first of the methods to be chosen was that of questionnaires. Questionnaires are considered a good method of researching worker attitudes (Strauss and Whitfield, 1998:25) and due to the primarily quantitative nature of the data produced can be seen as appropriate from the perspective of the predominantly deductive approach taken in this thesis (Strauss and Whitfield, 1998:10). In surveying groups of workers below the level of Team Leader, as was done, a questionnaire was felt to be an appropriate method as it focussed on, and was completed by, the employee themselves without input from management or trade unions (Hartley and Barling, 1998:163). It was felt a survey would be a useful tool as the groups, although employed at different authorities, were homogenous enough to be asked the same questions (Millward *et al*, 1998:145-146) and so the same questionnaire was used for workers at both sites. This issue of potential incompatibility of the samples (Whitfield *et al*, 1998:197) was recognized but it was felt to be the case that the two groups were similar in terms of the work they carry out and the technology they use to do this and so this was not considered problematic. An advantage of this method

is in terms of time taken per person, information can be gathered more quickly using a questionnaire than with an interview (Millward *et al*, 1998:139) and so was seen as an efficient way of gathering information (Ruane, 2005:123). The numbers of staff at each site meant no sampling was required as questionnaires were issued to all staff within the group. Individuals within this group were not able to be identified unless they wished to be so and were willing to take part in follow-up interviews (Cresswell, 2003:156).

A decision was taken as to what form this questionnaire would take (see Appendix 1) and it was decided the most frequently used and popular form of questionnaire, a self-completed, fixed question and fixed format answer, Likert scale, questionnaire (Hartley and Barling, 1998:159), would be utilized, with the respondents having "predetermined (fixed) response alternatives [...] to use when answering the question" (Ruane, 2005:131). Likert scales were felt to be good in analysing the strength of feeling respondents may have, but it also needs to be recognised attaching numerical values to these was considered problematic and the categories in the questionnaire were, therefore, indicative of the strength of feeling of the respondent and were not given any statistical weight (Bell, 2005:142). For this reason, allocating a numerical value was not considered to be helpful as the questions to be used in this questionnaire are largely qualitative in that they are categorical rather than numerical (Yin, 2009:19). A closed-ended questionnaire was also felt to encourage a higher return rate due to its simplicity of use as opposed to when open-ended questions are used (Ruane, 2005:131). Another advantage of this approach was its administrative simplicity and relatively low cost (Hartley and Barling, 1998:159).

There were weaknesses and areas of concern considered and recognised in the design and use of questionnaires. Firstly, they can be seen as a snap-shot at a

particular time (Whipp, 1998:57) and so the research considered whether either site was going through any changes, for example reorganization or downsizing, that would need to be considered when interpreting any results. There was also a concern using what was, to a certain extent, a quantitative method with an overall qualitative study. However, this combination was not felt to be necessarily excluded within a case study (Easterby-Smith *et al*, 2008:115) and it is also accepted that research projects are often not purely deductive or inductive but have elements of both (Saunders *et al*, 2009:127; Grix, 2004:114). As such, it was also decided to allow participants to be able to contribute any comments they wished in a freeformat box at the end of the questionnaire, thus giving an additional qualitative element to the survey.

A potential problem considered in the use of questionnaires was that of low return rates (Millward *et al*, 1998:139; Ruane, 2005:124-125). This was considered particularly when inferring anything regarding the group being researched (Whitfield, 1998:65) and it was recognised and considered those who chose not to respond may possess significantly different views than those who do (Ruane, 2005:125).

It is good practice in respect of questionnaires to pilot them with a view to ironing out any problems and this was done. Piloting was used to ascertain how long the questionnaire would take to complete, ensure the questions or statements were clear, whether anyone answering the questionnaire may have objections to certain questions, whether there were any omissions and whether the layout of the questionnaire caused any difficulties (Bell, 2005:147-148). This did not raise any problems, but if it had done any issues would have been corrected prior to issue, ensuring the highest possible return rate. This element was deemed crucial as reliability could not be tested for by re-running the questionnaire (ibid:117).

Distribution of the questionnaire was arranged by the contacts through the internal mail systems of the sites concerned (ibid:148). These were not addressed to individuals but were distributed to all staff employed within the relevant group and contained a letter detailing the project and how the returned questionnaire would be dealt with (ibid:149). To enable as high a return rate as possible, pre-paid return envelopes were included with all the questionnaires distributed (ibid:149).

161 questionnaires were sent out in 2014 for Authority A and 183 in 2015 for Authority B, with a return rate of 24% and 20% respectively. The number of questionnaires issued and the return rates achieved meant there were effectively no meaningful statistical procedures that could be carried out with the data obtained. However, questionnaire results were felt to be useful as they did not preclude the highlighting of possible similarities or differences within and between the groups being researched and could also indicate particular patterns (Bell, 2005:203). Related to the issue of return rates is how the questions on the questionnaire are framed. These were designed to be unambiguous, aiding with the reliability issues raised in Section 6.3.2, and not overly complex (Hartley and Barling, 1998:167; Ruane, 2005:127) and as far as possible were neutral in terms of language used (Ruane, 2005:128). Staff also needed to be confident any response they made was confidential and this was made clear to them in order for them to complete and return the questionnaire (Hartley and Barling, 1998:169). Those workers receiving the questionnaire were informed that when completed they would be held securely and these along with the analysis of the returned surveys would be retained by the researcher until the completion of the project for any audit and reliability purposes (see Appendix 2) (Yin, 2009:43).

Whilst on balance it was felt the information acquired from this method was of limited value, it was beneficial in a number of ways. Firstly, it provided some information that could be used qualitatively. Secondly, quantitatively it could provide instances where information gained from the interviews may particularly confirm views articulated in them or be significantly different from the general views expressed. As such it could be seen to aid reliability and, including where theoretical positions are being considered within this primarily deductive study, validity. Thirdly, the questionnaire was designed with a blank section at the end where respondents could make any comments they wished and so provide valuable information not gained from the questions themselves. Finally, and most importantly, one of the main reasons for carrying out this questionnaire survey was to design it to include a section where respondents could give their contact details if they were willing to be interviewed. This meant this process assisted in gaining access to interviewees that could be questioned at greater length at a later date (Burgess, 1984:161) and effectively meant the interviewees were self-selecting rather than selected by management or the researcher. Particularly in this latter aspect the questionnaire was felt to be of considerable value.

6.3.3.2 Interviews

An issue of concern with questionnaires, was whilst in themselves they can provide information about specific behaviours, attitudes, opinions and beliefs (Ruane, 2005:124) and fitted in with the primarily deductive nature of the study, they may be somewhat inflexible (Whipp, 1998:55). However, this concern, particularly around capturing the potentially subjective view of workers and managers that may not have been successfully obtained by a purely quantitative approach was somewhat alleviated by the use of the second method selected for the case studies, the semi-

structured interview with the questionnaire results being a useful supplement to information gained from them (Hartley and Barling, 1998:166; Whipp, 1998:54). A total of 33 interviews were carried out over the two sites over 2015 and 2016 (see Appendix 3). The breakdown of this is as follows:

Table 2 - Interviews

| | Senior Managers | Supervisors | Workers Below Supervisory Level | Trade Union Representatives |
|-------------|--------------------|-------------|---------------------------------|--------------------------------|
| Authority A | 3 | 2 | 9 | 2 |
| Authority B | 2 | 2 | 12 | 1 |

The following interviews were also carried out during this period. An interview was secured with a senior manager of a major software supplier to Revenues and Benefits departments to gain evidence on why computerized systems were designed in the way they were. An interview was also conducted with a retired Chief Rating Officer from Authority A, who had been responsible for the implementation of the first computerized system of its kind within a Revenues environment. As such this was felt to provide a valuable insight into the motivation of implementation and use at that stage. It is also worth noting here the value of the researcher's background in the area being researched and how this helped in facilitating these interviews. In total then, 35 interviews were carried out, and of these 21 were self-selected from the questionnaire process. From this perspective the decision to carry out a questionnaire survey was felt to be correct and successful.

Whilst questionnaires can be effective in gathering a large amount of information, the interviews allowed a more flexible approach to the gathering of subjective information from the participants. Interviews were felt to "provide in-depth information pertaining to participant's experiences and viewpoints of a particular topic" (Turner, 2010:754) and those participating were those directly involved in the events being researched (Yin, 2009:11). Many interviews are pitched at some point between being completely structured and completely unstructured (Bell, 2005:161) and this was felt to be the best option here. This semi-structured approach was felt to be the correct method as whilst it gave the researcher the opportunity to guide the interview thus enabling a focus on reliability and validity with the research aims, it also gave the participant the freedom to articulate their responses (ibid:161-162). Responses could then be followed up allowing for new avenues of enquiry to be opened up by the researcher in reaction to an answer given (Whipp, 1998:54; Turner, 2010:755). This meant there was a certain level of researcher control in the direction the interview took (Cresswell, 2003:186) and the "more abstruse facts" could be given expression (Brown and Wright, 1994:155). A totally unstructured format was not seen as satisfactory within a deductive format due to potential inconsistencies between participants and the information given which may have led to issues of unreliability (Turner, 2010:755).

Interviews were also felt to be a way of establishing a certain level of trust between the researcher and the interviewee and this would be particularly valuable when researching resistance to management control which may be viewed as illicit behaviour (Whipp, 1998:56). Interviews were also felt to be effective in bringing out historical issues (Cresswell, 2003:186) which were deemed to be more problematic when using other forms of research (Whipp, 1998:57). However, when discussing

events in the past, it was recognized interviewees are recalling events from memory and so may not be entirely accurate. For this reason, it was important as many interviews as possible should be carried out to highlight potential inconsistencies and divergences (Patmore, 1998:222-223).

In deciding how to structure the questions within the interview, it was felt to be beneficial to keep them as open ended as feasible, as this would encourage the participants to give as full a response as possible (Turner, 2010:756). As with the questionnaire, a pilot interview was carried out to gauge the responses to the initial questions (ibid:757) and was designed to ensure unambiguity and aid reliability (Hartley and Barling, 1998:167; Bell, 2005:117). However, it was recognized, due to the semi-structured nature of the interviews, pertinent follow-up questions could be different for different participants. Even taking this into account, piloting was felt to be a worthwhile exercise.

In comparison with questionnaires, interviews can be seen as somewhat burdensome in terms of extracting the information contained in them. However, this was carefully done with full transcriptions carried out to guard against potential researcher bias and also to mitigate against unreliability (Turner, 2010:756) and, along with interview schedules, provide the necessary research records required (Yin, 2009:43). The transcription process also allowed the interviewees actual words to be quoted, thus making any interpretation transparent as far as any reader is concerned (Cresswell, 2003:196). The transcription process was also seen to be a factor in achieving a level of validity (Cresswell, 2003:196; Yin, 2009:141), as it makes it more unlikely aspects that do not fit into a preconceived view would be overlooked. It needs to be recognised in this research that the researcher at the time of the interviews was a trade union officer and so bias was always considered and

addressed in how the research was conducted and how the analysis of the findings was dealt with (Strauss and Whitfield, 1998:26; Kitay and Callus, 1998:111) by ensuring questions were not leading and were as neutral and open, with as clear wording as possible (Turner, 2010:757). Whilst the use of jargon may be seen as problematic (ibid:757) the researcher's background in the area of Revenues and Benefits was beneficial as they would be seen to be able to both understand and effectively use jargon in ways that would clarify rather than obscure (ibid:758).

There were certain practical considerations taken into account in preparation for the interviews. Firstly, the contacts were approached to provide potential interviewees at various management levels and along with individuals who had indicated willingness to be interviewed on the returned questionnaire forms, interviews were scheduled with the participants. Secondly, the interview setting was considered and in all cases a place that did not suffer from interruptions was allocated (Turner, 2010:757). The researcher sought, and gained, the permission of the employers concerned to hold the interviews in the workplace. However, even though this was granted, it was felt appropriate to offer participants the option of being interviewed elsewhere, should they wish although none took up the offer of alternative locations. The only exceptions were those of the trade union officers, retired Chief Rating Officer and Software Manager interviews. These exceptions were carried out in union offices, a private side room at a town hall, and the interviewee's private office, respectively. It was made clear that the time of the interview was the choice of the participant and their schedule needs would be respected (Yin, 2009:85).

The purpose of the interview was made clear to all participants who were supplied with information sheets (see Appendix 5) and also verbally as an overview at the start of the interview. The issue of confidentiality (Turner, 2010:757) was addressed

in the information sheet, including the format the interview would take and the expected length of time for the interview (ibid:757) (see Appendix 5). Whilst the selection of interview participants is important (ibid:757) this was only of minimal concern to the researcher here as for the staff it was self-selecting by volunteers from those completing the questionnaire sheets, and for those at management and supervisory level there were relatively few to pick from, meaning there was very little researcher input in terms of selection. However, the researcher was also attentive to the potential that self-selection may also introduce a particular bias into the research. Following the interviews this became less of a concern due to the different views expressed within them. It was decided where participants were agreeable, interviews would be taped (ibid:759) so the fullest possible record was made (Friedman and McDaniel, 1998:124; Burgess, 1984:107). However, in some cases, agreement was not given and the researcher fully respected these wishes and the relevant points made as fully as possible by taking contemporaneous notes (Patmore, 1998:221; Ruane, 2005:161). Reliance purely on memory in these cases was not felt to be a good idea (Turner, 2010:759). Whilst transcriptions of interviews did not necessarily capture the non-verbal aspects of a face-to-face interview it was felt this was an easier way to work and analyse the information gained from interviews (Patmore, 1998:222; Ruane, 2005:162). Whilst it needs to be recognised transcription was a very time-consuming process (Burgess, 1984:121) it was felt to be of great value when analysing the findings of the research.

Whilst the use of semi-structured interviews was felt to be an appropriate method of conducting the research there were some limitations recognized within this method. The implementation of ICT systems in the areas under research initially took place in the early 1980s and as such many of the participants were not working in these

areas at this time. As such they could offer no insight into issues around the management of labour prior to, or immediately following implementation other than from an anecdotal perspective. As part of the research was considering the effect the implementation of this technology had on the control of labour and debates around the extent to which the public sector could be seen as a model employer (Coffey and Thornley, 2009; 2014) this could be seen as somewhat problematic. However, a small number of the interviewees were working in the area at the time and so a certain amount of information was available and because of this it was felt the research would not be unduly affected. Again, changes that may have occurred during the process of carrying out the interviews were considered as this may have led to issues with reliability due to different answers being given (Bell, 2005:117), but no such issues were identified. However, there was still the possibility interviewees would not give truthful answers and this was carefully considered in the final analysis including by comparing the various responses. It was also felt issues, such as the ensuring of anonymity and confidentiality, as detailed in the following section, would assist in obtaining truthful responses.

6.4 Ethical Considerations

In designing the research, specific ethical considerations of each method detailed above were a priority along the lines of "how do I protect the participants?" (Yin, 2009:73) No research was carried out and no potential participants were contacted until ethical clearance had been received from the University's ethics committee (see Appendix 8) (Bell, 2005:48). It was not the case research commenced on the assumption this would be granted (ibid:148). Part of this process was to identify the risks to the participants and how they may be protected (Burgess, 1984:188). It is important to realise with research into industrial relations, such as with this project,

what is being explored is a potentially hostile or adversarial relationship between labour and management and this was considered (Strauss and Whitfield, 1998:26). It is also the case that in this research project the permission of someone in authority for the research to go ahead in the particular workplace was sought and gained (Cresswell, 2003:65). In this study the process of ethical clearance involved the drafting of information sheets, for interviewees, and letters accompanying the questionnaire, explaining how the research would be conducted and guaranteeing anonymity in the final thesis (Bell, 2005:48-49) (see Appendices 2 and 5). The consent forms to be completed by interviewees (see Appendices 6 and 7) and an indicative interview schedule (see Appendix 4) were drafted and cleared by the University's Ethics Committee.

It is important to show informed consent of the participants has been received (Burgess, 1984:200; Bell, 2005:45) and a form was designed to detail what interviewees were consenting to (Appendices 6 and 7) (Cresswell, 2003:64) and this was signed by both the researcher and the interviewee with a copy being retained by both parties (ibid:65). In respect of the questionnaire, it was stated on the form (see Appendix 1), and felt to be adequate, that consent would be assumed if the form was completed. In order to achieve this consent, it is necessary to ensure the research is never misrepresented in terms of what it is and how it will be carried out (Burgess, 1984:197) and that the nature of the research should be made clear. In essence, participants should understand what they are consenting to and the research should not deviate from this (Bell, 2005:45). In terms of ethics, the stance the researcher took was to "make no promises that cannot be honoured" (ibid:55). No external funding of the research project was in place and this was made clear in the information sheet sent out to potential participants (Cresswell, 2003:64). It was

also the case that it was kept in mind ethical considerations should be a constant concern throughout the research and may need re-evaluating during the process (Burgess, 1984:207). Even though ethical clearance had taken place, it was still recognized as the responsibility of the researcher to consider potential harm to those taking place. This may be particularly important when dealing with an issue such as resistance to management, as in this study, where participants may divulge transgressions (Strauss and Whitfield, 1998:28). Participants were informed it was entirely their free-choice as to whether they participated in the research, that they could refuse to answer any questions they chose and they could withdraw from the process at any time without the need to justify their decision or give any reasons to the researcher (Bell, 2005:45). This was made clear in the information sheet provided to all interviewees prior to the interview. This information sheet was provided some days before the interview to allow the participant to read and ask any questions they may have prior to the interview taking place (ibid:45).

6.5 Research Sites

This section of the chapter gives some general information about the two research sites, information relevant to the industrial relations environment, why they were selected and pertinent issues around access.

Both research sites are unitary authorities created in 1974 following the *Local Government Act 1972* and as such are both classed as billing authorities, responsible for the billing, administration and collection of Council Tax and Business Rates. Both authorities are also responsible for the administration of Council Tax and Housing benefit and the functions are performed in-house with, in the main, directly employed staff. As such both authorities were appropriate for this study. As

can be seen from the comparison between the two sites given below, they are of comparable size and this was felt to be useful in that any differences between the two could not be put down to relative size.

Authority A has a population of around 300,000 and has approximately 130,000 liable Council Tax payers. The authority politically has no overall control at the time of writing, and regularly changes control between Conservative and Labour administrations. Authority A has adopted the leader and cabinet mode of executive. In 1990 Authority A had a structure of eight directorates and this has reduced over time to currently consist of three. At the time of Community Charge (1990) the Revenues function employed around 140 staff. This has reduced to around 70 at the present time. The Benefits function employed around 160 staff in 1990 and this has reduced to around 90 at the present time. These reductions have been achieved over time by natural wastage. The structure of the Revenues function is as follows. There are two teams split along geographical lines dealing with issues of record keeping and billing; a single NNDR team; a recovery team dealing with debt collection; and a scanning and indexing team scanning all incoming mail and documentation received at the various counters, thus creating a digital copy that is forwarded to the relevant team. The Benefits function is split into two geographical teams, a single quality checking department and a single team dealing with the recovery of overpayments.

Authority B has a population of around 309,000 and has approximately 134,000 liable Council Tax payers. The authority politically has been Labour controlled for all but one of the years since its inception. Authority B has adopted the leader and cabinet mode of executive. In 1990 Authority B had a structure of eight directorates

and this has reduced over time to currently consist of two. At the time of Community Charge (1990) the Revenues function employed around 170 staff. This has reduced to around 90 at the present time. The Benefits function employed approximately 170 staff in 1990 and currently employs around 100. These reductions have been achieved over time by natural wastage. Authority B's structure is based on a geographical split into two teams. Whilst there is a unified Revenues and Benefits function there is a certain specialization within the teams in dealing with Council Tax Billing, recovery, Benefits administration and NNDR. The scanning and indexing function has been outsourced and is carried out at a remote location to the Authority. Both research sites are unionised and the relative densities are detailed here with the information provided by the UNISON Branch Secretaries (Interview 15; Interview 33). Authority A has a union density of around 50% in its Revenues Department and 45% in Benefits made up almost entirely of UNISON members but with three members of Unite. There are two UNISON stewards operating covering both Revenues and Benefits but no Unite stewards. Corporately, Authority A had a union density of approximately 47% in 2016, falling from 51% in 2010. Corporately, UNISON has around 56%, GMB 41% and Unite 3%, of members across Authority A respectively. Authority B has a combined Revenues and Benefits function and the union density here is around 90% shared equally between UNISON and GMB. UNISON have three stewards operating here and GMB have two. Corporately, Authority B had a union density of approximately 62% in 2016, with a very small marginal fall from 2010. Corporately, UNISON has around 60%, GMB 35% and Unite 5% of members across Authority B respectively. Historically Authority B have had a higher union density across the whole authority compared to Authority A.

Neither Branch Secretary could provide a specific reason for this difference which appears to have been present for several years.

The interviews with the respective Branch Secretaries (Interview 15; Interview 33) detailed a similar branch officer structure. For UNISON, Authority A had two joint Branch Secretaries in post, a Branch Chair and Vice-Chair (both vacant at the time of writing), a Branch Health and Safety Officer (vacant at the time of writing) and a Branch Treasurer. Authority B UNISON had a Branch Secretary, an Assistant Branch Secretary and all the other posts as detailed at Authority A, with all positions filled. Both branches officer positions were subject to annual election. The GMB branch at Authority B had the same officer structure as UNISON with the exception of an Assistant Branch Secretary. These officer positions were subject to election every three years.

The bargaining and consultation structures, as detailed by the Branch Secretaries (Interview 15; Interview 33) were as follows. Both Authorities followed broadly the same system and had a corporate consultation committee made up of the Lead Elected Member with responsibility for HR, Heads of the Directorates, Senior HR representative, and representatives, usually the Branch Secretaries, from the recognized unions. Issues at both authorities relating to individual directorates are brought before joint director and union meetings, with unions represented by senior representatives within the directorates concerned. Likewise, there are departmental meetings at both authorities composed of managers and departmental representatives of recognized unions. Issues that cannot be resolved at meetings are escalated to the relevant meeting at the next level, culminating in the corporate group. There is an agreement currently in place between Authority B and the recognized unions that there will be no compulsory redundancies across the

Authority, although there is an acceptance staff may need to be transferred to other roles. No such agreement is in place at Authority A.

Access is a crucial aspect to the process as if it cannot be gained there will be a limited amount of research that can be conducted (Burgess, 1984:45). In terms of the selection, the two sites were approached for the reasons detailed above and also because of the ease the researcher would have in conducting research over time at the two sites, particularly as interviews would require being conducted at each site over a number of days (ibid:61). Access was arranged through what Burgess (1984) refers to as a gatekeeper, defined as "those individuals in an organisation that have the power to grant or withhold access to people or situations for the purposes of research" (ibid:48). An advantage for the researcher in this respect was that they had worked in this area for several years and so was known to the managers approached as gatekeepers who were helpful and cooperative. It was also the case that the researcher had been active within one of the recognized trade unions in this area at all levels of the union and so would also be known to union activists within the sites. This familiarity then was perceived as a particular advantage in terms of access (ibid:46).

6.6 Conclusion

This chapter has given a summary of the research aims of the study, around the use of ICT as a tool of management control within local government and how this may have affected resistance from the workers subjected to it. These research aims were paramount when designing the research strategy. The thesis, preceding from a Marxist labour process perspective and seeking to test theoretical positions, including around the potential for worker resistance following the implementation of

ICT as a tool of management control can be seen to be primarily deductive. The decision was taken to take a case study approach as this was well suited to industrial relations research and had been used before in this area and was felt to be particularly apposite when dealing with the complex social relationships in the workplace. A further advantage of this method was that it allowed for both quantitative and qualitative research methods to be used within the same study.

The main research methods considered were ethnographic study, questionnaires, interviews and documentary analysis. Whilst advantages could be seen in the first method, it was rejected as it was not considered appropriate for the type of study being undertaken although the researcher's background in this area, whilst not making this an autoethnographic study, was considered advantageous from this perspective. The option of documentary analysis was not rejected per se but proved unachievable due to the unavailability of relevant documentary sources. The options chosen as methods of research, therefore, were questionnaires and interviews. Questionnaires were recognized to have some points of concern around inflexibility and the relatively low numbers meaning there were no statistical conclusions that could be drawn. However, they were utilized due to the advantages associated with them particularly in terms of the amount of information that could be gathered in a relatively short period of time and within a primarily deductive study would provide valuable quantitative data. It was a particular motivation in using this method that it could also be used as a means of contacting individuals and allowing them to indicate whether they would be willing to take part in a follow up interview. This aspect was felt to be particularly successful. The questionnaire was felt to provide useful supplementary information to the second method chosen, that of interviews. The interviews were of the semi-structured variety as it was felt this allowed the

researcher to exercise a certain amount of control over the process whilst allowing the participant to express themselves and provide detailed information around their experiences that may have proved difficult to obtain by purely quantitative methods.

Case studies using these methods raise issues around reliability and validity. To a certain extent the issues around reliability were addressed by ensuring the wording of the questionnaire and interviews were unambiguous and to this end piloting of both methods was used. By the nature of a limited number of case studies external validity may be an issue here but the careful use of wording and the use of direct quotations from interviewees make the process more transparent and would hopefully allow the reader to make a judgement on any conclusion reached by the researcher. This chapter has also detailed considerations around the ethical concerns a study of this type raises, particularly as it is examining what potentially can be an antagonistic relationship between workers and management. In particular, aspects of anonymity were considered and addressed. The final aspect of the chapter was to provide some descriptive information around the sites chosen so a comparative perspective could be given. The issue of access was also discussed, although there were no major problems encountered in this area.

Chapter 7 - Findings 1: Control

7.1 Introduction

This chapter is the first of two chapters examining the findings of the research and considers management control of workers and the labour process and the relationship ICT has to this within the two sites. In researching the way technology has been designed, implemented and utilized, which directly addresses the second main aim of the thesis and the literature in Chapter 3, of how technology is used as a tool of labour control, also leads to a view around the first central aim of the thesis, namely the motivation behind the control of the labour process as discussed in Chapter 2, which advanced the view that as well as ensuring effective administration of services, as a component of the capitalist system control of the labour process within the public sector could lead to benefits for the capitalist class if it achieves an increase in surplus labour (Gough 1975;1979). This can be seen to be of relevance to Revenues and Benefits staff with the latter having a role to play in the reproduction of the working class, and the former providing a service in collection of taxes enabling the functioning of local government services. As both are funded from taxation of capital and labour the greater the extraction of surplus labour, the greater the benefit to the capitalist class, as detailed in Chapter 2.

The chapter commences by considering the issues around the design and use of the ICT being utilized. The thesis takes the view that the motives and interests of those who design or commission technology is important as it will be their interests reflected within it (Greenbaum, 1998:124). The chapter, therefore, sought to reach a conclusion as to who designed the systems in use, what the objectives were and whether, and to what extent, design and implementation could be challenged so

affecting the final result and how this may have changed over time, particularly in relation to material changes experienced within local government. The chapter explains why the resultant conclusion is that technology, in terms of its design, reflects the interests and objectives of local government management and excludes those of workers who will go on to use the systems (Braverman, 1998:34-35).

The chapter identifies three different types of systems used, firstly those considered as core to the administration of the Revenues and Benefits functions, namely RBCA (Revenues and Benefits Collection and Administration) and EDM (Electronic Document Management) systems, secondly bureaucratic systems and finally performance management systems. Following an examination of design and implementation of these, the chapter goes on to detail the way the systems, specifically those identified as core to the administration of Revenues and Benefits, have resulted in changes to the work practices and how this relates to control, particularly of a technical form, of the labour process. The chapter goes on to explore how the use of the systems identified are used as a tool of control by utilizing them to perform monitoring and surveillance on employees. The chapter identifies monitoring of performance and attendance. The changes in work practices and level of monitoring and surveillance demonstrates how ICT is utilized to achieve technical, bureaucratic and aspects of simple control respectively and then the chapter goes on to explore how ICT has developed to allow integration of these systems and forms of control into one overarching network (Berdayes, 2002:35).

The chapter goes on to consider consequences of the technology, planned or otherwise, for the skills required to do the jobs within Revenues and Benefits. It points to a concurrence with the view advanced by Braverman (1998:89-90) and Thompson (1989:118) that within the capitalist labour process, there is an overall

tendency towards deskilling, although this may be uneven between groups and over time. This aspect is important in the overall examination of control due to the proposition from Braverman (1998) that worker possession of skills makes control more problematic for managers and so they have a motive to remove them from the process as far as possible to maximise the level of control that can be achieved.

The final aspect considered is linked to one of the central questions of the thesis, in that if control exercised through technology had been rendered absolute, would we still see other forms of control being used? The research explored this issue by examining whether management may have attempted to control the labour process by encouraging worker consent through participation (Dyer-Witheford, 1999:223) within the areas of ICT design, implementation and use, and whether this strategy, if used, had changed over time. This also addressed the view from some, for example Burawoy (1979:30) and Sturdy *et al* (2010:116) that LPT focussed solely on the coercive aspect of the employment relationship to the exclusion of more participatory forms.

7.2 ICT Systems Design and Implementation

This section considers the design and implementation of ICT within the Revenues and Benefits functions and how this relates to issues of control of employees. A central question in this section is whether workplace ICT has been designed with control of the labour process in mind or whether it is intrinsic to the technology itself and, following implementation, whether it is used for this purpose (Edwards, 1979:112). As such the research was concerned with who designed the various systems and why. The section considers three types of system used and integrated, namely: the two distinct core systems, an RBCA system to administer Revenues

and Benefits, and an EDM system to process incoming mail, forms and documentation; a bureaucratic system that records working time and absence and is, therefore, not concerned with the performance of the job itself (Littler, 1982:45); and lastly, performance management systems that measure output.

This thesis considers whether ICT, given its capability for integration, is qualitatively different in bringing management a significantly increased, if not total, level of control where resistance becomes highly problematic if not impossible, as proposed by Fernie and Metcalf (1998) and Delbridge *et al* (1993). The issue of design is considered particularly important as the thesis takes the view that within this is reflected the objectives and intentions conceived of by those designing or commissioning the systems, which the findings show is management rather than the workers using them (Braverman, 1998:34-35).

7.2.1 Core Systems

The core systems are ICT systems with the primary function of administering collection and recovery of revenue, and assessment and awarding of benefits. There are two types of core systems used simultaneously, one to administer collection of revenues and awarding of benefits and used from the 1980s and referred to here as an RBCA system; and an EDM system to process incoming correspondence and forms and first deployed in local authorities from the late 1990s.

Initially there seems to have been little thought as to the use the original computerised RBCA system would be put to. An informative account was given by a retired Chief Rating Officer from Authority A (interview 35) who was in charge of the Revenues and Benefits functions at the time of design and implementation of

what was the first computerised General Rates system in the U.K. It seems unclear as to the motive for the introduction of this technology (Hyman, 1987:37), apart from that the Authority had purchased a large main-frame computer and needed to decide what to do with it. When asked about the motivation behind the implementation of a computerised Rating system in the early 1980s he said:

"When I started [at Authority A] in 1975, the first thing that happened was [the IT Manager] said, 'Right we're having a computer, a super main-frame'. It didn't mean anything to me and we started chatting, 'it seems the most appropriate thing to use it for is Rates' because Rates produces loads of data and so, 'what can this new computer do?' And so, he and I said, 'perhaps we should get a small group together'. That was all the brief we had." (Retired Chief Rating Officer, Interview 35).

Whilst the initial motivation for implementing the computerized system is unclear, it would appear to be the case those designing it were free to design a system that would, as Greenbaum (1998:124) stated, achieve the objectives desired by the designers:

"[In terms of controlling staff] our primary target was to get the system up and running by 1st April 1980, and we worked on the basis of what has it got to do, not how it could affect staff." (Retired Chief Rating Officer, Interview 35).

The first RBCA system of its kind to be implemented was, superficially, designed without any objective for control of the workforce being considered and was only concerned with the components of effective and correct billing, collection, and assessing of claims, as consistent with the provision of a rational administration of

the functions researched (Harris, 1998:843), and therefore it is safe to assume these were the primary objectives of the designers (Rosen and Baroudi, 1992:221; Baldry *et al*, 1998:169). This was also the case at Authority B:

"When it was brought in, it hadn't got anything to do with control or monitoring of staff, it was to do with a more accurate way of doing things." (Operations and Improvement Manager, Authority B, Interview 28)

There is however, a technical aspect of control that appears to have been overlooked by interviewees, in that the RBCA system has rules embedded within it and inherent with this type of system (Robins and Webster, 1985:37) even though it may only be recognized as a way to achieve a technical solution in providing a more effective and accurate way of performing the work (Garson, 1989:208; Knights and Murray, 1994:12). Revenues and Benefits are rule and regulation driven and these systems are seen as ensuring accuracy and compliance with these aspects by proscribing employees' actions via the embedding of rules within the system (Marx K., 1990:548; Hall, 2010:172-173). Whilst it cannot exercise control over the pace of work, it instils technical control by determining how work must be performed (Frenkel et al, 1999:14; Mackenzie, 1982:81). Aspects of decision-making shift from the worker to the ICT system designed by management (Crompton and Reid, 1982:171) and so cannot be viewed as simply a form of mechanization without any control element (Edwards, 1979:112). The computerized systems in question would also show, contrary to Edwards view (1979:21), this form of control could be applied to non-production workers.

The research showed even though the system's control capabilities were quickly recognized in terms of monitoring staff, as it could electronically log work completed

on the system (Retired Chief Rating Officer, Interview 35), individual monitoring was not initially carried out post-implementation (Retired Chief Rating Officer, Interview 35; Revenues and Benefits Manager, Authority B, Interview 18; Head of Revenues, Authority A, Interview 14) and as the Retired Chief Rating Officer (Interview 35) confirmed, implementation did not result in a reduction in supervisory staff even though the technology could be expected to assume some of the control (Edwards, 1979:119; Belanger and Thuderoz, 2010:141).

The system designed by Authority A was sold to a major software company to be developed into one that could be sold to other authorities (Retired Chief Rating Officer, Interview 35) and from this point in-house design of these systems became rare. There is nothing to preclude in-house design (Beirne *et al*, 1998:151), but cost benefits of not having to design and maintain the systems mitigate against this. A system will only have to be designed once and any software developments will be applied to numerous client sites simultaneously:

"Because the legislation changes regularly, not so much in Revenues but definitely in Benefits, the overheads of maintaining the system for yourself are not cost effective, you would need teams and teams of people whereas there are a few core suppliers that supply the majority of councils. I doubt if there are any in-house Benefits [or] Revenues systems now." (Head of Benefits, Authority A, Interview 1).

Whilst authorities and employees can potentially adapt systems once purchased, as detailed by Beirne *et al* (1998:151) this is not something normally be done as it may cause problems with future supplier software updates and potential withdrawal of support (Head of Benefits, Authority A, Interview 1). Whilst 59% of questionnaire

respondents from Authority A and 48% from Authority B felt they could adapt systems to their own way of working, interviews showed this only extended to the extent of the size of text and the number of windows that could be open at any one time rather than anything related to the actual working of the system.

As the above indicates, employees who are to use these systems are excluded from their design and as such their interests will not be reflected, with an increasingly strict division of labour between those who design the systems and those who carry out the work (Ironside and Seifert, 2001:12). A number of RBCA systems have been used at both authorities due to legislative changes abolishing and instituting local taxes, and technological developments resulting in the move from mainframe computers to web-based servers. The functions carried out, however, are the same. With the procurement of the latest RBCA systems, employees from both authorities were involved in their selection. Both sites identified systems on the market delivering solutions for Revenues and Benefits functions. All these systems were already in existence:

"There were about four systems that were available on the market. We went into a procurement exercise and involved a wide range of staff in that."

(Revenues and Benefits Manager, Authority B, Interview 18)

and:

"We looked at the players in the marketplace and did lots of site visits. We did demonstrations for staff and did questionnaires and asked for their comments on the usability of the system, [this] was part of the evaluation criteria." (Head of Benefits, Authority A, Interview 1)

From the above it was clear the staff were not involved in anything other than their views on the 'usability' of already existing systems. This may be advantageous to management as external procurement may remove any meaningful element of control from employees:

"the driver was to improve performance and service to the public. One of the reasons was poor systems performance. Poor service, ironically from our internal IT department, a decision was made to seek external support and assistance. Contractually we're in a better position to hold suppliers to account." (Revenues and Benefits Manager, Authority B, Interview 18)

As a supplier, any software company will have to design a system that can be sold to customers and so the final system will be shaped by this requirement (Knights and Murray, 1994:25). Both the research sites use the same system for the collection of revenues and the administration of Housing and Council Tax Benefits. There is input from senior management at design and enhancement stages achieved by user groups instigated by the developers:

"it's part of a national user group where every enhancement has to be agreed by the group and you go through those mechanisms to achieve any change." (Revenues and Benefits Manager, Authority B, Interview 18)

and:

"there is the user group element to this. It's off the shelf but this process does enable the product to be changed from within." (Head of Revenues, Authority A, Interview 14)

The EDM system adopted by both authorities was designed externally by the same software provider supplying the RBCA system. This system is designed specifically

to process incoming mail, forms and documentation and can be seen to be an administrative tool. The main motives in implementing these systems was to facilitate space saving by converting paper documents into an electronic format, to reduce time in locating documents, and to provide a greater level of control in the allocation of work (Head of Benefits, Authority A, Interview 1; Revenues and Benefits Manager, Authority B, Interview 18; External Software Development Manager, Interview 34). We can see, therefore, an element of technical control (Dawson, 1988:120) has been designed into this system. In terms of employee involvement with the design and use of the EDM systems, the same points are relevant here as with the RBCA systems, namely they are excluded in any meaningful way from the design process and there is no possibility in adapting the system other than in the most basic manner. Management, however, do have an input into design of the EDM system through the process of user groups in the same manner as described with the RBCA system.

Whilst Wilkinson (1983:18-20) considered it simplistic to view design as a decision purely taken by management and highlighted the range of options within the process, there is little evidence to show workers using the systems detailed above have any significant input into this. However, the research has considered, whether individuals or groups of managers have their own interests and may not be a homogenous, coherent group and some contestation around design and implementation is possible (Knights and Murray, 1994:11). So, whilst Beirne *et al* (1998:157) highlighted contestation between groups and individuals in shaping the design of technology, this does not appear to be applicable to workers at the sites researched. Management contestation did not appear to be an issue in terms of the core systems but is highlighted when discussing the use of peripheral systems

designed for performance management and is also considered in greater detail in the following chapter on worker resistance.

7.2.2 Bureaucratic Systems

As we have seen in the previous section the design and implementation of the core systems appear to reflect management objectives as no worker involvement can be seen here. The second type of system to be considered in these terms is an off the shelf system that monitors and records workers' attendance at the workplace both in terms of time worked and absences including sickness, and implemented by Authority B in 2009 (Council Tax Billing Team Leader, Authority B, Interview 27) and Authority A around 2011 (Head of Revenues, Authority A, Interview 14). It is deemed a bureaucratic system due to it seeking to control workers by monitoring compliance with certain rules and policies of the organization (Edwards, 1979:131). These rules have nothing to do with the way work is performed but rather aspects such as compliance with annual and flexi leave entitlement, sick leave and working time (Littler, 1982:45).

How the system is used is considered when discussing how various systems are utilized as tools of control but suffice to say, these systems are designed to monitor specific aspects of employees' behaviour and have no input from the workers within the sites researched in terms of design or how they are used. The system seeks to facilitate management control by firstly, integrating with other systems for performance monitoring. Secondly, this system automatically triggers procedures managers must follow to comply with internal policies on time-keeping and attendance (Council Tax Billing Team Leader, Authority B, Interview 27; UNISON Branch Secretary, Authority A, Interview 15) and this removal of discretion means

this totally accords not only with Greenbaum's (1998:132) view that the policy of the organization replaces the rule of the supervisor, but also that it has become a powerful control tool (Rosen and Baroudi, 1992:215). According to Edwards (1979) the development of bureaucratic control related to deficiencies of technical control and was an alternative control strategy for non-production staff. However, the research indicates this form of control exists in conjunction with others and is, therefore, consistent with Hall's (2010:171) view that ICT has the capability to simultaneously integrate both simple and structural forms of control strategies and is not part of an evolutionary process of control methods (Thompson, 1989:152) and would suggest even with effective technical control the bureaucratic form would not necessarily disappear, as posited by Rosen and Baroudi (1992:223), if delivered through ICT but would be potentially integrated with other forms.

7.2.3 Performance Management Systems

The third type of system, performance management systems are designed to extract and manipulate data from the core and bureaucratic systems for performance monitoring purposes. Although not part of the initial design brief within core systems, over time the performance monitoring element has been specifically developed, including as a separate module which is considered here. A Software Development Manager (Interview 34) explained the process his company had undertaken in developing a system considered "performance management software". His company had taken over another that had developed what was, in essence, a spreadsheet where staff detailed what they were doing in terms of 'processing' benefit claims and 'non-processing' time taken up by meetings and other such activities:

"What clicked when we went to see what they were doing was we could do much more within our software. So, we designed Performance Management and Quality Assurance [PMQA] because without quality it doesn't matter how fast you are working if you put in rubbish it ends up creating more work. We ended up with a module called PMQA, which has three elements to it" (Software Development Manager, Interview 34).

If we discount the quality element, which is not part of the system as it involves manual checks of a percentage of work completed for accuracy, the other two elements are an electronic timesheet activated by a worker having to electronically sign in, extracted from a bureaucratic system as described in the previous section, and an electronic log of work completed, referred to as 'events', extracted from the core system, with a points weighting for each type of 'event' allowing the PMQA package to allocate a performance score of points per hour for individual workers.

This module appears to have been purchased by a large number of authorities:

"The unitaries, metropolitans and London Boroughs, the majority of those have got it, the bigger authorities, the majority." (Software Development Manager, Interview 34)

The control function provided by this system could either be something the suppliers have developed proactively to sell as a beneficial function, or it could be they have responded to a demand from the employers. When interviewing the Head of Benefits at Authority A (interview 1), she was of the view the software providers were responding to, rather than creating demand for, this control element. Either way, this system is designed and marketed as a control tool by the software suppliers (Kidwell and Sprague, 2009:196; Garson, 1989:214-215). Where an authority purchases

externally designed modules to monitor its employees this would appear, again, to leave no room for employees to intervene at the design stage. There is the option to include employees at any design stage should the control module be designed in-house.

In terms of design, implementation and use of monitoring systems, there were clear differences in approach between the two authorities. The details of how monitoring takes place is considered Section 7.4, but suffice to say here in terms of design and implementation, Authority A did not design or purchase a separate performance management system and as such no employee input was present in terms of design or procurement. Authority B, whilst not purchasing the PMQA module, designed their own performance management module along similar lines. The details of how this is used is considered in the next section but in essence it is a system that weights certain functions according the time they take to complete, so individual employees are scored against a normative, managerially set and assessed, output expectation (McNay, 1994:95). Employees were consulted on the implementation of the system but only to the extent that they had some input on the timings for types of work items. We can see, therefore, at both sites the decision on monitoring performance and how this would be performed was purely a management decision and as such would solely reflect their interests.

7.3 Implementation of ICT Systems and Changes to the Work Process

Before the chapter moves on to an examination of the techniques of control exercised through the currently deployed ICT systems there needs to be some description of the way the design and implementation of these core systems detailed in 7.2 has affected the work process. This section details what happens in terms of

items of work being received by the authorities and how this is allocated to employees. Both authorities deal with this workflow in broadly similar ways but relevant differences are detailed.

Prior to any implementation of ICT systems, letters and claims would generally be received by authorities in paper form. These would be dealt with by relevant teams after sorting by clerical staff. Officers responsible for dealing with correspondence would be expected to act on these items on receipt and the required calculations and alterations to records and accounts would be manually completed within the Revenues and Benefits sections respectively:

"We had about 80 ledgers for the collection of rates and they were originally written by hand. The rest was done by manual calculation and entered in manually, the same with Rates demands. The name and address was put on by plates and the amount to pay by hand." (Retired Chief Rating Officer, Interview 35)

Payments and benefit entitlements would be manually entered onto an individual's account. Letters or bills to individuals would be manually typed and posted. The recovery of debts *via* reminders and/or summonses would be completed by officers checking ledgers and determining which accounts required recovery action.

Authority A implemented their first RBCA system in 1980 (Retired Chief Rating Officer, Interview 35), with Authority B following suit around five years later (Revenues and Benefits Manager, Authority B, Interview 18). This therefore occurred within the period in which computerisation was becoming a regular occurrence in local government (Local Government Association, 2014:12). The Retired Chief Rating Officer (Interview 35) and Revenues and Benefits Manager

(Authority B, Interview 18) concurred with the changes to the work practices following initial computerization. Computers initially did not alter the way the work entered the authorities. This was still paper based with no system of allocation of work and officers still selecting items to be completed. The difference between noncomputerised and RBCA computerised methods was mainly in terms of the calculations, now carried out by computer, and bills, now automatically generated with account records updated and held on computer rather than ledgers, and an electronic interface allocating benefits. Payments would be automatically posted onto accounts. Any recovery action for non-payments would now be dealt with via parameters on the computerised system with reminders and summonses produced automatically. We can, therefore, see some erosion of worker autonomy and increase in management control of the labour process in these changes with technical control implemented by embedding rules and business processes, shifting decision making from the worker to the ICT system (Hall, 2010:172-173; Crompton and Reid, 1982:171), concurring with Marx K. (1990:548) that workers must follow requirements of the machine rather than vice-versa and exercising a clear distinction between conception and execution (Braverman, 1998:35).

Paper-based systems of correspondence and forms continued after computerisation at both authorities until the implementation of EDM, seen in some local authorities from the late 1990s and implemented in both sites here shortly after 2000. Following this, all items of work are electronically scanned and indexed by the Scanning and Indexing Section and entered into the EDM system:

"The post is opened, scanned into the system and there is a record of that there forever." (Deputy Revenues Manager, Authority A, Interview 2).

Phone calls from the public at both sites are currently dealt with by call-centres, an electronic form completed and passed to the teams *via* the Scanning and Indexing team entering it into the EDM system. Following the implementation of EDM at no stage in the current work process is there a paper letter, claim or enquiry form passed to individual members of staff. The allocation of work can be performed by the EDM system (Council Tax Billing Team Leader, Authority B, Interview 27; Assistant Benefits Officer, Authority A, Interview 3) further extending technical control seen with the RBCA systems by removing autonomy in work selection giving weight to Braverman's (1998) view that computerization would provide the control for clerical and administrative staff that the production-line had for production workers (Thompson, 1989:80; Button *et al.*, 2003:54-57).

Since the implementation of EDM items of work are no longer physically held in the workplace but are transformed into electronic copies allocated to individual electronic in-trays. A further aspect of EDM is certain incoming forms that may have required manual input or amendment on the RBCA system, are now automated (Council Tax Billing Team Leader, Authority B, Interview 27). For example, a claim form for a particular type of discount can be dealt with by EDM using, Optical Character Recognition and Optical Mark Recognition that update the RBCA system without human intervention:

"We use a system that automatically takes data from claim forms, formats it to squirt it back into the [RBCA] system. It's indexed automatically against the register of people on our system and squirted back so it's set up without manual intervention" (Head of Benefits, Authority A, Interview 1).

In respect of these tasks, human intervention has been eliminated. This aspect in the development of ICT is increasing:

"Last year in May and June, which is the big tax credit change period, we did 56% automatically, this year we did 71% automatically." (Head of Benefits, Authority A, Interview 5)

We can see in the discussion regarding moving from pre-computerised to computerised methods of work there was a change in how the work was done, with the computer taking over much of the calculation and applying the rules and regulations for administration of Revenues and Benefits. The inputting of data onto the computer system was carried out by individual employees. However, some functions, such as billing generation and recovery of debts had been taken over by the computer system. This has continued but with an increasing amount of the work of inputting data now having been automated too, resulting in a potential displacement of labour. We have also seen ICT systems implemented with the capability of allocating work to individual workers, thus potentially removing a worker's autonomy in work selection.

The core systems (RBCA and EDM) have affected the work process and initiated a level of technical control absent before their utilization within Revenues and Benefits. The other systems, bureaucratic and performance management, have not altered the work process as they are not concerned with the actual administration of the functions. However, as detailed in the next section, the changes in working practices have affected how the other types of systems have been integrated into an overarching network of control.

7.4 Monitoring and Surveillance

Following on from considering how design and implementation of the systems utilized can be seen to privilege management not worker interests and how the changes in work practices following computerization led to a level of technical control being implemented, we now examine when, why and how ICT became used for the purpose of management control of performance and behaviour through monitoring and surveillance. The argument here is this is carried out to achieve intensification of effort from workers as a necessary response to central government policy initiatives and budgetary reductions and not necessarily as a proactive decision taken by local government management or employers (Ironside and Seifert, 2001; Gill-McLure, 2014). This section considers the way ICT is used as a tool for monitoring, firstly for performance, and secondly attendance, and how these two elements have been integrated to achieve an overarching network of control. From this stems the proposal that these ICT systems are being utilized to achieve a level of panoptic capability allowing employers to maintain control regardless of the geographical location of the worker. It is worth noting, however, initially following computerization in Revenues and Benefits the main focus was a system of supervisors whose physical presence provided control in a simple form and the technology should therefore not be considered deterministic (Edwards, 1979):

"You had supervisors who each had a small team, eight or so, who if people were chatting too much would make it clear, 'that's enough now get your heads down and get some work done'. And of course, there was a half-yearly balance so senior management knew everything was being done correctly and in time. They also knew who was in or on holiday or sick and monitored

and signed off timesheets so it was up to them to keep everything running" (Retired Chief Rating Officer, Interview 35)

and:

"I remember managers would start to [interviewee taps desk with a pen] do that and people would stop talking. The main view was you would soon realise if work wasn't being done, or wasn't being done correctly because the public would let you know. I'm not sure it always worked but that was how workers were managed" (Revenues and Benefits Manager, Authority B, Interview 18).

7.4.1 Monitoring of Performance

Although neither site were subjected to CCT the policy did impact on them (Wilson and Game, 2006:355) with research indicating close individual monitoring was not something staff were subjected to until the early 1990s, following authorities being subjected to a regime of government performance indicators (Wilson and Game, 2006:183) and potentially being drawn in to the CCT process (Revenues and Benefits Manager, Authority B, Interview 18; Head of Revenues, Authority A, Interview 14; Byrne, 2000:556). This was confirmed by the Operations and Improvement Manager (Authority B, Interview 28) in that "we never used to monitor what people did anyway", and:

"For individuals it wasn't like they do now, 'this is how many pieces of work you will do in a day and if you don't do it we want to know why, and if you continue not to do it you will be in trouble'. That never happened" (Retired Chief Rating Officer, Interview 35)

A view was put forward by the Retired Chief Rating Officer regarding central government policy, concurring with Ironside and Seifert (2001:4) regarding these issues:

"I do think there was a qualitative shift from the mid to late 80s in terms of the government introducing performance indicators, CCT and targets and as you are seeing now, in an extreme form, starting to squeeze the money that was going in and to a certain extent forced us to act as though it was a business that was put in a false situation of competition with other councils." (Retired Chief Rating Officer, Interview 35).

How budgetary constraints have affected operations on a day-to-day basis was outlined by the Head of Revenues at Authority A:

"As budget cuts start to bite the problem is the politicians and the powers that be aren't going to say, 'it's alright we appreciate that ...' they are going to be saying, 'you've still got to collect this money and deliver this service, you've got to do what's needed'. So, the problem you have got is, 'how do I get more work out of the people I've got?' and that's where technology will increasingly come in, monitoring so staff are working to their best in terms of output and increasingly automating entire processes" (Head of Revenues, Authority A, Interview 14).

We can see the effects of Government policy initiatives and financial cuts (Thompson, 1990:110) flowing from the critique the public sector privileged the interests of the producer over the consumer (Kirkpatrick and Martinez Lucio, 1995:8), was a drain on the public purse (Thornley *et al*, 2000:140) and managers within the public sector were incapable of controlling pay or productivity (Gill-

McLure, 2014:372), may have had the result of forcing local authorities and their managers to adopt management practices seen in the private sector as argued by Ironside and Seifert, (2001:3).

The research indicates a change in how authorities, formally subordinate to central government (Travers and Esposito, 2003:20), sought to control the labour process in terms of intensification of effort brought about by policy initiatives detailed above, and the threat of underperforming councils having services removed (Orr, 2005:377). This can be seen to have led to a shift resulting in a congruence of management practices between the public and private sectors (Martinez Lucio and MacKenzie, 1999:165). This has resulted from conscious decisions of management (Knights and Murray, 1994:16) who, whilst being employed in the public sector must enforce any administrative, regulatory or legal requirements (Gill et al, 2003:258). It is the case contracts of employment within the public sector are generally indeterminate in nature in terms of the amount of work required (Braverman, 1998:37; King, 1990:76). As highlighted by Gough (1979:119) with public sector workers, and Braverman (1998:248) with non-productive workers, there is no reason as to why they cannot perform surplus labour. Therefore, as with the private sector where the motivation is not control per se but the maximization of profit (Bain and Taylor, 2000:9), the problem for local government employers is providing the same service for a reduced amount of money, as highlighted above (Head of Revenues, Authority A, Interview 14).

The problem for managers becomes equivalent to the private sector, in that they had to transform labour power into an adequate amount of actual labour (Marx K. 1990), but in this case as a consequence of central government policy and dwindling

resources rather than the profit motive. A Systems Officer (Interview 11) who was employed within the private sector prior to being employed at Authority A believed that she had seen management practices in terms of control of labour, within local government become identical with those she witnessed prior to her employment at the authority. As such we see the motivation for the use of ICT in local government as not only a means of achieving a more effective and accurate way of working concerned with quality and processes (Garson, 1989:208) from a professional bureaucratic perspective (Wilson and Game, 2006:96), but also as a means of control of the labour process (Wilkinson, 1983:21) to achieve the optimal quantity of surplus, and therefore unpaid, labour (Gintis, 1987:69) which, as proposed by Gough (1975; 1979) may result in an increased appropriation of surplus labour within the capitalist sector and therefore increase profits. In this sense the application of technology as a disciplinary tool in this context is confirmed as specific to workplace relations (Ackroyd and Thompson, 1999:164) and is a sufficient explanation for the control of workers (Hassard et al, 2001:347), rather than as part of a wider disciplinary system as proposed by Foucault (1995). The Head of Benefits at Authority A (Interview 1) and Operations and Improvements Manager at Authority B (Interview 28), confirmed their recollection that not only prior to computerization but also prior to the requirement for performance indicators, there was no individual monitoring. As such there appears to be some concurrence between changes in government policy and individual performance monitoring. This was also articulated by the Head of Revenues at Authority A:

"My brief used to be about quality and customer service. since all the targets and now the cuts have come in, it's really only about volume. Getting more

and more out of less and less. That's what I'm paid for now" (Head of Revenues, Authority A, Interview 14)

However, in considering these responses the view expressed in Chapter 6 that it is potentially problematic in terms of accuracy recalling events from a considerable time ago, as highlighted by Patmore (1998:222-223) needs to be borne in mind here, particularly as very few of the interviewees were employed in the areas under research prior to, or immediately following computerization. Whilst it does appear from the evidence individual monitoring did not take place immediately following computerization, supervisors were employed who were answerable to more senior managers and it is likely therefore, that control of labour was in place as highlighted in Chapter 2 (Harvey and Hood, 1958:242; Ironside and Seifert, 2000:37; Webb and Webb, 1897:819), albeit using non-technological techniques. It may also be the case that any control applied was not necessarily perceived as individual in nature and it was only with the advent of ICT systems that the forms of individual monitoring now seen could be applied (Head of Benefits, Authority A, Interview 1). However, it also appears, whilst this level of individual performance monitoring was possible, it was not the inherent qualities of the technology that determined whether it would be used.

When both authorities started monitoring individual performance, this was done by computerised and manual means. Broadly speaking, computerised monitoring involved automated counting items of work completed and comparing this to a managerially set target, whilst manual monitoring involved checking the quality, that is the correctness or accuracy of work completed, therefore focussing on outputs (Seifert, 2018:111). Authority A operates with separate Revenues and Benefits departments. Those working in the Revenues department are subject to both

computerised and manual monitoring. Those working in the Benefits department are not subject to individual computerised monitoring but were subject to individual manual monitoring of quality. Authority B operated a combined Revenues and Benefits department where staff below Team Leader level in the structure are subject to both forms of monitoring.

We now turn to examining how ICT has become fundamental in delivering performance monitoring on the scale we now see (Thornley *et al*, 2000:152; Beynon-Davies and Martin, 2004:217). Both sites employ EDM systems and it has been noted how EDM facilitates an aspect of technical control (Edwards, 1979), in that it potentially removes discretion individual workers have in selecting what pieces of work they undertake. The Operations and Improvement Manager from Authority B (Interview 28) recalled letters held in a cardboard box with staff selecting items they wanted to deal with and leaving others for someone else. The implementation of technical control through EDM systems potentially removes this autonomy from the individual worker and places it with the system or manager (Button *et al*, 2003:54-57):

"There's no free for all where, 'I'll just take this or that bit of work'. It's either allocated to you or it's the next piece that [automatically] comes from the work tray." (Head of Benefits, Authority A, Interview 1).

Work allocation is important in how performance monitoring works, particularly at Authority A where no separate performance monitoring system has been designed or purchased. The element of monitoring dealing with the volume of work completed by individuals here is a count of completed items taken from a report from the EDM system and compared against a managerially set target (Head of Revenues,

Authority A, Interview 14; Billing Clerk, Authority A, Interview 13). Workers also have to electronically clock in and out, and log on and off on the core systems. Should less than a full day be worked a proportion of the target is used. There are two questionable aspects to this target setting. Firstly, there appears to be no objective criteria:

"There's no scientific approach. We just looked at historic data and said 'let's look at a long period of time, six months or whatever, and see what the average is [and] let's just try and bring the weakest performers to average" (Head of Revenues, Authority A, Interview 14).

A Senior Billing Clerk at Authority A confirmed how she believed the targets were set:

"The way it's set is if one clerk can produce 50 or 60 items a day ... and another can produce 30 or 25 items then they get the average from it." (Senior Billing Clerk, Authority A, Interview 12)

Another member of staff articulated what employees at her level felt about the nature of performance targets:

"I personally think they just pluck a figure out of the air. I can't see where they get it from" (Billing Clerk, Authority A, Interview 6).

In terms of this aspect of monitoring it is problematic where an average figure is used as a target, as by its very nature some will be unable to hit it as to calculate an average figure dictates some will fall below it.

Secondly, the items of work carried out by individuals are not standard. One document may be dealt with in a few minutes and another make take considerably longer:

"[If] we say 25 cases a day you don't know really whether they've got 25 complicated or easy cases" (Head of Benefits, Authority A, Interview 1).

The monitoring of individuals is based on items of work completed. However, this does not actually measure the work they may have done to reach this point and concurs with the findings in the survey conducted by Marsden and French (1998:9) in respect of the nature of the work making accurate measurement problematic:

"currently it's five an hour but some days you would struggle to do five all morning because pieces of work are not always straight forward. You don't get all the information, so you have to send a letter off and that can be any time. There is no set time to do a piece of work, so how can you measure it?" (Billing Clerk, Authority A, Interview 6).

and:

"there can be times when you have meetings et cetera and although you get standard times set for the day, if you have taken longer than expected, or you have systems problems that's not always taken into account." (Billing Clerk, Authority A, Interview 13)

A solution to this has been advanced that if the individual has no control over allocation of work achieved by the technical control of the EDM system, randomness deals with potential discrepancies over time. The EDM system incorporates a 'next' button and when an item of work is completed if this is pressed the system automatically allocates the next one:

"You can't cherry pick; you get the next item. In a day you might have the bad luck of getting three really nasty ones, so we never look at it in that period of time. But over a month it evens out and we look at it historically month on month." (Head of Revenues, Authority A, Interview 14).

Even if this has the effect of evening out the discrepancies between individual items of work, this is not what actually happens:

"A good few years ago we used the 'next' button. At the moment I don't think anybody presses it. We haven't for years because the work put into our trays on a daily basis is prioritised, so we don't get that option anymore unless you've got nothing in your tray, which doesn't happen." (Billing Clerk, Authority A, Interview 10)

This is a clear example of senior management being unaware of what actual working practices are. As far as management are concerned, certain pieces of work are more urgent than others and as a result of cuts in resources due to financial constraints, backlogs occur leading to supervisors prioritising certain items of work over others. Therefore, the use of the 'next' button has been curtailed as per the comment made by the Billing Clerk above, (Interview 10). This means the selection of work cannot be made by the individual employee but neither is it random:

"the Senior or Team Leader looks and sees what needs actioning quickly and distributes it that way. They are trying to deal with the most important because if you press the 'next' button it's just what's next in the tray and if you did this they would know because you wouldn't be dealing with the work they had prioritized for you." (Billing Clerk, Authority A, Interview 6).

The monitoring of individual employees at Authority A is currently being performed on employees at the level of clerks and senior Clerks within the Revenues Department. This was confirmed in a number of interviews with Authority A employees (Billing Clerks, Interviews 6 and 10; Senior Billing Clerk, Interview 12). This method of monitoring also used to be carried out within the Benefits Department. However, this stopped when the current Head of Benefits took over:

"I am not a fan of averages, averages can be manipulated and if you're measuring something you should understand why ... and what can actually influence what you're measuring." (Head of Benefits, Authority A, Interview 1)

"We abolished it because we were counting rubbish really, and documents

completed in EDM was rubbish." (Head of Benefits, Authority A, Interview 5)
Whilst there is no individual monitoring undertaken within the Benefits Department at Authority A, due largely to the Head of Benefits dislike of the lack of objective rigour in the monitoring process, it occurs at team level. Benefits administration is subject to Government performance indicators and the targets are taken from these:

"We give teams performance targets now and it's up to the team leader to manage staff how they see fit." (Head of Benefits, Authority A, Interview 1)

In essence, we can see whilst the technology allows management to count items of work completed by individuals, this does not necessarily mean it is an accurate measure of the work they have performed. There is a clear difference between managers regarding the desirability of this form of monitoring. However, the desirability from management's perspective will depend on the motivation for implementation. If the intention is to intensify the effort of workers, and this may be

one of a very limited range of options managers in local government have (Ironside and Seifert, 2001:3-4), objectivity may be of little concern. This provides further evidence technology is utilized, not in a pre-determined manner, but as a matter of choice (Noble, 1979:18-19; Wilkinson, 1983:18), and how it is used may vary according to choices from managers and potentially contestations from other actors, including within the management group (Hall, 2010:164).

Authority B operates a single Revenues and Benefits department with a uniform monitoring approach that is different from Authority A. Whilst Authority A appears to have little objective justification for the way it monitors the actual amount of work performed, Authority B has instituted a system that, superficially at least, seeks to address the issues of objectivity raised by the methods of Authority A.

Authority B have designed and implemented their own system for monitoring staff output called the 'Performance Hub'. This system fits the description of a performance management system as detailed in Section 7.2.3. It works by extracting data on completed work items from EDM for each individual and inputting these to a database. Each document is assigned a type when scanned into EDM. Where Authority A operates a monitoring regime that simply counts items of work completed, Authority B allocates a timing for each type of work:

"The basis was time and motion. Every function was measured and timed and a reasonable average applied which was then fed into this system" (Revenues and Benefits Manager, Authority B, Interview 18)

"We did a timing exercise on all types of work coming in. We got everybody from the slowest worker, who we know is slow, to the fastest, so we get a fair average of how long it takes to do a piece of work." (Revenues and Benefits Supervisor, Authority B, Interview 24)

"We accepted that's an average and we worked with staff that they accept 'well I've done that claim and you're only allowing me 40 minutes but that one took me 50' so we work with staff to say 'yes but that one only took you 30', so because we are working with averages, over a period of time it should work itself out." (Operations and Improvement Manager, Authority B, Interview 28)

When a piece of work is completed on the core system this is fed into the monitoring database and the timing for that type allocated to it. In this way, over a day the system is able to calculate the number of items of work completed and the notional time this should have taken to complete. There should be no point in individuals trying to select easier types of work to increase performance totals, as is the case with Authority A, as the timings for these would be less than more difficult types (Council Tax Billing Team Leader, Authority B, Interview 27). Working time is also monitored by a computerised system, identified in Sections 3.3.2 and 7.2.2, as a bureaucratic system, that electronically records when the person arrives at and leaves work and also when they log on and off the core systems.

A number of interviews (24,27,28) at Authority B detailed how the 'Performance Hub' works. The working day is calculated from the time the worker logs onto the system until they log off. This is adjusted for 'legitimate' non-productive time staff can input when they are engaged in activity not related to the completion of work items, such as "non EDM time because [they] were in a meeting or training" (Operations and Improvement Manager, Authority B, Interview 28). The system, therefore, has

information on the time the employee has as potentially productive time and the number of completed items, each of which has a timing applied to it. This data is then fed into the Performance Hub which calculates a percentage of notional productive time worked from the time logged on to the system and the actual completions. These 'scores' are then put into a range relating to the acceptability, or otherwise, of the individual's performance. If the number of items of work completed equals the time at work this would give a score of 100%. However, management accept staff may not be productive 100% of the time and have implemented what they refer to as a 'traffic-light system'. Between 0% and 74% productive time is classed as 'red' and deemed unacceptable. 75% to 89% is classed as 'amber' and deemed satisfactory, with 'green' being given as optimum between 90% and 120%. A figure of over 100% is accepted because some will work faster than the set timings, as would be expected when using averages. There is an expectation that homeworkers, those who work at home rather than based in the office, should produce more due to reduced interruptions, with the red band having a higher limit of 84%. According to the Revenues and Benefits Supervisor (Interview 24) these levels were agreed with the trade unions but the research did not corroborate this.

It appears, superficially at least, Authority B has developed a more objective system for performance monitoring. However, it should be noted the timings for work types are averages. Therefore, on any day an individual's performance could be judged inadequate as the system cannot accurately measure the work performed. Although there may appear to be a greater degree of objectivity applied, neither site can claim to operate a genuinely objective performance measurement regime.

If the monitoring regimes used at both sites do not accurately measure the amount of work done, then a relevant question is what is the motivation behind them? It would appear the motivation for this type of monitoring is not that it provides any useful information regarding an individual's performance, as was articulated by the Head of Benefits at Authority A (Interview 1), but rather it provides a level of control for managers in intensifying the effort of individual workers (Bradley et al, 2000). Rosen and Baroudi (1992:217) were of the view, output itself is not the concern of management but rather if the correct behaviour is achieved there will be a satisfactory level of output. The less than objective manner output is measured at the two sites gives some credence to this view. Interestingly the questionnaire carried out at the two sites showed a difference in how the staff viewed the real reason monitoring was carried out. When given the statement "Performance monitoring is not about accuracy, it is about getting us to work harder", more than half (61%) of respondents in Authority B agreed as opposed to just over a quarter (28%) at Authority A. However, in terms of whether they would work less hard if performance monitoring was not in place, no one at Authority A agreed with this and only 9% at Authority B. As to whether staff felt pressure to meet management targets 61% of respondents at Authority B agreed with this as opposed to 86% of the staff in Revenues subject to this in Authority A. Only 20% of Benefits staff at Authority A subject to team level monitoring felt this pressure. This and the interviews certainly point towards a motivation for individual performance monitoring being for the reason of intensifying the effort of individual employees (Bradley et al, 2000:105-106). Furthermore, regardless of whether employees believe this is the motivation, this does appear to be the effect. The next quote is from an employee who admitted they would not work as hard without performance monitoring:

"I would definitely work at a more reasonable pace if I could, without this."

(Benefits Assessor, Authority B, Interview 17)

It also appears some who feel they would work as hard without performance monitoring, nevertheless perceive management motivation as intensification of effort:

"They try and screw more and more work out of us for the same money."

(Billing Clerk, Authority B, Interview 22)

"I check before I go home and if I am five short or something then I think 'I've got to do more tomorrow, I must catch up', I would stay till six most nights to make sure I had done my quota" (Billing Clerk, Authority A, Interview 6)

There did appear to be a somewhat contradictory indication in this area when comparing the questionnaire response which indicated almost 90% and 75% of workers at Authority A and B respectively would work as hard without monitoring, whereas in the interviews, they indicated the worry, stress and pressure they felt to achieve targets:

"I thought, 'do I need to get away from people and not listen to office banter? Just concentrate on my work'. It was once a relaxed office where people were relaxed about stopping and having a conversation and now you don't get that because you've constantly got work in your tray. You're constantly worried, thinking, 'if I don't get this done', it came to the point where I was counting the amount of work I was doing and thinking, 'Oh God I'm going home soon and I've got to get another 10 items done'" (Billing Clerk, Authority A, Interview 10)

Managers interviewed generally accepted one of the results of this type of monitoring by the use of ICT is the intensification of effort and increased output, thus concurring with Bradley *et al* (2000:105-106), Oz *et al* (1999:168) and the general view of interviewees above. As highlighted in Chapter 3, Taylor (1947) believed it was natural for workers to shirk and for this to continue was a failure of management (Jacobs and Heracleous, 2001:123). A Revenues and Benefits Supervisor from Authority B concurred with this view:

"As soon as we put that Performance Hub in place and started measuring performance, you could see over two to three months each member of staff's performance started to increase. Obviously, people knew their performance was being monitored, the office was quieter, work started to increase" (Revenues and Benefits Supervisor, Authority B, Interview 24)

The Operations and Improvement Manager at Authority B, responded to the suggestion that around three quarters of employees responding to the questionnaire within Revenues and Benefits at her authority indicated they would work as hard without monitoring as follows:

"That's rubbish, absolute rubbish. I can honestly say under the system we have seen a massive impact in terms of output. If you know you're being checked and your performance is being looked at you are more aware of, 'oh I'd better put my mobile phone away' for example. 'I'd better stop this conversation'. Don't manage the mobile phone, manage the performance. It took all that micro-managing away because people knew what to expect. People work harder if they're performance managed, undoubtedly." (Operations and Improvement Manager, Authority B, Interview 28)

The Head of Revenues at Authority A also concurred that monitoring of this kind had the effect of intensifying the effort of employees and needed to happen because of reduced resources:

"the problem I have is, how do I get more work out of people, and that's where technology will increasingly come into it. That's both better efficiency through automation et cetera and making sure staff are working to their best in terms of output. Monitoring is a crucial aspect of this." (Head of Revenues, Authority A, Interview 14).

There is a second element in the monitoring regimes undertaken by both authorities in relation to the accuracy of the work carried out. It was pointed out by a number of the interviewees there was little point encouraging a high level of output from individuals, if that resulted in a high level of errors. Both sites operated a manual checking of work from individual workers as it was impossible for these checks to be carried out *via* the system. Both sites had a section whose role was to perform quality checking:

"The quality of work, all the 'exemptions' and 'disregards' and 10% of other work gets checked. Quality is monitored that way." (Senior Billing Clerk, Authority A, Interview 12)

"We've got a new member of staff. He's only just picking up the job so you check 100% until we are happy what he is doing is ok and then we'll ramp that down." (Council Tax Billing Team Leader, Authority B, Interview 27)

There is a view for this type of monitoring to achieve an intensification of effort, workers must be aware of consequences of their failure to achieve the desired level of performance (Larson and Callahan, 1990:530), as it is these consequences that

ensure the required behavior (Hunton *et al*, 2008:1555). However, no workers at either site had been subject to any formal disciplinary or capability action as a result of performance monitoring. Initially it was considered whether, as any action could not be instigated automatically, managers were simply avoiding confrontation (Zuboff, 1988:334-335; Hyman, 1987:41). However, the process at both sites was to raise informally if output is deemed unsatisfactory:

"If they get a red the supervisor speaks to them and says "what's going on?"" (Revenues and Benefits Supervisor, Authority B, Interview 24).

"Informal. I may have been told but it's not really discipline, she just said, 'your numbers are a bit awry'" (Scanning and Indexing Clerk, Authority A, Interview 4)

Whilst there is a clear requirement for human intervention in terms of target setting and action for failure to attain these (Baldry *et al*, 1998:173-174), there is some use of technology to ensure supervisors are complying with the monitoring procedures (Thompson and Bannon, 1985:107). Supervisors at both sites believe they are monitored as to whether they raise these issues with members of staff. This is a manual form of monitoring as detailed below:

"My team leader will check to see if I have done what I'm supposed to. What we do on the Performance Hub is where we have spoken to a member of staff, we put the day we have spoken to them and a brief description of what's happened. So, if my team leader, sees them in red, she will say, 'What steps has he took? I can see, fair enough'" (Revenues and Benefits Supervisor, Authority B, Interview 24).

Whilst managers at both authorities confirmed no formal disciplinary or capability action had been taken against individuals (Revenues and Benefits Supervisor, Authority B, Interview 24; Head of Revenues, Authority A, Interview 14), they were of the view that normal methods of control, namely disciplinary or capability action, would be undertaken if informal aspects of this form of monitoring proved unsuccessful:

"It wasn't a stick to get people sacked, it was something that identified to us, 'this person isn't performing very well. Work with them, develop them, get them into the green.' Ultimately if we can't do this it becomes a capability issue. Somebody asked me the direct question, 'could we be sacked because of the information the system is showing?' I said, 'if after development we still couldn't get you into the amber then yeah you could be. It could be down to capability and you're not capable of doing the job'" (Operations and Improvement Manager, Authority B, Interview 28)

The fact no formal action has been taken has been cited as a reason to believe this type of monitoring works due to workers behaving in a way that avoids sanction (Hunton *et al*, 2008:1555) and in this sense, it may be seen as management exercising an effective control over the labour force:

"Because the processes are in place before you get to disciplinary action you resolve the issue, so that Big Brother scenario does the deal without having to resort to disciplinary action, which is obviously a preferable outcome." (Head of Revenues, Authority A, Interview 14)

However, ultimately there are other reasons why disciplinary and capability cases may not be arising. The Head of Benefits at Authority A (Interview 1) made the point

that it was difficult to recruit experienced and qualified Benefits Assessors and even within Revenues where recruitment was not problematic (Head of Revenues, Authority A, Interview 14), there is a training and replacement cost in having to replace workers and this would concur with Batstone's (1988:223) view around the level of control that may be ceded by either side depending on the cost of applying sanctions:

"We're not using it as a tool to hit somebody over the head [or] as a mechanism to get rid of them. Why would we want to do that? We need the staffing resource. The last thing I want to do is get rid of somebody and have to invest in somebody new and the costs associated with training. I would rather the staff already here are performing to adequate levels and we haven't got to go through the cost and resource of replacing them." (Revenues and Benefits Manager, Authority B, Interview 18).

This type of monitoring of employees where numbers are taken directly from a computerised system has been advanced as an objective form of performance measurement. This has also been put forward by managers as fair, as it prevents arbitrary sanction by managers without any actual evidence. The performance target itself becomes a rule and the basis of authority (Dawson, 1988:120; Edwards, 1979:131):

"It could be used to take people through a capability procedure and for me that's better than what we had, which was perception. At least you have got hard facts." (Council Tax Billing Team Leader, Authority B, Interview 27)

Ultimately this argument is difficult to sustain, as the measurement is only superficially objective and fails to accurately measure all work performed. It is also

the case there was little, if any, disciplinary or capability action, arbitrary or otherwise, taken against individuals regarding performance prior to this form of monitoring being implemented (Head of Benefits, Authority A, Interview 1; Head of Revenues, Authority A, Interview 14; Revenues and Benefits Manager, Authority B, Interview 18). In fact, potentially it is now more likely to be used to support action taken against individuals on the basis of capability. This was expanded on by the UNISON Branch Secretary at Authority B who felt the use of computer-generated performance figures did not prevent managers from picking on individuals, albeit the examples he was aware of were not in the Revenues and Benefits Department and so are only mentioned to illustrate how managers could use data. The basic premise articulated was managers can and do target individuals:

"Individuals have been targeted. They use whatever evidence they have to hang somebody and it's done in such an unfair way" (UNISON Branch Secretary, Authority B, Interview 33)

Whilst the comments above point to perceived unfairness in the way computerised monitoring could be used, managers have pointed to what they feel is not just an objective way of measuring performance but also action in respect of poor performance can be sustained by comparing output between individuals, potentially exerting peer-pressure to increase output (Sewell, 1998:420). Both authorities organize their workers into teams based on geographical areas and a number of interviews highlighted a concern from individuals that they should not let their team or team leader down (Authority A, Interviews 4 and 6; Authority B, Interviews 26 and 31):

"I'd love to be able to put some figures in front of you that are verifiable and say, "this is what you've done during the year and here's an average for everybody else in your team". All these things are possible." (Software Development Manager, Interview 34)

The difficulty reliance on supposedly objective evidence can cause for employees and their unions was raised:

"Monitoring definitely makes it more difficult to defend people in capability situations. It's harder to claim a worker is being unfairly targeted if bosses have data showing they are performing below par compared to others. Before, we might have had a shot at saying, 'you're picking on them'."

(UNISON Branch Secretary, Authority A, Interview 15)

This would appear to give a greater control over the labour process in as much as individuals can potentially be replaced or removed as part of a move to achieve a cheaper displacement of labour. However, this potential does not appear to be used by management at either of the research sites. In terms of intensification of labour however, there is evidence provided in this section to show this has resulted from the monitoring undertaken at both sites.

7.4.2 Monitoring of Attendance and Absence

We have considered control aspects applied through ICT systems extracting data from core and/or bureaucratic systems that, in respect of Authority B feed into a separate performance monitoring system creating an overarching network establishing a technological system of control for managing performance. We have seen up to this point technology used seeking to achieve control whilst the worker is at work. This section, however, considers how bureaucratic attendance

management systems are used, separately to their role as a component of performance management systems, to implement a level of control on another area of employee behaviour, absenting themselves from work. This aspect of control has a two-fold characteristic. Firstly, it seeks to remove control from workers who may use absence as a means of effort-management and escape from managerial control (Edwards and Scullion, 1984:553), and secondly it may intensify work by increasing the level of attendance with staff attending rather than taking sick leave.

Both sites use swipe-cards that must be used when staff enter and leave the workplace. We have also seen the moment someone logs onto the core system is recorded. This combination is used to monitor periods of inactivity where individuals may have potentially absented themselves from the workplace and therefore may prevent and give management control over unauthorised absences during a working day (Head of Benefits, Authority A, Interview 1; Operations and Improvement Manager, Authority B, Interview 28) which, prior to the use of this technology, may have been unseen (Edwards and Scullion, 1984:553).

An area where management have sought to increase control is around sickness absence where,

"technology has also started to have an effect not just on monitoring people's work but enforcing attendance." (UNISON Branch Secretary, Authority A, Interview 15).

At both sites an HR management system was implemented within the last decade, where sickness absence is logged, triggered by a failure of any employee to clock in *via* a swipe-card. Managers failing to log the absence are reported *via* the system to the central HR department. Parameters are set by corporate policy indicating to

managers when absence triggers are hit and a meeting must be held. Unless there are any absences that can be discounted due to disability (as defined by the *Equality Act 2010*), pregnancy, or industrial injury, a warning *must* be issued, including where a doctor's note has been obtained. Further absences within a set period of time move the process automatically to the next stage and ultimately a dismissal hearing:

"When they are monitoring sickness [absence] that's recorded on the system through 'Yourself' [the HR management system]. I think that's a form of control, a stick to threaten you with. You can see 'Yourself' and when you hit a trigger and I think that does put people off from phoning in sick." (Benefits Assessor, Authority A, Interview 9)

"There's corporate targets that must be met for sickness, and where they are breached it triggers a warning to the manager saying, 'this person has triggered these targets', they are called in for a meeting and there are various stages to that." (Council Tax Billing Team Leader, Authority B, Interview 27)

"The warning is for a failure of attendance and the managers do not take into account the nature of the illness. In essence they [HR] want a policy where managers get to the capability stage more quickly than if left to their own devices" (UNISON Branch Secretary, Authority A, Interview 15)

When the meeting has been held and a warning issued, the system must be updated by the manager indicating this. If the manager chooses to ignore this, it is reported *via* a system generated report and they are challenged as to why this has not been done. This is, therefore, a system of monitoring individual managers, subjecting them to control with regard to this aspect and who have effectively had discretion in this area removed (Rosen and Baroudi, 1992:221). As with performance monitoring

there is recognition that failure to behave in accordance with managerially set norms requires consequences for the worker. Managers at both sites maintained that since these systems were implemented, sick leave had significantly reduced (Head of Benefits, Authority A, Interview 1; Head of Revenues, Authority A, Interview 14; Revenues and Benefits Manager, Authority B, Interview 18), thus potentially achieving an intensification of labour.

7.4.3 Panoptic Control

This section examines the view that what we have seen in the previous sections on monitoring and surveillance of performance, activity and attendance, including the integration of separate ICT systems has, led to a panoptic level of control. To recap, originally conceived as an ideal prison, it enabled prisoners in cells to be constantly observable from a central vantage point without them being aware of whether they were being viewed (Foucault, 1995). It was not deemed necessary to continuously view the prisoner as the possibility they were being viewed meant they would behave as if they were (Sakolsky, 1992:238). We have seen in previous sections how ICT is used to monitor workers performance and attendance. The research indicates the integration and concurrent use of systems detailed can be considered a panoptic form of control as proposed by Berdayes (2002:35) who saw this technology as mimicking the panopticon.

A development in Revenues and Benefits departments over the last decade, adding weight to this view has been the increase in workers who are no longer office based but work from home. The introduction of EDM means that, for example, Benefits Assessors do not have to access actual paper files to make an assessment as all documentation received is scanned and indexed and placed in electronic in-trays

(Scanning and Indexing Clerk, Authority A, Interview 4; Revenues and Benefits Supervisor, Authority B, Interview 24). This technology means employees can now work from remote locations (Thompson and Smith, 2010:21):

"There's nothing to stop someone on the other side of the world from working for us. There's now the opportunity to totally divorce work from the locality. When we started the home work project we did something called a location independence test which says are you linked to a workplace because of particular filing or machines you need to use, or because you have to see face-to-face people? Is there anything that links you to a particular place, and with Benefits Assessors it didn't and therefore it was prime for home working. You could do it anywhere." (Head of Benefits, Authority A, Interview 1).

In essence:

"As all the work is on the computer, people can stay where they are. You can send them the work rather than before, they came to the work when it was paper." (Assistant Benefits Officer, Authority A, Interview 3)

An important aspect of this geographical separation is the panoptic power of the technology employed and its effect on the workers subjected to it. The view expressed by Foucault (1995) that the concept of the panopticon could be applied to the workplace is encapsulated by the following comment:

"We know how much work someone is doing because we can see it in EDM and there's all these electronic systems that see when you log in [and] out. You don't necessarily need to monitor people for them to be productive. The fact they know you could, makes them work but we don't sit there all day

watching them. The fact we could is the deterrent that stops them" (Head of Benefits, Authority A, Interview 1).

The view of this manager coincides with Sakolsky (1992:238), that it is the potential for them to be monitored in this way that ensures they work and means there is actually no reason to continually monitor, even when the worker is geographically separated from the main workplace. A supervisor at Authority B summed it up as:

"The way technology works now means managers don't need to monitor and surveillance people to the nth degree because people know it could be done. So, I never really know when they are watching me and when they're not, so I'd better behave myself because there's this audit trail and there's the possibility I'll be caught." (Council Tax Billing Team Leader, Authority B, Interview 27)

As a technique, employing technology with the capability to have this level of panoptic quality would, from the perspective of management, go some way to ensuring employees work rather than spend paid time in idleness. This form of control has undoubtedly been one of the deciding factors in allowing employees to work from home but is not exclusive to workers employed remotely. This surveillance can be seen as another strand of control sitting alongside the regime of monitoring and targets. It is a further means of control which potentially removes from workers their ability to manage their own effort. Where targets are set it is always possible individuals may rush through the work to enable them to take it easier later in the monitoring period. This panoptic control makes this less likely as the system can report on spells of time where little or no work is completed:

"We have got Citrix [software allowing remote access to a central server] and when you log onto the system, that's your personal log on, so when you use our system it knows it's you and nobody else. I couldn't log in as you. When I log on that's me and my time sheet. With the EDM system when they touch a piece of post it date stamps it with a time as well, up to a second. So, we can see when you say you've started at eight o clock we can look at the Performance Hub and that tells us what the first piece of post that has been 'completed' or 'pended'. We allow about 15 minutes and say, "well yeah, fair enough" but if they said eight o clock and the first piece of post was not completed until 10, then questions are asked, 'what have you been doing for two hours?" (Revenues and Benefits Supervisor, Authority B, Interview 24)

We can see here the level of panoptic capability ICT delivers (Sewell, 1998) with a level of integration that not only measures output and ensures rules regarding time-keeping and attendance are complied with but also surveilles workers with regard to their activity, legitimate or otherwise, for example unauthorized internet use throughout the working day, or indeed where no activity is seen at all (Oz *et al*, 1999:167; Kolb and Aiello, 1996:408). As such we can see an integrated network evaluating output against managerially set norms (McNay 1994:95), supported by a system that can detect periods of inactivity, unauthorized activity and attendance all motivated by management's desire to intensify effort. In effect this deals with the issue as raised in Chapter 2 where the distinction between labour-power and labour is raised. The technology here can be seen to be guaranteeing attendance, the presence of the labour-power, and actual work, or the transformation of this attendance into labour.

This thesis views the panoptic capability of ICT when used as a means of intensifying effort to be consistent with a Marxist labour process perspective being specific to the workplace relationship in its application and in this it does not need to form part of any wider system of control. This is achieved without requirement for the simultaneous presence of a supervisor (Zuboff, 1988:322) due to the technology itself providing the necessary control (Belanger and Thuderoz, 2010:141). This helps alleviate the problem identified by Edwards (1979) of achieving simple control within a large organization and subsequent spatial separation meaning remote workers can be subject to a managerially appropriate level of control (Baruch, 2000:38; Castells, 1992:208). As there is no requirement for the simultaneous presence of supervisor and worker it extends the concept of the panopticon from a notion where individuals had to behave, as they were never sure whether they were being observed (Sakolsky, 1992:238), to one potentially where observation is constant and certain (Hunton et al, 2008:1555) regardless of the physical presence of supervisors (Zuboff, 1988:322). Therefore, the requirement for an exponential increase in managers in relation to the size of an organization (Edwards, 1979:19), can be reversed due to technology assuming some of the control function (Garson, 1989:223). It therefore also fits in with the requirement to displace labour, as one of the few options open to management to achieve required budgetary cuts (Ironside and Seifert, 2001:3-4). Both sites reported a reduction in supervisory staff over the preceding ten years of around 50% (Head of Revenues, Authority A, Interview 14; Revenues and Benefits Manager, Authority B, Interview 18) which can be plausibly attributed to the level of panoptic capability and also technical control achieved through the embedding of rules within the system as detailed in Section 3.6.2.

7.5 Control and Skill

One area potentially linked to the issue of control through technology is that of skill. The question considered in this section is whether the removal of skills means employers and management may exercise control more effectively and this is why deskilling is a central tenet of labour process theory (Elger, 1982:26) and whether this applies within the public as well as private sector:

"If technology deskills, you have greater control over people because it's obviously easier to replace them" (UNISON Branch Secretary, Authority B, Interview 33)

Staff who possess skills management no longer require, or skills of a more generic nature may be more easily replaced. They are potentially more easily controlled due to their reduced ability to rely on any value and scarcity of the skills possessed. This raises a number of questions. To what extent is the deployment of technology a deliberate attempt to deskill jobs to enable an increased level of control (Braverman, 1998) and how does the deployment of technology affect skills, does it merely deskill jobs or does it introduce new skills?

A majority of those returning the questionnaire felt the technology currently used has had the effect of making the job less skilled. In Authority A, 63% of respondents believed the job would require a higher level of skill without the technology used, against 25% who disagreed with that position. The results from Authority B for the same question were 53% (but 63% for those specifically identifying as Benefits workers) and 29% respectively. A typical response from the interviews was:

"The rules and regs are so complicated it would be difficult to do without computers. They would have to employ more workers and pay a lot more."

(Benefits Assessor, Authority B, Interview 23)

However, whilst this does indicate deskilling due to the technical control inherent in the embedding of rules and regulations, questionnaire responses detail some contention as to the extent of this. When given the statement "I feel the technology used in Revenues and/or Benefits requires a high level of skill", 49% and 47% (and of those specifically identifying as Benefits workers, this was 58% and 75%) of respondents from Authority A and B respectively agreed with this, with 39% and 29% respectively disagreeing. We can see, therefore, staff may feel whilst technology has reduced the level of skill required, there remains a high skill requirement.

In terms of whether we are seeing deskilling or upskilling the research points to an uneven effect with some staff seeing the requirement for skills reduced in their role, whilst another, apparently smaller, group of workers are required to acquire new skills or at least have their skills maintained:

"You've got two types of people, administrators who feed the system and do the same thing and that's most staff, and you've got people whose work is constantly changing because they're always at the leading edge of changes" (Head of Benefits, Authority A, Interview 5)

Whilst highlighting the difficulty of recruiting competent and qualified Benefits Assessors, the Head of Benefits at Authority A (Interview 5) confirmed she was aware there were moves to develop software to deal with the complexity of this area, so deskilling the work of Benefits Assessors. This concurs with the view that whilst

initially technology may not deskill and rather, may require upskilling, the tendency is for all roles to be deskilled (Thompson, 1989:118; Gorz, 1976:57). The uneven effect on skills is a complex area, with no direct causal effect that the ICT used in Revenues and Benefits departments has simply caused deskilling. In one sense automation can be seen to have reduced the simpler elements of the job:

"There's another argument about technology such as telephony systems. In effect that takes out easy stuff and the pressure's now greater because all the easier stuff is done and what we get is all the nasty ones" (Head of Revenues, Authority A, Interview 14)

Whilst the above discussion points to a consensus that for the majority of workers at the two sites deskilling has occurred it is likely this is not necessarily part of a strategy to gain a greater control of workers *per se* but has largely become about shedding staff to save money due to financial constraint, forcing managers to change the focus of control from quality to cost:

"We are talking about more of a self-service approach, as financial pressures rise. 15 years ago, it was, 'no this isn't about losing staff; it's about improving customer experience' et cetera. We're in a different world now. Now it is about losing staff because it's about losing the cost and about 90% of our cost is staff. So, you are getting to a point where you're having to automate whole processes." (Head of Revenues, Authority A, Interview 14)

However, this explanation whilst potentially correct in detailing the prime motivation for the implementation of ICT systems does not mean jobs were not lost, even if not dealt with by way of redundancy but rather through natural wastage. As detailed in Section 6.5, Authority A has seen a staffing reduction since 1990 in the areas of

Revenues and Benefits of 47%, with Authority B seeing a 44% reduction over the same period with the associated reduction in labour costs.

In looking at the motivation behind the implementation of technology and its relationship to skills we can potentially see two distinct aspects. Firstly, in terms of automation, this appears to be driven by financial constraints and a requirement to achieve savings, which as discussed was a link made and encouraged by central government (Local Government Association, 2014:13) through reducing labour costs as a major element of public spending (Ironside and Seifert, 2001:3-4; Gill et al, 2003:261-262; Gill-McLure, 2014:370) with a potential result of an increased appropriation of surplus labour in the capitalist sector (Gough1975:83). This does not deskill as much as remove labour from the process, although it may have the result, by elimination of simpler tasks, that the residual tasks are the more complex ones. Secondly, there is the implementation of systems that embed rules within them thus limiting or curtailing employee discretion and autonomy. This may have the result that tasks left to be performed by workers, even if comparatively more complex, have a reduced skill element, as indicated by the questionnaire responses. It would be likely any new skills required in terms of systems implementation and development would not be seen within the Revenues and Benefits staff but would, as discussed in Section 7.3, likely be outsourced. The acquiring of more generic skills may not offset the loss of more specific ones (Glenn and Feldberg, 1979:61), with the result of an increased level of management control. General IT skills once seen as an upskilling rather than deskilling element are now perceived differently:

"We introduced EDM about 15 years ago. At that time there was concern and an issue about people having basic computer skills. People did use computer systems but they were nowhere near as integrated into the

workflow and so when we introduced this there were issues we needed to address and train people and make sure what people were doing, which seems amazing now when you see my nieces and nephews. Even my five-year-old niece knows her way around a tablet but I remember doing sessions on how to maximise and minimize windows, stuff like that. The world has shifted on an axis since then. It's much more endemic. Kids and people who join us now have got those skills already. So, there was the technological skills required, and that isn't much of an issue now." (Head of Revenues, Authority A, Interview 14).

There does seem to be a concurrence of views that the issue of skills has affected groups differently. Benefits Assessors are seen as highly skilled and whilst there are developments to automate as much of this process as possible, it is currently viewed this group do possess, as highlighted in Chapter 5 with recognition of the continuing regulatory changes in this area (Harris and Rutledge, 2013:12; Salman, 2001), and in comparison with their Revenues counterparts, a skill set that is more resilient than those areas in Revenues subject to deskilling:

"With Revenues you've got all this on-line single person discount and change of address forms, basically when you do this on-line it loads into the system and just gives warnings and all they do is check these. I think that has brought a deskill of Revenues Officers, but for Benefits, regulations keep changing. From April there's backdated Benefits discount changing to four weeks, there's changes to tax. These are skills Benefits Officers still need to process claims and when they are on the counter we have to do manual calculations. But Council Tax regulations are static. You can do more automation like a single person discount you fill a form in saying, "I live on my own" that goes

into the system, you can see the date, it awards the single person discount and it's done." (Revenues and Benefits Supervisor, Authority B, Interview 24)

Benefits Assessors are like gold dust, you can't get trained assessors. We went through a recruitment campaign a few years ago and we couldn't get them. Benefits Assessors are rare because of the knowledge of all the rules and regulations and decisions you have to apply. On the other side I think you could take a Benefits Assessor, give them a Revenues job and they could do it, because they are using the [same core] system, the rules are relatively simple. Going the other way, Benefits is complicated, and even as the manager of Benefits I wouldn't be able to assess a claim because I don't have that knowledge. (Head of Benefits, Authority A, Interview 1)

However, even given this view, the staff's perceptions generally do appear to be that ICT has reduced the skill required to do the job:

"It takes away a lot of skills. You can do anything now can't you, on a computer? All that thinking has been taken away, you just press a button, your end date is automatically put in for you, but you still have to think in terms of your regulations and such." (Senior Benefits Assessor, Authority A, Interview 7)

It does appear therefore, as highlighted by Grugulis and Lloyd (2010:94) there is a polarizing effect ICT has on different groups of workers. From the above it appears within the Revenues function, the relatively static and less complex regulatory aspects have made automation and the embedding of rules more prevalent than in the Benefits environment with its constantly changing, more complex framework of regulation. However, it is worth reiterating here the comment made that technology

is potentially being developed to automate these aspects too (Head of Benefits, Authority A, Interview 1) and so fits with Thompson (1989) and Gorz's (1976) view of the tendential aspect of deskilling and the fact development of technology is ongoing (Sivarajah and Irani, 2018:1). It is also worth noting here the link with skill and monitoring in that the more a job can be standardized and routinized the more calculable it becomes in terms of effort (Lukacs, 1971a:88), thus resolving some of the issues relating to objectivity in performance monitoring raised earlier. Whilst Negrelli (1988:90) highlighted a possible move away from Taylorist solutions and bureaucratic regulations within the productive private sector due to the capability of ICT to allow for a more instantaneous response to new demands, this would appear to be relevant to the private sector with a desire to open up new product and service lines, and not the areas under research where the administration of Revenues and Benefits are driven by bureaucratic rules and regulations and as such, skills lost would not be expected or required to be replaced through innovation.

During the research managers consistently raised the point that monitoring is not solely about control but also training and development of individuals and their skills (Frenkel *et al*, 1999:142-143; Zuboff, 1988:317; Sewell, 1998:407):

"With the element of control, I think it facilitated more performance management of the staff involved and I think the nature of that is it increases output. Now I'm reasonable, I've got a management head on looking at this, but there are two elements. One is to make sure everyone is earning their corn and two, is highlighting issues where we need to develop people. It's not all about sticks, it's also about, I suppose, not much of a carrot, but saying, 'look what's the issue here with training requirements'". (Head of Revenues, Authority A, Interview 14)

This would appear to be a somewhat problematic view as it does appear the implementation of ICT has deskilled, and is deskilling work for the workers being monitored. It could conceivably be for the reason that individuals are inputting incorrect information into the system or not following the correct procedures in terms of data input but the research shows no link with monitoring identifying a deficiency in a certain skill and then addressing that. As such a plausible explanation given by Chalykoff and Kochan (1989:809) is this is stressed to obscure its use as a coercive tool of control.

7.6 Control by Consent

One of the central questions in this thesis is whether control of workers has been rendered complete by the use of ICT (Fernie and Metcalf, 1998; Delbridge et al, 1993). The previous sections have highlighted control applied directly or achieved indirectly, however, in answering this question, it would seem pertinent to assess whether any form of control is used without recourse to ICT. Should this be present it may indicate potential deficiencies within technological control (Grint and Woolgar, 1997:119). Chapter 2 considered whether control of the labour process required a combination of coercion and consent (Gaines and Domagalski, 1996:182). When asked in the questionnaire regarding whether they were encouraged to participate in deciding how the work was done, this was somewhat inconclusive with 41% and 47% at Authority A and B respectively agreeing that they did, as opposed to 39% and 38% disagreeing. This potentially points to ambiguity within the question itself. We have seen in Section 7.2, there was little, if any, worker participation in the design of systems used. There was some encouragement for workers to be involved in both the selection of the systems used and in Authority B the procedures used in performance management as confirmed by the Operations and Improvement Manager (Interview 28). Whilst this involvement may have been motivated by a desire to incorporate and make labour complicit in consenting to its own control, the research shows only an appearance of choice for workers from among a number of managerially acceptable positions (Burawoy, 1979:27) and was clearly not a threat to management prerogative as workers were not in a position to influence whether systems were used, only which software supplier, and likewise were not consulted on whether they accepted monitoring and performance management (Dyer-Witheford, 1999:224) (Interview 1, Head of Benefits, Authority A; Interview 28, Operations and Improvement Manager, Authority B).

Both sites had in the past used some form of management participation schemes, primarily 'Investors In People' (IIP). However, staff at both sites confirmed this was no longer genuinely pursued and there were no other participation schemes. At Authority A it was only of concern when accreditation was due for renewal:

"when the people from IIP decide whether or not we can carry on having accreditation, we set up a staff forum group." (Assistant Benefits Officer, Authority A, Interview 3).

At Authority B, a Recovery Officer (Interview 32) said they thought IIP had been "knocked on the head" due to lack of resources. A Billing Clerk at Authority A believed the only time management paid any attention to IIP is if inspectors were attending as part of a re-accreditation exercise when staff would be "coached" as to what to tell them (Interview 13). As Sturdy et al (2010:5) believed, coercion was not the only way to achieve control, however, a lack of resources in addition to effective control via ICT could be reason as to why a coercive approach in itself would be utilized. The actual reason for the lack of activity around IIP is unclear. However, it

would appear there is no serious attempt to control through consent. This may give some weight to the view that if technology can provide an adequate level of control, managers may not seek other means (Grint and Woolgar, 1997:119).

7.7 Conclusion

This chapter has examined the research findings in respect of how the technology used within the Revenues and Benefits departments of the two research sites relates to the aspect of management control of workers and the labour process. The chapter considered the design and implementation of ICT systems from the perspective that the objectives of those who design or commission them will be reflected in the process. Three particular types of system were identified. Firstly, core systems, consisting of two systems, RBCA and EDM. RBCA systems are concerned with the correct, and therefore legal, administration of Revenues and Benefits. The initial RBCA system implemented was felt by those who designed it to have no control element. However, the fact the system administered Revenues and Benefits by way of standardized inputs and outputs means there was clearly an element of technical control. An examination of working practices prior to the introduction of RBCA systems, showed with the exception of the embedding of rules and regulations within the system, the working practices and workflow remained largely unchanged by computerization within Revenues and Benefits at both sites. A significant change in working practices came with the development of EDM systems when an extension of technical control was potentially achieved by system allocation of work, meaning ICT could now determine both how and what work was carried out, leading to a further reduction of autonomy for workers. These systems have also created the opportunity for increased automation and labour displacement.

Individual performance monitoring was a known capability of the initial RBCA core system following implementation but was not exploited in any significant manner until external pressure from central government was applied by the requirement for performance indicators and targets, compulsory competitive tendering, and financial constraints with a subsequent shift from a management style of professional bureaucracy to one focussed on outputs and people management broadly in line with the concept of NPM. Managers interviewed clearly linked the use of technology with achieving requirements in performance and labour displacement as a result of external pressures. As such changes in how the technology is used in terms of control can be seen to be as a result of management objectives rather than any technological determinism.

The second type of system identified were bureaucratic systems monitoring worker behaviour in relation to corporate and departmental HR policies and as such can be seen to have a clear control motive. The relevant areas here were those of timekeeping and attendance. The design of the systems enabled electronic clocking in and out, and electronic monitoring of logging on and off the core systems. The systems were designed to report worker transgressions automatically to managers in respect of attendance and activity. The chapter also noted how a strict sickness absence management policy was enforced using these systems. Underpinning this was monitoring of managers by more senior managers or the HR section to ensure policies were adhered to and the required action taken against transgressors. However, this does indicate a continuing requirement for a certain level of human intervention and interpretation.

The third type of ICT system identified was designed to monitor output performance and as such had a clear control objective. This type of system highlights developments in ICT allowing for the integration of separate systems. The extraction of data from core and bureaucratic systems into a performance monitoring system allows for output to be compared to managerially set targets. The methods employed for performance monitoring at both sites are less than objective, a position accepted by a senior manager at Authority A, and so we can posit a reason, supported by the research, for this regime is to achieve an intensification of effort rather than any meaningful data.

The research has pointed to, with the possible exception of the third system type, a lack of worker involvement in the design and implementation of the systems. Even where there may be some worker input into design and procurement, this appears to be in terms of choices being available within a range of managerially acceptable options. The system's design and utilization can, therefore, be expected to reflect the intentions of those who design or commission them, in this case senior management, who even when not designing systems, shape the development of them through user-group participation and the final decision on procurement. Whilst bureaucratic and performance monitoring systems appear to clearly have control of performance as an objective, this was less apparent with core systems. Although core systems had a technical control element as part of their design, the inherent output monitoring potential was not utilized immediately following implementation of the RBCA system. We can see therefore, systems can be designed with control as an objective, or that control may be an intrinsic potential. Either way, it is clear we are not witnessing technological determination but these outcomes are a matter of managerial choice potentially mitigated by negotiation and contestation. We can see these objectives may change, not necessarily by development of technology, but by changes in the material conditions management operate in.

A particular concern of the chapter was to consider the extent the concept of the panopticon could be applicable to control applied through the integration of ICT systems. The conclusion was this level of integration did lead to a form of panoptic control with both attendance at work and performance whilst attending, being simultaneously subjected to a potentially constant managerial scrutiny. However, the research also pointed to support for the view that this is not a simple dichotomy of control with management on one side and workers on the other. Rather, we also witness managers themselves being subject to the same forms of panoptic control applied to those they supervise. There are further supporting factors in the proposition that the integration of ICT systems has led to a high level of panoptic control. Firstly, staff are now allowed to work from home but are still subject to a comprehensive level of monitoring without the requirement for a physical supervisory presence. Secondly, we have seen a significant reduction in the number of people employed within the supervisory tier. The view that panoptic control could be shown to be effective by the lack of disciplinary or capability proceedings was felt to be more problematic as there were very few of these prior to the implementation of these regimes also.

The chapter also considered how ICT has affected skills required to perform jobs within Revenues and Benefits. This was viewed as particularly pertinent as the thesis accepts management control can be more effectively exercised where skill levels required to perform work is low or commonly available. A number of factors were seen as relevant here. Firstly, the embedding of rules and regulations into core systems, ostensibly as a tool to achieve a more effective administration of the functions, engendered a level of technical control resulting in a deskilling of the roles. Secondly, it was recognized in the research that the roles increasingly

required skills that were generic and widely available within the working population. However, it was also the case that deskilling should not be seen as uniform in terms of its scale. Those working within the Revenues field appeared to be more affected by the impact of loss of skills, and within Authority A these workers were the only ones subjected to individual performance monitoring. The research, however, did support the view of a general tendency towards deskilling in the public as well as private sectors.

The final consideration was to consider the issue of management attempting to elicit consent from its workforce as a method of control. There was evidence management included workers in the procurement process of new ICT systems. However, this needs to be seen in the context of a selection from a number of already existing systems, which as we have seen reflect the intentions and objectives of management not workers. Authority B, who designed a performance monitoring system did have some worker input but this was not in any way a choice as to whether they should be monitored and a more plausible explanation is workers were placed in a position where they were effectively accepting and being positioned as complicit in their subjection to management control. Both sites were nominally members of the IIP scheme that should have required some staff participation. However, this was not now actively pursued. The possible explanation here could be a diminution of resources plus an effective regime of control achieved through ICT satisfies management objectives. It can be seen here, workers at the two sites have no input in terms of design of any systems and any participation cannot be seen to challenge management prerogative and the systems of control in place will reflect management prerogatives albeit this will be an outcome of negotiation and contestation within the management group.

One of the central aims of the thesis is how ICT has been utilized as a tool of labour control within the areas researched. In doing this, light has also been shed on another central aim of the thesis, namely the motivation for seeking such control within the public sector. The initial utilization of computerized systems in these areas mirrored the professional bureaucratic approach of local government management as detailed by Harris (1998:843) as a "rational administration of bureaucratic systems", prevalent at the time. The motivations of management in respect of labour control appear to have shifted due to external pressures from central government resulting in a requirement for increased intensification of labour. The link between central government policies and this change springs from the findings that although the potential for monitoring of performance was present within the initial core system, this was not exploited. At no point in the research did managers indicate that intensification of labour was a specific goal prior to the external pressures being applied. As such the research findings are consistent with a view that the state desires a maximization of surplus labour in the public sector and that a combination of government policy and ICT development was used to effect a change in management behavior. Technology, then can be seen to be used as a tool to achieve the objectives of management, including as shaped by external forces, and is designed, implemented and utilized to achieve these.

Chapter 8 - Findings 2: Resistance

8.1 Introduction

This is the second of the two findings chapters. It follows on from the chapter on control, to consider incidences of, and potential for, resistance from workers to management control exercised through ICT, the third major theme of the thesis. Resistance, as a term used within this chapter, follows the definition arrived at in Chapter 4. If management seek control of the labour process as a way of intensifying labour and removing discretion in how work is carried out then resistance can be any act that would challenge, subvert or prevent this as workers potentially seek to resist management control. The issue of resistance is situated within the debate around whether ICT has resulted in a totalizing control by eliminating the possibility of resistance, as posited by Fernie and Metcalf (1998:9) where the power of the supervisor has been "rendered perfect" by computerization, and as Delbridge et al (1993:98) advance, "where there is little, if any, room for employees to exercise counter-controls over the pace of work and task execution" as a result of surveillance via ICT, or whether resistance remains possible (Bain and Taylor, 2000). Should evidence of actual resistance be found this would give credence to the view that technology has not proved capable of preventing all resistance. However, in terms of potential it needs to be understood there may be no incidences of resistance but that it remains a possibility and this chapter explores this.

The chapter commences by examining aspects of individual resistance, that is those not expressed collectively. It will be seen that any individual resistance will be in relation to how systems are utilized and not around implementation itself. Firstly, it considers the monitoring of individual performance through the use of ICT and

whether in its operation this leaves spaces for resistance to take place. The chapter considers the extent to which standardization of work may be important for the monitoring of performance (Lukacs, 1971a:88) and how this may affect potential gaps in technical control that may be exploited by workers. Related to this is how workers may seek to manipulate performance monitoring figures as a means of subverting management control. The chapter also considers how management deal with those who are detected taking part in this form of resistance. The chapter then goes on to examine the monitoring of attendance and absenteeism at the workplace in the context of absence being utilized as a means of resistance (Edwards and Scullion, 1984). The chapter pays particular attention to the extent ICT systems may have curtailed this form of resistance.

Following on from a consideration of individual resistance by workers, the chapter seeks to move from a simplistic binary position where managers control and workers resist, to a more nuanced view. The chapter considers the extent to which managers may themselves individually be subject to the control of more senior managers through ICT systems and so, therefore, may also be motivated to resist control. It is worth noting here Braverman's view that apart from the most senior management, managers are analogous to other employees (Braverman, 1998:288-289). The chapter particularly considers the extent to which managers' roles may be threatened by control regimes, including the subsuming of supervisory functions within the technology itself and how the career structure of management progression may have been altered by technology. The chapter examines the view that management should not necessarily be treated as a homogenous entity with a coherent programme (Wardell, 1990; Hyman, 1987) and whether technology is,

therefore, determined as a result of negotiation, contestation and resistance, not just between management and workers but also between managers themselves.

The previous chapter considered the issue of skills from the perspective of management control. This chapter considers this from the perspective of how ICT may have impacted on the ability for workers, or indeed managers, to resist such control, particularly the effect this may have on their capacity to resist control by quitting and transferring their labour to another employer. This aspect is considered here as the effects of ICT on skills are potentially pertinent to both workers and managers in similar ways.

Collective resistance, particularly in terms of actions expressing a collective response to management behaviour, is the next aspect to be considered. The distinction between individual and collective resistance in this thesis is the former cannot be identified with the institutions of organized labour (Martinez Lucio and Stewart, 1997:74), therefore particular interest here is in resistance as expressed through trade unions. The chapter examines the extent to which evidence exists of trade unions seeking to influence design and resist implementation or particular uses of ICT systems relating to control of the labour process. Consideration is given to the extent to which unions' action in this area is driven by the views and responses, or lack of, from their members. The chapter also reflects on the distinction between resistance pre and post-implementation of ICT systems and examines whether there is a different approach in these phases. The chapter moves on to explore how ICT may have affected union organization, chiefly around developments in the geographical dispersion of workers as a result of homeworking. An aspect of this is the extent to which unions may make use of ICT themselves as an organizing tool (Dyer-Witheford, 1999:126).

In considering the extent to which ICT may have led to management having achieved total control by curtailing worker resistance, the chapter considers the position equating the lack of any resistance with an increase in the use of ICT systems. Other explanations are considered in terms of any absence of resistance. These explore the possibility resistance may be absent due to attitudes held by individuals, that whilst potentially influenced by technology, may not be as a result of the properties of the technology itself and may remain a potential that workers may engage in. In particular, the research considered in this chapter addresses issues raised in the literature in Chapter 4 around whether workers see control regimes initiated by management as fair (Challykoff and Kochan, 1989:811), the perception technology is inherently progressive and any resistance is therefore backward in nature (Burnes *et al*, 1988:7), or finally it is fear, particularly of unemployment (Dyer-Witheford, 1999:196), and it may be any of these, rather than the property of the technology itself, that may be a deciding factor in the absence of resistance.

8.2 Evidence of Resistance

This section considers the evidence emerging from the research of any actual or potential resistance within the Revenues and Benefits departments of the two authorities being researched. Firstly, Section 8.2.1 considers individual workers carrying out acts that would be clearly resistant to management control. This is clearly evidence of its possibility within the ICT facilitated control regimes. Potential resistance was examined firstly, where acts that may not have a known meaning, for example absence, but that in certain circumstances may well constitute a resistant act, and secondly, there is also consideration of the extent to which workers may have knowledge of how to act in a resistant manner, thus indicating

the potential for resistance, if not its actual occurrence. Section 8.2.2 considers the actions of individual managers in resisting more senior managers to extend the usual simple binary view where managers control and workers seek to resist. The research considers the extent to which managers may not act as a homogenous and unified group. The issue of the effect of ICT on skills and its relationship to individual resistance is addressed in Section 8.2.3. Finally, Section 8.2.4 examines any organised resistance through and from trade unions operating within the authorities.

8.2.1 Individual Worker Resistance

When researching the incidence of individual worker resistance, what was apparent was the lack of this regarding technical control achieved through the embedding of rules and regulations within the RBCA systems. The unanimous view of those interviewed was that any input outside the parameters of the system would be invalid and prevented and that unless no ICT systems were used this was a fact that must be accepted. As such, this section largely looks at actual accounts of how workers seek to resist one of the main examples of control identified in the research detailed in the previous chapter, namely control exercised through monitoring and targets (Beirne *et al*, 1998:157). In terms of what staff might do to subvert this control and potentially regulate their own effort levels, a number of themes arose during the interviews. Firstly, is an issue staff at both sites referred to as 'cherry picking', essentially an individual deciding what items of work they wish to do and what they did not. This is important as items of work are not necessarily standard and so some are easier to deal with than others and effectively would entail staff subverting this aspect of technical control (Taylor and Bain, 1999:107). Even types of work

appearing superficially the same may have different levels of complexity or require investigation to complete:

"Moves, changes of address aren't widgets, you could have a chain this long or that long. It could be in-borough, out-borough, people all don't necessarily move on the same day and then you have got direct debits to sort out. Nothing is straight forward." (Head of Benefits, Authority A, Interview 5)

"Revs and Bens, it's not like making widgets, is it? Where each thing is exactly the same as what you had got in front of you before." (UNISON Branch Secretary, Authority B, Interview 33)

It may be useful for an individual in terms of what score they achieve in performance monitoring to select easier pieces of work. It may also be the case, regardless of performance monitoring, an individual worker may not want to deal with more complex cases. Management are keen to prevent this practice and one of the reasons for this is it provides some weight to their argument that in terms of monitoring, random selection allows for averages to be used over a period of time in determining performance (Head of Revenues, Authority A, Interview14; Operations and Improvement Manager, Authority B, Interview 28).

Officially, management at both sites do not think individual work selection occurs, with an example given below. It was accepted this regularly occurred under the paper-based systems prior to EDM:

"Before EDM... work would literally be in a cardboard box and you would think 'oh somebody else can have that one, that looks nice I'll have that'. I

don't think people can do that now." (Head of Benefits, Authority A, Interview 1)

However, further down the management structure at Authority A, it is acknowledged individual selection may happen but managers could check to see if this was being done. There was also the view that to a certain extent the relationship between the individual employee and their line manager is one of trust:

"They can cherry pick but I can monitor [that] because I can look at the trays, I can see the oldest piece of work not allocated ... within the tray the person's name is next to the item of work, and if further down say there's one piece of work that's been allocated before the oldest, then that person has gone in and took that piece of work themselves but you've just got to trust the staff to not do that." (Assistant Benefits Officer, Authority A, Interview 3)

At grades below the team leaders it appears they are clear it can be done:

"I could do it, if I wanted to. Instead of taking the oldest piece of work which might be horrible, it could be, 'ooh I really don't fancy doing this today'. I have access to go into the team tray and pick out a load of easy work if I want. I don't know how managers monitor whether that's happening or whether they look at the actual items you have completed and say, 'hold on, she's just completed 10 cases that are really easy'. Managers should be able to see the team tray and see the oldest piece of work and assessors that are completing work, they should be able to look at what date work you have completed. But yeah, you can go in and just cherry pick your own work because the facility is there for you to do it." (Senior Benefits Assessor, Authority A, Interview 7)

"You can put work back into the generic tray but we know that is normally monitored by the supervisors. So, if anybody does that they will say, 'why have you done it?' and then the supervisor then deals with it if there is a problem. We're told not to do it but there's no restrictions on our access levels for distributing work." (Benefits Officer, Authority B, Interview 31)

We saw in the previous chapter, part of management's defence of the validity of this type of monitoring, in essence the counting of completed items, rested on the assumption that any variations in the timings of individual pieces of work would even out over time. It can be seen, therefore, why they would not want individual employees to have control over work allocation. However, it is clear workers have this capability even though none admitted to doing this. However, this may be one of the potential situations where no admission may not equate to absence of the behaviour due to it being deemed unacceptable to management (Taylor and Walton, 1971:220; Ackroyd and Thompson, 1999:3). One reason this capability exists is work items are not standard (Head of Benefits, Authority A, Interview 5; UNISON Branch Secretary, Authority B, Interview 33) and there needs to be a possibility for prioritization leading to potential gaps in the functioning of the system that may be exploited by workers, as highlighted by Bain and Taylor (2000:13). In a backlog situation there may be a decision to prioritize certain types of work over others due to a difference in relative importance. Although the technology has the capability of automatically allocating work, in practice this would not be practical in all situations. Therefore, this element cannot be subject to total technical control due to a requirement for human intervention (Taylor and Bain, 1999:107). The interviews highlighted concerns individuals have that they may be caught if they seek to subvert this technical control due to the presence of audit trails acting as a panoptic tool allowing for a simple form of control, that is the potential to be spotted by a supervisor, thus discouraging this (Berdayes, 2002:35):

"You could move it from your box to somebody else's but there's an audit trail so you can see who's moved that document. So, if somebody's moved it from their tray to somebody else's you can see that. I think somebody would question it anytime that happened." (Recovery Officer, Authority B, Interview 32)

Staff in the Revenues Department at Authority A identified management rather than system allocation due to prioritization as a particular problem. In this department the allocation of work is the responsibility of the Senior Clerks who are also subject to performance monitoring themselves:

"I don't agree with how it's done because the Senior Clerks are performance monitored ... they can influence their figures because they have access to the work and they can pick all the easy stuff, whereas a clerk can't and I feel the Senior Clerks seem to be performing a lot better because they can cherry-pick work but we can't. I've noticed these clerks have friends and when they allocate work, they are the ones that get easier work, whereas someone who doesn't fit in [with them] will be left with harder items. Some Senior Clerks are allocating things to keep certain people happy" (Billing Clerk, Authority A, Interview 10)

At Authority A certain groups of workers have the authority to allocate work due to the prioritization criteria within the department. Again, this highlights a potential gap in the systems operation and the consistency of management behaviour that may be exploited (Bain and Taylor, 2000:13). If this is the case, it does mean there is the

opportunity for some groups or individuals to have a greater chance to manipulate work allocation to ensure they select and allocate easier work and therefore increase their own and other favoured staff's performance scores. As we have seen in the previous chapter, senior management believe the process is either random or fairly allocated and does not allow 'cherry picking'. This appears not to be the case at the level of Senior Clerks who have a role in prioritizing and allocating work to the clerks. This highlights the potential for an act of resistance from this group as they are acting contrary to management policy, even though in this aspect they are assuming a management role. This issue of the unity of the management function is discussed more fully in Section 8.2.2. In theory this situation is not relevant at Authority B where, because work items are weighted, no advantage would be accrued by doing this. However, the previous chapter also highlighted the lack of objectivity in this method and the questionnaire results from Authority B indicated only 29% of respondents felt the way they were monitored was fair, perhaps adding credence to this view.

An aspect of resistance brought up by the research was the subverting of management control of the labour process by deliberate cheating in respect of the performance scores as has been highlighted by Edwards (1988:190) and Knights and McCabe (1998:183) as a means of workers regulating effort. This takes place at both sites and appears to concur with the view of Taylor and Walton (1971:242) and Thompson and Smith (2010:16) that workers will find sophisticated ways to subvert management systems of control, and as we shall see in the discussion below, managers seem to be aware of this. The following comments show some of the deliberate falsification of data that appears possible:

"Staff can easily manipulate these figures. I don't believe management look into them on a detailed basis, so staff can continue manipulating the data. I know how to manipulate performance monitoring figures, but choose not to.

It's easily corrupted" (Benefits Assessor, Authority B, Interview 20)

"I know how the figures can be ... shall we say tweaked if you need to. Not saying I do though [laughs]" (Billing Clerk, Authority B, Interview 21)

"What you could do ... because a 'complete' counts as a case ... you could actually go through one day, if you've got 80 items in your tray you could go through and 'complete' one thing off each one and then the next day do another thing off each one. Yeah, you could fiddle it. You can send a memo to yourself saying, 'don't forget to change the PIN number on this tomorrow' or whatever. You could fiddle it and I have done on occasions when I've been monitored and had a particularly tricky case and thought this is going to look bad today, so I'll go in and send myself a few memos, complete them and it'll look good." (Benefits Assessor, Authority A, Interview 8)

"I always think there will be stuff you will find out that management don't know about straight away ... or if they do find out about it at all. There's always something. When managers find out about something, they might close that loophole and staff will already have found another loophole, there'll always be a way round it. There may be ways around by completing extra stuff and then not actioning it. You show it being completed when it isn't" (Billing Clerk, Authority A, Interview 13)

"We can change the document type. We know what will give you the higher timings, so we can change post to that. But the supervisors sometimes look

at what we call 're-indexing'. They look at a report sometimes and ask why these documents have been changed." (Benefits Officer, Authority B, Interview 31)

It is fair to say most staff interviewed felt there were ways they could manipulate the performance monitoring figures, concurring with a paper by Knights and McCabe (1998:183), including as the last quote above mentions, altering the weighting of individual pieces of work. These 'fiddles' would appear to give individuals some level of control over specific situations arising in terms of their performance (Taylor and Walton, 1971:234-235). A relevant question to be considered is to what extent management are aware of these manipulations. The core systems have inbuilt facilities within them for allowing aspects such as re-indexing document types and importing of memos, as there may be a requirement to use these facilities legitimately. However, some staff appear to either use this as a means to subvert performance monitoring or know how this can be done to improve performance scores. Managers may then seek to close these loopholes, which does not necessarily mean staff cannot find others and could be seen as evidence of a continually shifting and fluid frontier of control (Goodrich, 1975; Hyman, 1975b:viii) relevant within the public as well as private sectors. The above comments would appear to give credence to the view advanced by Collinson (1994:34-35) and Ditton (1979:162-163) that workers knowledge of the day-to-day processes is often superior to managers and gives them an advantage in this respect. The questionnaire showed 24% and 21% at Authority A and B respectively believed they had a better working knowledge of the technology than their managers did. Around half of questionnaires returned from both authorities offered no opinion in this respect. It has been suggested there may be some form of collusion between staff

and management at certain levels who know these practices take place. A manager at Authority B, when asked whether there were any ways staff could fiddle the numbers on the system to show they had done more work than they had, commented:

"I know a couple and I think staff have found out as well. We found out staff could 'pend' a claim for one day. The next day it's 'expired', 'oh it's expired but the reply hasn't come back, I'll 'pend' it' and they get a timing for it. They've done nothing, they've just 're-pended' it. We picked that up. They think, 'oh right, I'm being crafty here' so we run a report to say 'give us a list of all these claims that have been 'pend' to 'pend' for more than one day' and as soon as the staff knew we picked up on it, it stopped. That's the main example but I think there are staff here who try to manipulate it. You have to think like them [laughs] you do." (Revenues and Benefits Supervisor, Authority B, Interview 24)

As discussed in the previous chapter, the Benefits Department at Authority A have stopped individual monitoring and one of the reasons this decision was taken was due to the knowledge staff will find ways to fiddle the figures:

"I think if staff know how they are being performance managed they will fiddle them. They will always find how to fiddle it. One of the performance management things I've stopped is we used to measure document completions on EDM. You get a document, you complete it. You can create your own documents and put them in your own tray so you know if you're working on a claim you can say 'I wrote a letter' or 'you need to refer that back to me to check something and I'll complete it tomorrow'. You can

manipulate it so we don't do that anymore because if the staff know, 'oh I can manipulate that and I can have the best productivity of anybody', why bother counting it if it's useless?" (Head of Benefits, Authority A, Interview 1)

Whilst the previous chapter discussed the possibility the true motivation behind this form of monitoring was not the validity and usefulness of the data but rather a method of control geared towards intensification of worker effort (Bradley *et al*, 2000:105-106), the view expressed by the Head of Benefits at Authority A, shows management accept this form of monitoring can be resisted by way of falsification of data. However, as mentioned in interviews at both sites, one of the properties of these systems is they have an electronic audit trail for anything, right down to individual key strokes and managers can run system generated reports that may highlight where staff have been manipulating the system in the ways detailed (Head of Benefits, Authority A, Interview 1; Council Tax Billing Team Leader, Authority B, Interview 27; Operations and Improvement Manager, Authority B, Interview 28). This panoptic capability (Berdayes, 2002:35) may have the effect of limiting, but not eliminating, activities of this kind as several of the interviews above have recognized management's ability to monitor certain actions should they decide.

Whilst management acknowledge the presence of this deliberate deception by staff, there was no evidence this is treated as a serious offence:

"I've made this clear to the supervisors, if you see it and you know it's happening deal with it informally. That's a quick chat, 'I can see you're doing this [so] stop it. I'll be checking you over the next couple of months and if it happens again it'll go to a formal stage 1' that's the message we give staff" (Operations and Improvement Manager, Authority B, Interview 28).

In short, at Authority B, staff are informed if they try cheating and are caught, only a further infringement will result in formal action. We can see here a dynamic playing out where some staff find ways of manipulating the data and use this to subvert management monitoring until management find out. None of the managers at either site could recall any disciplinary action having been taken in respect of any manipulation. This would appear to introduce some doubt as to the efficacy of this method of control as transgressions are not usually accompanied by formal management action (Larson and Callahan, 1990:530). In essence, management know it happens, they then attempt to prevent this manipulation and staff may then find other ways to manipulate the figures or continue to use other ways of manipulating the output data management are unaware of.

It is also possible those operating at the management level of supervisors may consciously turn a blind eye to these activities. They themselves are under some form of scrutiny from their managers. It may be then, as long as managers above them are satisfied with the figures being produced it is not in the supervisor's interests, which as Ackroyd and Thompson (1999:80) pointed out, may be distinct from their superiors, to highlight staff deliberately using techniques to falsify the performance figures:

"[Supervisors] won't do anything about it because if things look ok to the bosses they're not going to rock the boat." (Benefits Officer, Authority B, Interview 19)

The findings above can be seen to relate to actual resistance. We now turn to what could be seen as potential resistance to the extent that whilst individual actions may be difficult to definitively categorize as so, in certain circumstances this would be the

case. The first of these researched was the extent to which employees could attempt to make justifications to management for what could be considered poor performance figures. This could be a genuine explanation or an attempt to subvert the monitoring process by fabricating excuses to avert management action. The questionnaire response in Authority A from the Revenues Department where this type of monitoring is carried out, when given the statement, "Managers take personal circumstances into account when looking into performance figures", not a single respondent agreed with this statement. Likewise, with the statement, "I can always make up a plausible excuse if my performance figures are too low", again no one in Revenues at Authority A agreed with this statement. No interviewees felt managers would take any personal circumstances into account, genuine or otherwise, should performance not meet managerially set levels. One interviewee explained that you would only get the chance annually to discuss any reasons for scores considered sub-standard:

"I don't think it's [discussing any personal issues that may affect performance] really done in practice. You don't get the chance to do it unless it's PRD but they are yearly" (Billing Clerk, Authority A, Interview 13).

Authority B responses to the questionnaire showed 36% of respondents agreed that "Managers take personal circumstances into account when looking into performance figures" but only 9% felt that "I can always make up a plausible excuse if my performance figures are too low". This may indicate managers at Authority B may take personal circumstances into account when looking at performance figures if they are believed to be genuine. Management here have stated personal circumstances are considered as part of the monitoring process:

"If they're always in the green and suddenly they're in the red you take them to one side, you have all the stats ready and say, 'is there anything you want to bring to my attention, are you ok at home?' They might tell you and you would say, 'fair enough, let's disregard that day and hopefully your performance will be back to where it was'. It does affect what decisions we make." (Revenues and Benefits Supervisor, Authority B, Interview 24)

Where managers accept mitigating circumstances as an explanation for poor performance, as appears to be the case at Authority B, then there is an obvious potential to subvert this method of control, albeit on an infrequent basis. Whilst some interviewees at this Authority confirmed they had raised personal issues as an explanation, there were no admissions this was used as a means to subvert performance monitoring, hence placing it as a potential rather than actual occurrence of resistance. However, Authority A Revenues staff appear to believe their personal circumstances are not considered. Although disputed by the Deputy Revenues Manager at Authority A (Interview 2) who maintained "relevant" personal circumstances would be taken into account, no interviewee indicated this was something they felt they could use to circumvent management control in this area. As discussed in the previous chapter, managers are potentially performance managed themselves (Edwards, 2010:34) to ensure they are acting where performance is below set norms, rather than falsifying or failing to carry out action so as to avoid a conflictual situation that may result in formal action (Zuboff, 1988:334-335).

A further act that has been advanced as a potential act of resistance is for employees to absent themselves from the workplace (Edwards and Scullion, 1984). Whilst managers from both sites felt implementation of core systems had not

resulted in any increase in absenteeism (Head of Revenues, Authority A, Interview 14; Revenues and Benefits Manager, Authority B, Interview 18), this area of resistance is one where technology is being employed in a bureaucratic form to curtail it as detailed in the previous chapter in Section 7.4.2 (Head of Benefits, Authority A, Interview 1; Head of Revenues, Authority A, Interview 14; Revenues and Benefits Manager, Authority B, Interview 18). Curtailing management discretion (Hyman, 1987:28) and forcing them to take action when corporately decided trigger points are hit may have the effect of lessening this behaviour as a form of resistance. Interviewees expressing an opinion felt it did not prevent non-genuine sickness absence from taking place but it would put a strict limit on this that they could not get past. In effect what we are seeing is potential form of resistance to simple direct, and technical forms of control being potentially restricted, if not eliminated, by an ICT facilitated bureaucratic form. We are seeing here how ICT is being used to facilitate an integrated panoptic system combining a number of control approaches (Hall, 2010:171). When considering a central concern of the thesis, the possibility ICT has rendered management control absolute, we can see that unless management impose the ultimate sanction of dismissal for all transgressions, space for absence as a form of resistance remains. However, again we see ICT severely curtailing workers' ability to resist management control.

A further potential way absence could be used as a form of resistance is by workers absenting themselves during the working day without authorization. Again, this was still possible although interviewees felt this was something they could not do to any great extent:

"You could pop out for 10 minutes and you might not be missed. Any longer and the Team Leader might notice and then if you're not on your lunch-break they could pick it up" (Billing Clerk, Authority A, Interview 13)

"I wouldn't risk it. I'm not sure they would check as a matter of course but they might. I do pop out occasionally if there is a test match on to check the score. But only for a few minutes" (Recovery Officer, Authority B, Interview 32)

Both sites claim to have had a significant reduction in recorded absence since the introduction of the bureaucratic control systems ensuring rigid compliance with sickness absence policies (Head of Benefits, Authority A, Interview 1; Revenues and Benefits Manager, Authority B, Interview 18). The quotes above would also appear to indicate unauthorised absence within the working day, which by its nature is unrecorded, would be detectable by management through the reporting facilities of the ICT systems which would detect the worker as being present but no work carried out and highlight the discrepancy (Taylor and Bain, 1999:107). As such it would appear as a form of resistance this also has been significantly constrained. Again, however, the extent of its constraint is determined by managerially set norms in respect of the length of time a worker may be inactive.

In short, this section shows individuals do actually subvert management control regimes by deliberately manipulating, falsifying and cheating the performance management regimes. In terms of the potential acts of resistance such as making up excuses for poor performance and absenting themselves from the workplace the evidence would point to ICT as not eliminating but having severely curtailed the potential for these actions.

8.2.2 Resistance from Individual Managers

This section considers whether managers may be seen as a homogenous, or alternatively, fragmented group, with separate interests not only to the staff they are employed to manage, but also their own managers, and who, therefore, may also carry out acts that may be seen as resistant to corporate control strategies. The distinction here between individual managers and workers is whilst managers may be seen as employees and wage workers (Braverman, 1998:220) they are employed to control the work of others and this is the criteria by which they are performance managed by more senior managers (Edwards, 2010:34). As such could it be the case management are not a homogenous group, and certain levels have been impacted on by structural changes and the technology used in local government, leading to a greater propensity for them as individuals to seek to resist control emanating from more senior management? The research has, therefore, sought to go beyond the usual binary division of management and workers. It is of interest to examine the extent to which technology used as a tool of control by management and employers has changed the dynamic and perception of managers and supervisors who may have provided control through their physical presence prior to implementation of these systems, that may now be a declining requirement (Zuboff, 1988:322). In particular, the issue concerns whether managers at certain levels are also threatened by this technology and who, therefore, may seek to resist in their own interests (Wilkinson, 1983:19; Hyman, 1987:28), or may now identify with those they manage as both sellers of labour subject to control from more senior managers (Braverman, 1998:290; Wardell, 1990:157). In short, are all managers part of a homogenous group, or has the use of this technology fragmented them,

including by subjecting them to monitoring and surveillance as well as workers, and therefore, who may themselves engage in resistance?

As technology appears to have taken over a significant amount of the monitoring aspect of a supervisor's role, there is a potential they may no longer identify with more senior managers (Wardell, 1990:157). The reduction in the supervisory content of the role can be accepted as factual as workers at both authorities are allowed to work from home with no direct physical supervision. Chapter 5 highlighted a shift in the role of management in local government, from that of a professional bureaucrat to a managerial function as highlighted by Ironside and Seifert (2001:10), commencing with the increasing size of departments due to both internal and external restructuring imposed by central government (Wilson and Game, 2006), and possibly facilitated by the embedding of rules and complex regulations in the ICT systems meaning that the professional expertise has increasingly been employed in the private sector software supplier industry. This was agreed with by the interviewee below:

"[There has been a] shift away from having a practitioner in charge. We in the IRRV [The Institute of Revenues, Rating and Valuation] have noticed this and increasingly so now that the IRRV qualification is less and less relevant for senior people because practitioners are not being promoted into positions of responsibility. If you want to get on as a practitioner now you would have to do what I did and go and work for a software supplier. I don't really know about the technical aspects but I can tell the developers how it has to work." (Retired Chief Rating Officer, Interview 35)

It was also confirmed by a Revenues and Benefits Supervisor at Authority B (Interview 24) and from an Assistant Benefits Officer at Authority A (Interview 3) that the numbers of supervisors had decreased and would continue to decrease as a result of the technology being implemented. With ICT leading to fewer supervisors there is the potential to reverse the problem identified in Chapter 3 with simple forms of control and large organizations. We can, therefore, see a potential deskilling of the role coupled with a reduction in posts at this level of management. This may well have affected how these staff identify as a tier of officers that at one time may have seen a career path to more senior positions by way of practitioner qualifications. This was certainly posited as a possibility by the following interviewees:

"I think managers at supervisor level are getting worried. There's definitely been a reduction in their numbers. What do you need them for? If the computer has all the information about the worker's performance why do you need a supervisor to make sure they are working. Just press the button and off comes the report. In some ways I think this group is now the most insecure." (UNISON Branch Secretary, Authority A, Interview 15)

"They are using technology to implement processes that are breaking things down to their component parts and therefore you have workers who do just part of the component rather than the whole. It challenges the balance of power, I think it forces people to identify more with the workers rather than the gaffers because they are no longer in complete control." (UNISON Branch Secretary, Authority B, Interview 33)

These comments would appear to concur with Braverman's (1998:289) view that these managers are actually analogous to workers. However, resistance stemming

from an identification with those they are supposed to control may have been curtailed by the use of technology. One potential area of management resistance to this regime of control was whether supervisors may not explicitly refuse to carry out this form of monitoring but may just choose to ignore any system-generated report of unsatisfactory performance. The research highlighted the technology was designed to allow scrutiny from managers at a higher level (Software Development Manager, Interview 34) and this surveillance means managers may not choose to resist by simply failing to comply (Thompson and Bannon, 1985:107). This was also raised during the previous chapter when considering whether technology is also used to control managers responsible for performance management and was confirmed by a Revenues and Benefits Supervisor at Authority B (Interview 24). As in the previous chapter on control, the issue of the panoptic effect is relevant here. Even if managers are not actually monitored to check if they are actively monitoring and warning their staff, they may well comply with the expected norms of the role as it is never known to them when they may be being observed by senior managers, thus meeting the conditions discussed as a form of panoptic control (Jacobs and Heracleous, 2001:126; Zuboff, 1988:321). No managers interviewed with this responsibility admitted to failing to carry out their control function and were aware of the potential for more senior management observation:

"[I don't have to report] on a daily basis because they're visible to my line manager. They can access reports." (Assistant Benefits Officer, Authority A, Interview 3)

There is a role in the Revenues Division at Authority A of Senior Clerk, that appears to have aspects of management, in that they are responsible for work allocation to the clerks. This role apart from this aspect is identical to that of a clerk. An aspect

of this was considered around the perception of fairness in that the clerks felt this group of workers unfairly distributed work, keeping the easier items for themselves and their friends and thus boosting their performance figures relative to the other clerks:

"What I have got an issue with is the Senior Clerks who are also on performance monitoring who have got this ability to dish out work and to 'cherry pick' coz they could go through a day's post and pick [the easier items]." (Billing Clerk, Authority A, Interview 10)

What we are seeing here is the ability of certain people who have some management responsibility to potentially subvert and resist the process to their own ends or to protect the interests of other privileged workers. This adds further support to the view that the management function is fragmented, with individuals and groups within it acting in their own, rather than corporate, interests, thus potentially undermining the control regime (Ackroyd and Thompson, 1999:80).

There is also evidence at Authority A to show more senior managers may also not act as a homogenous group when it comes to performance monitoring. The situation at Authority A at the time of research was that Revenues was individually performance managed and Benefits was not. This could be viewed as a result of conflicting management styles leading to a refusal by the Head of Benefits to institute this type of monitoring for her staff. This fits with the view of Hall (2010:173) that the use of technology can be the result of struggles within factions of the management group:

"Not everybody has my views. My boss, [the Assistant Director of Finance], isn't of that view. He wants everybody performance managed, be able to

compare x with y and I fight that battle regularly. It's a personality thing.

Revenues are different to Benefits. Revenues have more of my boss's management style." (Head of Benefits, Authority A, Interview 1)

It was certainly put forward by the Head of Revenues at Authority A that it was management that determined the use of technology and as a group they were not necessarily consistent:

"Revs and Bens have got very different management styles and there are advantages and disadvantages to both. But I think the management style to a large extent dictates how technology is used." (Head of Revenues, Authority A, Interview 14)

Authority A is not pursuing a consistent control strategy as different approaches are present resulting from contestation within the management group (Friedman, 1990:182) and as such, the research points towards resistance potentially arising from individual managers.

8.2.3 Individual Resistance and Skills

The previous chapter considered the issue of skill and how ICT may have affected this in relation to management control. This section approaches the issue from the perspective of the employee and how technology and its effect on skills may influence the degree of resistance they may engage in, particularly around their potential to end the existing employment relationship and transfer their labour to a new employer (Edwards and Scullion, 1984:562). Knights and Willmott (1990:11) citing Braverman (1974) saw a link between the possession of skills and a worker's capacity for resistance. However, this section points to a complex relationship between technology, skills, and the labour market in relation to resistance.

Of particular relevance when considering skills and their relationship to resistance as highlighted in the research, is the extent to which they are required by employers and how common their possession is within the working population. It needs to be made clear in terms of skills that the job is deskilled and not the worker (Lee, 1982:148). The skills and knowledge possessed are not necessarily lost but, in this circumstance, the possession of the skills affords the employee no leverage with the management as the employer no longer has any requirement for them.

The previous chapter contained a detailed discussion on whether skills that had been lost as a result of ICT had been compensated for by new skills required. The research indicated a potentially uneven impact in terms of the effect ICT has had on skills between different groups (Wilkinson, 1983:8) but supported the position of a general tendency towards deskilling. The Head of Revenues, Authority A (Interview 14) highlighted a requirement for more generic IT skills, identified as a consequence of technological change for both groups being researched. These generic skills are transferable within a wider area but paradoxically their commonality may mean it is not so easy for a worker to transfer their labour to another employer due to an abundant supply in the labour market. The Head of Benefits at Authority A (Interview 1) confirmed these ICT skills are now a requirement for most jobs, both within her department and also widely externally:

"technology skills are transferable and in this day and age there isn't many jobs where you don't need them." (Head of Benefits, Authority A, Interview 1).

We can now turn to any difference between the two groups, firstly considering those who administer the Revenues function. Whilst being in possession of basic

technology skills is a requirement for many jobs, if they are commonly held then would not be seen as a particularly strong advantage in a competitive situation for an individual seeking new employment:

"It's not about whether you know the regs it's about whether you can operate the computer and let's face it, kids coming out of school can." (Billing Clerk, Authority A, Interview 6)

In terms of new skills required by employers as a result of the implementation of technology, it is the absence of specificity and the fact they are widely held that appears to result in a lack of leverage that can be applied by workers when using them. It is this factor that appears to have impacted particularly on those workers within the Revenues function:

"There's a big book of legislation but now you have rules programmed into the system... at one time the decision would have been taken by a person but because the system does it for you the knowledge of how to do it manually disappears." (Head of Revenues, Authority A, Interview 14)

As such it would be expected the skills required by the employer to administer the Revenues function are now the more commonly possessed generic computer skills and not the more specific skills associated with professional knowledge of that area of work. In essence this would point to a reduced ability among this group to resist management control by quitting and transferring their labour to another employer (Edwards, 1979:126). Almost a third of staff completing the questionnaire within the Revenues Section at Authority A are seeking new employment. Among these, a common theme expressed at the interviews was the difficulty in finding new employment either within other Revenues departments or in other lines of work:

"I'm looking but there's not much out there. No councils are hiring because of the cuts. I could think about other types of work but what have I got to offer. I know my way round a computer but so what. That's expected nowadays isn't it? Nothing special." (Billing Clerk, Authority A, Interview 10)

The situation within the Benefits Department at Authority A was somewhat different. The scarcity of trained Assessors and their ability to leave Authority A for a neighbouring authority has been highlighted and what appears to make the skills valuable in terms of this group is their specific rather than generic nature. As highlighted, Benefits administration is seen to be a dynamic environment, where regulatory and legislative changes have meant a certain level of complexity has been maintained (politics.co.uk, 2018), meaning constant software changes and more difficulty in achieving automation (Salman, 2001; Head of Benefits, Authority A, Interview 1; Revenues and Benefits Supervisor, Authority B, Interview 24). As such, they appear less disempowered by the codifying of knowledge into a computerized system (Rosen and Baroudi, 1992:228). A member of staff at Authority A did believe this scarcity of Assessors combined with their specific skills did mean the employer would not be "too draconian" with them as a group:

"I could say, 'you know what, get somebody else to do this job'. As an experienced and trained Assessor, I'd find another job. There are companies now who employ assessors to go into councils to do the work. As a group we have some clout." (Benefits Assessor, Authority A, Interview 8)

The Head of Benefits at Authority A was not of the view that any power Benefits Assessors possessed resultant from these specific skills was the reason individual monitoring had ceased (Interview 5) and there may well be some weight to this view

as Benefits Assessors are still individually monitored at Authority B, and had been at Authority A until her appointment. However, the above does highlight a potentially different attitude in terms of the two groups. Whilst the foregoing discussion would point to the potential for those administering the Benefits function to be able to more effectively engage in resistance by transferring their labour to other employers, managers at both authorities (Head of Revenues, Authority A, Interview 14; Revenues and Benefits Manager, Authority B, Interview 18) indicated at the time of research there was very little staff turnover in either function, both agreeing the current financial constraints within councils had led to a significant reduction in recruitment.

The research points to a complex relationship between skill, technology and the labour market. Whilst there has clearly been deskilling in both groups, the overall impact has differed. Those administering Benefits can be seen to have retained more of the specific skills associated with this area, but this has largely been due to the continual changes in welfare and benefits policy from central government (Salman, 2001). Revenues, on the other hand have, due to the largely static regulatory framework, seen more of their specific Revenues related skills subsumed within the ICT systems by embedding of rules, and increasingly, automation. However, the interviews at both sites did not indicate any significant difference in the groups in terms of their inclination to resist management control. The research indicated no resistance against the utilization of systems that embed rules and regulations and the requirement for standardized inputs makes it difficult to see how this could be achieved at the level of the individual. It should be recognized whilst the skills Benefits staff have, appear to be more resilient at the current time, developments in ICT or potential changes in government policy may make this less

so over time. This coupled with the situation that authorities are not recruiting in any significant numbers may provide some explanation in this area. In short, resisting management control by transferring employment to another employer is still possible, although ICT may make it more problematic for certain groups in terms of its effects on skills and the labour market.

8.2.4 Collective Resistance

This section moves on from individual forms of resistance to examine evidence that resistance to management control using ICT, may be exercised collectively, particularly through trade unions. As the previous section on individual resistance indicated the potential for this, there is the possibility this may be organized into collective action (Taylor and Bain, 1999:112-113), although the research would indicate unions would not sanction the transgressive types of individual action detailed in 8.2.1. However, some individual resistance relating to performance monitoring, particularly around the falsification of performance figures, appears to have a collective element to it (Taylor and Bain, 1999:112). As a Benefits Assessor at Authority A (Interview 8) said in relation to this, "the word gets around". It is also the case, and will be more fully considered in Section 8.3, that individual considerations have an effect on the incidence, or otherwise, of collective action (Collinson, 1994:55). However, the research shows little evidence of unions, either locally or nationally, engaging in any form of resistance to try and prevent implementation of ICT or monitoring of staff, which concurs with Garson's (1989:219) view regarding unions' general failure to resist this type of control. Involvement of unions appears to be post-implementation rather than at the point of design or implementation (Noble, 1979:45) and is concerned with the way the systems are used and the impact this may have on members (Robins and Webster,

1985:29). At no stage, however, have they appeared to challenge management's prerogative in carrying out monitoring of workers, mirroring the view of Thompson and Bannon (1985:130-131) that this is rarely seen. Indeed, at the stage prior to implementation, the UNISON Branch Secretary at Authority B (Interview 33), confirmed there had been no consultation with unions and these monitoring systems were implemented without dialogue. The problem for the unions appears to follow Noble's view (1979:49) that to effectively challenge the implementation of technology for the purposes of monitoring would require prior knowledge. The Branch Secretary at Authority A concurred with the view regarding the lack of consultation and bargaining structures (Scott, 2004:3):

"We don't get consulted over technology or how it's used unless it results in restructures or job losses. Sometimes if it causes issues for a member, we're called in." (UNISON Branch Secretary, Authority A, Interview 15)

The research, in examining unions' responses in relation to technology, considered how members may wish them to respond to its implementation and use. The UNISON Branch Secretary at Authority B (Interview 33) described it as seeming "illogical" to try and oppose the use of this technology. However, this view was not universally accepted in terms of how the technology should be used. The questionnaire gave the following statement, "Trade unions should try and prevent performance monitoring", 10% of respondents at Authority A and 13% at Authority B agreed with this statement.

"The unions should have stopped this before it started, now it's too late" (Benefits Clerk, Authority B, Interview 17)

"I've raised these concerns with management and the union. Managers ... it's like talking to a brick wall and the unions, they listen but can't really do anything." (Billing Clerk, Authority B, Interview 21)

From the comments above we can see some feel unions should have done more to prevent the use of performance monitoring through ICT. There was a view among some individuals that unions are not able to achieve this or they have left it too late. However, among the majority of the staff at both authorities there is the view unions should not try and stop it: and there appears to be very few individuals who raise any issues concerning performance monitoring with a trade union. Only 3% of respondents at Authority A and 6% at Authority B had raised any issue concerning performance monitoring with unions. This may potentially explain unions' apparent lack of activity in this area (Tullney, 2010:43).

Neither of the union branch secretaries interviewed were of the view that industrial action was considered regarding the implementation of technology or its use as a tool of control. The UNISON Branch Secretary at Authority A did explain how, whereas ICT used to be seen as positive in terms of industrial action, as workers could paralyze whole functions and make the employers vulnerable to this form of action (Shaiken, 1985: 247-248), it was now the case developments in ICT and legislation on industrial action had made this much less likely. Expensive mainframe computers have been replaced with web-server technology located remotely from the authorities:

"It used to be that if we went on strike in these areas, we could cut the money supply off. No bills sent out, no payments dealt with, no direct debits called for. This was a real concern for bosses. This made it more likely that strikes could succeed for all groups of workers because of the damage one group could do. The technology used now with remote servers means all these system jobs are set up a year in advance so bills go out, direct debits are called for whether we are at work or not. With phone banking and stuff like that money still flows in. I suppose we could delete all future work before taking any action but that would be tantamount to sabotage and God knows what the legal sanctions would be. And of course, you have to give them notice and have ballots so they can prepare." (UNISON Branch Secretary, Authority A, Interview 15)

However, even given the legislative changes which were part of central government's strategy for the required changes in the public sector (Ironside and Seifert, 2001:4), both Branch Secretaries concurred that industrial action was not an impossibility and indeed had taken place, as detailed in Chapter 5, both in individual authorities and nationally. However, concerns around union strategy were identified by both branch secretaries. The following comment sums this position up:

"Technology is the same as with cuts and of course it's all linked. We have been left to it. Where is the national strategy? Individual branches have been left to get on with it on their own." (UNISON Branch Secretary, Authority A, Interview 15)

It would appear it is the case that to make a simple correlation of reduction in industrial action with an increase in the use of ICT is erroneous (Hyman, 1988:55). However, it is also clear whilst technology in itself does not prevent industrial action being taken it may affect the effectiveness according to the extent ICT has impacted on the labour process.

The research did consider the plausibility of collective sabotage, in terms of the destruction of the employer's property (Edwards and Scullion, 1982:154) as a means of resisting management control through ICT. Historically there have been examples of sabotage in response to technological changes in the workplace, most notably the rise of Luddism as discussed in Chapter 4 (Thompson, 1980). The feeling at both sites was any such proposition would be difficult to give credence to. Both authorities no longer operate a mainframe computer and all the systems used operate on a remote web-based server. There is, therefore, no single physical entity to render inoperable. There is potentially the destruction of individual computers but this would only mean a temporary disruption to service. The Branch Secretary at Authority B (Interview 33) was incredulous at the suggestion that sabotage may be a means of resistance, saying at best it would be "nuisance value" and at worst, "dangerous for any organization or individual" carrying it out. Both authorities also confirmed the presence of Disaster Recovery Plans would mean alternative facilities would be found should any catastrophic situation occur (Head of Benefits, Authority A, Interview 1; Revenues and Benefits Manager, Authority B, Interview 18). As such, Landes's view (2003:498) that strategies are what are available and appropriate at the time seem pertinent here.

The research appears to indicate unions have largely accepted ICT will be introduced and used in the workplace and this aspect of management prerogative around design and implementation is something they have not and cannot challenge (Thompson and Bannon, 1985:132; Wilkinson, 1983:85). Both Branch Secretaries felt they and the union organization as a whole had insufficient expertise to be involved with, or influence the design of, ICT systems (Bamber, 1988:216). It is the impact on working practices where they feel able to get involved:

"Usually what happens with ICT is it can change working practices. So, it would be [those] that get negotiated rather than the technology. People expect technology to change quickly. So, when someone says we're having a new system it's not seen as 'not in a million years', the response is 'we'll have to learn the new system.' Immediately you're into the detail of implementation, rather than saying 'no way'. The pace of technology has changed so quickly, it almost feels illogical for us to say, 'no you can't do that'. Immediately we're into 'what difference is that going to make, what is going to happen to x,y,z'. It's that kind of discussion." (UNISON Branch Secretary, Authority B, Interview 33)

"I think we have had to focus on issues that might crop up in how they use it rather than 'we won't work with it'. It almost sounds ridiculous now thinking that we might prevent implementation of ICT." (UNISON Branch Secretary, Authority A, Interview 15)

The issue here appears to be technology is ubiquitous in the workplace and society in general (Rosen and Baroudi, 1992:222) and to challenge its use would now be unthinkable for trade unions given its perceived links with progress has essentially detached it from its organizational impacts (Burnes *et al*, 1988:7) and this is something more fully considered in Section 8.3.2. The aspect of it challenged is how, rather than whether, it is used:

"We were concerned that with no paper and everything being done electronically, people would have to spend more time on computers. We tried to negotiate set break times, but in the end agreed with management that staff could have breaks whenever needed. In hindsight we got that wrong

because of the pressure of monitoring they just keep working and I don't think it's good for them mentally or physically." (UNISON Branch Secretary, Authority A, Interview 15)

There was a challenge here but in hindsight the agreement reached at Authority A was felt to offer little protection against the intensification of labour discussed in the previous chapter. Of those who responded to the questionnaire 20% from Authority A and 15% from Authority B, felt they did not take a break when they needed one, which adds some weight to the concerns the union have expressed.

One management initiative resisted by union involvement in Authority A was around the dissemination of performance scores to staff. In the Revenues Department this was done by informing staff not just of their own performance scores but also those of others:

"We were always pretty well organised in Revenues and Benefits and I think there was always a 'don't mess with us because we can stand up for ourselves' culture. So, when managers published individual scores ... there was a lot of anger and the rep argued and brought in Health and Safety because of the stress being caused ... raised it as a health and safety issue. Central Health and Safety instructed management to pack it in. Managers were gutted about that because they knew people would work harder to avoid being seen as the worst on the team." (UNISON Branch Secretary, Authority A, Interview 15)

It will be recalled from the previous chapter, team working was indeed seen by management as a way of intensifying effort and enforcing a level of control through peer pressure (Sewell, 1998:420) and the self-policing of the staff team members

themselves (Head of Revenues, Authority A, Interview 14). So, we are seeing here an example of resistance to management control through the collective organization of the workers, *post-hoc* by using Health and Safety regulations to influence how the monitoring regime is carried out (Taylor and Bain, 1999:114). There were no specific examples of resistance to technology at Authority B. However, it appears no performance data was ever shared across the staff group as a whole. The example above links the level of union organization, not necessarily density, and the ability to resist. The UNISON Branch Secretary at Authority B highlighted the issue of union organization within the sections where the technology is used to illustrate how the knowledge of the people working with it is important if practices are to be challenged:

"[In terms of challenging how technology is used] it comes down to sectional organization because it's only when you know the detail of what you and your colleagues do, that you're in a position to try and implement measures to control what's going on. I see it as the role of stewards on the ground in their day to day dialogue with their colleagues that if, for example, there was a move from 35 to 40 items being processed per day and that was out of order, that local steward should pick it up and have that argument locally and if there was no resolution then it goes up the consultative tree, at which point we pick it up and say, 'this ain't on.'" (UNISON Branch Secretary, Authority B, Interview 33)

One area unions have expressed difficulty with around technology is how it can be used by managers as evidence particularly in disciplinary and capability situations.

This may also have an impact in staff being willing to engage in behaviour to resist

management control due to the increased likelihood of evidence being seen as irrefutable due to its technological source, being used against them:

"We've had some issues with staff, mainly being called in for meetings regarding performance. We've tended to get this dealt with, particularly where we can identify some underlying health issue. The problem is though, management can arm themselves with so much data about what the 'average' worker does and that our member is 'way below this'. It's almost like, 'it's not just me saying this, look at the figures'. This can make it difficult and if it ever got to disciplinary or performance dismissal hearings they would use this." (UNISON Branch Secretary, Authority A, Interview 15)

However, it is clear unions would represent their members in respect of capability and disciplinary procedures (Taylor, 2013:71) and in this sense do offer some resistance to management action. Indeed, the vast array of data referred to in the quote above would point to a management insecure in its position within the frontier of control (Bain and Taylor, 2000:12). There is also the possibility the presence of this evidence may be used to resist attacks on members by the arbitrary actions of management (Findlay and McKinlay, 2003:306). Of course, preventing action may not be visible and so this type of resistance may be overlooked. As a Billing Clerk and UNISON member from Authority A articulated:

"I don't care whether the boss likes me or not, if my figures are ok, they can't touch me" (Interview 13).

We have seen in the previous chapter that ICT has facilitated the spatial separation of work thus allowing homeworking (Thompson and Smith, 2010:21). It is highly unlikely this form of working would be encouraged (Baruch, 2000:38) without

management being able to exercise control over the individual through the available technology (Castells, 1992:208). We have seen in the previous chapter, the panoptic effect in the way individual homeworkers are monitored and surveilled and how this is used as an instrument of managerial control, solving the problem from a management point of view of supervising a dispersed workforce (Bradley *et al*, 2000:105). A further aspect of this form of remote working is the effect it can have on trade union organisation and collective resistance, potentially reversing the process of constructing a mass worker (Murray, 1989:40). In Authority A 29% of workers within the Revenues and Benefits function work from home (Head of Revenues, Interview 14). At Authority B, the figure is 25% (Revenues and Benefits Manager, Interview 18). There is a view that the dispersal and fragmentation of the workforce from one that had been centralised in a single place has led to difficulties for unions in terms of organisation. Unions at both authorities recognized this could cause problems in terms of industrial action (Orlikowski,1988:33) and at both sites a protocol was agreed with the respective employers:

"It's [homeworking] caused some potential issues in terms of organising. We realised if we're on strike these staff would be able to work on that day and we wouldn't know. The Council agreed if there was ever official strike action that home workers would have to either come into the office or declare themselves on strike." (UNISON Branch Secretary, Authority A, Interview 15) "One thing we negotiated corporately was for industrial action days, any home worker would have to report to their base at work, they couldn't just stay at home. So, it's a clear expectation that on days of industrial action, if they want to work, they've still got to cross a picket line." (UNISON Branch Secretary, Authority B, Interview 33)

However, in terms of day to day communication, this form of working may cause problems for unions:

"Communication is difficult ... they're rarely in the office, you can't have those chats around the water cooler and get them involved that way, but they still get emails I send out. It's a mixed picture but it's not ideal." (UNISON Workplace Steward, Authority A, Interview 16)

"In terms of organising people, it's an issue, because the reps can't easily speak with people. One of our reps is a homeworker so that's problematic from both sides." (UNISON Branch Secretary, Authority B, Interview 33)

Whilst the issue of members working away from the workplace causes problems in terms of organisation for unions (Orlikowski,1988:33), a number of the members of the unions actually prefer this form of working and see it as an advantage to them:

"It works better for me with my children and the flexible working around taking them to school or nursery, or if I've got a doctor's appointment I just log off, have half an hour off, come back and carry on working. The role I do needs a lot of concentration. I like it to be quiet and to get into my work and it's easier to do that at home because I haven't got the disruptions I have in the office." (Senior Benefits Assessor, Authority A, Interview 7)

"I love working from home because I'm just allowed to get on, instead of being harassed constantly by the phone and people asking questions. If you are on your own you can just get on with it." (Benefits Assessor, Authority A, Interview 8)

Due to the popularity of homeworking and the fact no member of staff is compelled to work from home at either site, unions appear to be in a difficult situation in that it causes issues around organisation and therefore the potential for effectively resisting management action. There was a move at Authority A to introduce a clause into contracts allowing managers to designate certain jobs as home based. UNISON resisted this and any homeworker does this voluntarily and could, if they wished, return to an office-based location:

"Homeworking is voluntary and we have an agreement with HR that no jobs can be [compulsorily designated] homeworking. They wanted to designate employees in certain jobs as homeworkers in their contracts. We got them to back off from that as we thought it may have a number of potentially discriminatory elements. Having said that, a lot of the people working from home love it and would be really against it if they had to come into work." (UNISON Branch Secretary, Authority A, Interview 15)

It can be seen the technology facilitates this type of remote working. No paper files have to be transported and as highlighted in the previous chapter, managers feel this group of workers can be controlled at remote locations due to the monitoring capabilities of the technology. However, in examining this particular aspect of potential worker resistance, it is the dispersed nature of the workforce rather than the technology itself that causes organizational problems for unions. In short, the research points to a dual aspect unions have to contend with. Firstly, the geographical dispersal of workers related to this use of technology has potentially negative impacts in respect of organization and secondly, many of the union members appear to prefer this way of working meaning unions may only seek to deal with some of the issues relating to homeworking, for example its effects on industrial action, rather than attempt to resist its use completely.

The research considered so far in this section relates to unions resisting management control as exercised through technology and the problems for unions changes to workplace structures can have for effective organization. We can now turn to a potential solution to the problematic aspects of union organization resulting from ICT use by utilizing technology itself, such as websites and social media as an organizing tool as suggested by Dyer-Witheford (1999:126), including as a potential solution for a dispersed or remote workforce. The questionnaire responses were not very positive in this area. When asked the question whether they "use social network" sites to keep in touch with trade unions", only 5% of respondents at Authority A who were union members, and 9% at Authority B answered affirmatively. Not a single non-union member at either site answered affirmatively to this. When asked whether they "use social network sites to keep in touch with political parties, groups or campaigns", 10% of respondents at Authority A and 12% at Authority B answered affirmatively. When questioned about whether they would be interested in using them as a means of communication with trade unions, this resulted in 3% at Authority A and 6% at Authority B saying they would. The same question but in respect of political parties, groups and campaigns showed 8% for both authorities. The general view expressed was outside of work employees use social media but do not want to use it for anything related to work.

The use of the internet is a feature of the working day for many of the employees within the Revenues and Benefits departments at both sites. It is used to check various items such as post codes, business addresses and land registry records. Management sanction the use of the internet for what they consider legitimate reasons or whilst on breaks:

"Internet access is while you're at lunch or breaks, unless it's connected with work. [For example] if [a member of the public says] they're doing their best to sell a property and we doubt whether they are, I would have no problem with somebody Googling that address and checking if it's up for sale with an estate agent. It's on a trust basis ... visually we've got sight of people round the office, but we've got people who are home based workers so it's absolutely based on trust. If you have somebody spending hours a day on the internet it would flag up through IT Services that they're on the internet for x amount of hours. We could also see from the system that they weren't doing any work." (Deputy Revenues Manager, Authority A, Interview 2)

The use of the internet on works computers can be monitored by the employer in terms of the amount of time spent and sites visited and as such may prevent employees using it for non-work-related reasons, including union activities, due to the panoptic capabilities the technology affords managers (Sewell, 1998:404).

"They say it's monitored and obviously we haven't got access to certain websites. I think they can see what you've looked at. I'm sure they can, but I've never been pulled up over that and I've never known anyone that has. We know people could be checked" (Recovery Officer, Authority B, Interview 32)

"Some sites are blocked and that's a corporate thing across the Council because our internet through our corporate servers have got a specific block on some sites and there are methods where they can trace websites you've been on during work's time." (Benefits Officer, Authority B, Interview 31)

Many employees are now in possession of mobile phones with internet access and so could use these in works time and do not have to solely rely on the employer's computer equipment. However, this may be limited as an employee's output and non-productive time may be monitored, as detailed in the previous chapter and in the quote from the Deputy Revenues Manager (Authority A, Interview 2) above:

"Your performance might go down if you are browsing something or maybe ICT have their ways viewing what I'm browsing but I don't know. I think people do have concern but nowadays if you're looking for something quickly on your phone no one's going to know. If you want to do it you can but you can't do it on the computer because ICT would have a tap on it." (Senior Billing Clerk, Authority A, Interview 12)

In summary, we can see the potential for ICT to be used for union activities. This may be considered a potential rather than actual form of resistance, indicating the possibility the very technology used as a tool of control can also be used as a communicative tool of resistance (Greenbaum,1998:139). The research appears to indicate there is some work for unions to do at these sites if there is to be any exploitation of ICT as a means to organize collective resistance, although there are examples of this being done elsewhere, as detailed by Dyer-Witheford (2015:156). It is the case the use of technology as a tool of resistance does not necessarily have to be utilized in works time and we have already seen the ubiquitous nature of technology in the home and not just the workplace.

This section in discussing the evidence around collective resistance has again pointed to its possibility and posits the view that ICT has not been able to make management control absolute in this respect. However, it is also true to say ICT

does appear to make aspects of collective resistance problematic. Firstly, it can be seen to have been developed in ways that potentially lessen the impact of industrial action when engaged in by these workers. Secondly, as it leads to an increasingly dispersed workforce, there is evidence it is causing some organizational issues for unions. The section also points to a lack of pressure exerted on unions from their own membership in relation to engaging in collective forms of resistance, possibly down to individual attitudes of workers and this is discussed in the next section.

8.3 Worker Attitudes and Relationship to Resistance

This section focuses on the attitude individual employees may have towards management control exercised through the ICT systems. When considering the extent to which the technology used either prevents or restricts the level of resistance employees can engage in, there may be a tendency to assume the absence of resistance equates to an inability to resist resulting from essential properties of the technology. This may be fallacious as the absence of, or level of resistance, may result from employees actively choosing not to engage in it given the circumstances at a given time (Dundon and Dobbins, 2015:2) rather than being prevented from doing so by the intrinsic properties of the technology itself. It is the case that individual attitudes may have an effect on the level of collective action as detailed in 8.2.4 if workers are not seeking action collectively, particularly through their trade unions. As such the attitudes of individuals may not only be relevant to resistance carried out at an individual level. One such reason, for an absence of resistance could be that workers agree with the performance management carried out via technology, or at least that it ensures consistent treatment. The research also considered the ubiquitous nature of ICT and the general view held that it is progressive and therefore it should not be hindered, and may have the result of making resistance to its use more unlikely. A further potential reason researched in examining an absence of resistance to management control through ICT is the fear individuals have of loss of employment and the financial implications as a consequence of this. Given the points raised here the research was keen to establish whether any lack of resistance may not be due to impossibility or difficulty as a result of the technology employed, but rather the attitude some members of staff have in respect of ICT or its effects. This is important when considering the potential technology has in terms of it affecting workers ability to resist management control, either positively or negatively, and therefore, how it affects the frontier of control. It would be clear only if resistance from employees has become impossible (Fernie and Metcalf, 1998; Delbridge *et al*, 1993) could the frontier of control be irreversibly settled (Batstone, 1988:228).

8.3.1 Perceptions of Fairness

It cannot be assumed individual employees are necessarily opposed to management control, particularly of performance or attendance through monitoring *via* ICT. The position does appear to have been taken by some employees that they work hard and performance management ensures others work hard too and is, therefore, something they agree with as necessary (Challykoff and Kochan, 1989:811) as it ensures fairness:

"I agree with performance monitoring as it shows who the poor performers are. Something can be done about it then. I have to earn my money so everyone else should too." (Benefits Assessor, Authority B, Interview 30)

"Yes [it is fair], because that is what they are paying you for, so they've got to put the squeezers on you somewhere, ain't they? Or you would have some people who would take liberties." (Benefits Assessor, Authority A, Interview 8)

In the questionnaire the statement "Performance monitoring is good because it identifies poor performers" was agreed with by just over half of respondents at both sites.

Management at both sites felt workers preferred to be monitored, precisely because it was seen to ensure others were giving the same amount of effort they were. This was even a view put forward by the Head of Benefits at Authority A (Interview 1), who had ended individual monitoring in their department. The position was articulated by a manager at Authority B:

"The number of staff that said that was unbelievable. So, whilst I think people might not like having their performance managed, I genuinely think they do because they hate the fact that they could be sitting next to somebody who is constantly not performing and 'I'm doing a good day's work every day. What are you doing about Joe Bloggs who's doing nothing?" (Operations and Improvement Officer, Authority B, Interview 28)

This was not a unanimous view, however, with the response to the questionnaire indicating 15% of respondents at Authority A and 32% at Authority B did not agree with the statement "Performance monitoring is good because it identifies poor performers". One employee, who incidentally had also said they knew how to manipulate the performance monitoring figures put it this way:

"I don't agree with performance monitoring. You're not measuring whether people try are you? Just because I can't run as fast as someone else doesn't

mean I'm not running as fast as I can does it? It's not fair like that." (Billing Clerk, Authority B, Interview 21)

"It's not really fair, I always reach the targets but not everyone is as good.

They might be doing their best, so what's the good of continually hassling them." (Billing Clerk, Authority B, Interview 29)

The above comments would suggest some see performance management through monitoring as unfair *per se*, others object because they are subjected to it but others are not, so do not necessarily see it as unfair in itself but rather it is inconsistently applied. This was certainly raised as an issue at Authority A but not at Authority B:

"I don't think [it's fair] for us. On our floor there is only us that's performance monitored. It's not fair, if the whole of the Council warrants it where you are dealing with people's incomes and such like. It was down to the managers concerned because apparently it was the Head of Revenues' baby, that we were performance monitored and that's how it came about. I think it's a good thing if I'm honest. If it's done fairly because that way it will stop a lot of complaints." (Billing Clerk, Authority A, Interview 6)

"If you are going to do it then why keep an eye on just Clerks and Seniors? Why not Deputies and Team Leaders ... and managers? Performance should be at all levels not just the bottom two" (Senior Billing Clerk, Authority A, Interview 12)

An aspect of monitoring raised by managers and staff relates to how system generated figures are seen as fair by removing the arbitrary nature of management action against individuals by providing workers with objective evidence and as such may be supported (Findlay and McKinlay, 2003:306) as discussed in 8.2.4, although

in this section unions also pointed to the difficulty potentially caused for them because of the perceived objectivity of the performance figures produced through the system and how this may play out in disciplinary and capability situations. This is so, notwithstanding the criticisms made in this thesis regarding the lack of objectivity in the data produced and for some would appear to concur with the view that workers may prefer the monitoring to come from an ICT system rather than a manager who may not be impartial (Marx G.T., 1990:13):

"I think it's fairer. Whether a manager likes me or not, they can't argue with the figures." (Benefits Officer, Authority B, Interview 19)

What this discussion on perceived fairness of monitoring is pointing to is a significant number of employees feel it is fair managers carry it out as long as it is applied accurately and consistently. However, the research indicated this assumption needs to be treated with some caution. The questionnaire shows a marked difference between the two sites with responses to the statement "the way my performance is monitored is fair". Almost two thirds of respondents from Authority A agreed with this, with around one in ten disagreeing, opposed to less than one third agreeing and nearly half disagreeing at Authority B. This is particularly interesting as Authority B appears, if only superficially as detailed in Section 7.4.1, to have a more objective monitoring regime. There is a possibility here the term 'fair' may have an element of ambiguity as some respondents may have equated consistency with fairness whereas others may see the form of monitoring as inherently unfair regardless of being consistent or otherwise. The interviews, as detailed above, show this split among workers regarding this aspect. A lack of resistance from workers that accept the fairness of this form of monitoring would seem to be a plausible result (Stanton, 2000:132; Challykoff and Kochan, 1989:812).

A related issue to that of fairness as discussed above that is worth noting is 29% of workers at Authority A and 25% at Authority B work from home (Head of Revenues, Authority A, Interview 14; Revenues and Benefits Manager, Authority B, Interview 18). Neither authority impose this form of working which is currently voluntary. All the homeworkers who were interviewed explicitly valued this form of working and are, therefore, unlikely to resist any monitoring process managers see as facilitating this.

Kidwell and Achey-Kidwell (1996:9) posited where monitoring was performed to enable management to identify training needs and may therefore be seen as non-coercive, as partially concurred with by the Head of Revenues at Authority A (Interview 14) and noted in 7.5, may result in a situation where workers were more likely to accept than resist. However, no interviewees believed monitoring was carried out for this purpose and accepted a coercive nature to this form of monitoring. As such the possibility resistance may be absent due to a non-coercive application of monitoring was discounted at these sites.

We can see here some workers have a general perception of fairness and worthwhileness in respect of monitoring performance through ICT and in this example, it provides an explanation as to why individual resistance may not be present and also why pressure does not appear to be commonly applied to unions to formally resist the use of ICT as a control tool. This would also be true of the next perception, that of ICT being seen as essentially progressive.

8.3.2 Perceptions of Progress

There is a strand running through the research findings that ICT is now so pervasive in all aspects of life that to resist it would be illogical and would be tantamount to

standing in the way of progress (Burnes *et al*, 1988:7) and this was highlighted also in the section of collective resistance, 8.2.4. This has echoes of the discussion on Luddism in Chapter 4 and how the term 'Luddite' has become pejorative (Bamber, 1988:204). It is also the case, workers in the public sector will have been through the same educational system as their private sector counterparts and so have been subject to a process designed to endow them with skills required by the capitalist class (Carnoy, 1984:94) and to develop a level of consent to the general direction desired by the dominant group (Hyman, 1975a:127):

"I don't think there's many people who are technophobes by instinct and I'm wondering if it's because it's become, 'it's a fact of life, it's not something we either can or should be doing anything about', because it's not just in the workplace, now it's so pervasive it's, 'well you couldn't do anything about it or turn the tide with this thing" (UNISON Branch Secretary, Authority B, Interview 33)

"I think in years past people could fight change. Now I think it's accepted your job's never going to stay the same and you shouldn't stand in the way of progress. It's expected nothing's going to stand still so you don't fight it." (Head of Benefits, Authority A, Interview 5)

A number of interviewees expressed the view that unions should not try and prevent the use of ICT and accepted the view of its essentially progressive nature (Burnes *et al*, 1988:7) or that it provides a better way to carry out the work (Garson, 1989:208) in terms of administration of the services:

"Unions shouldn't try and stop it. It's progress. Would you really want to go back to working things out on paper? I wouldn't." (Benefits Assessor, Authority B, Interview 25)

The questionnaire responses would also point to a positive view of ICT. When given the statement "*I enjoy working with new technology*", 80% of respondents at Authority A agreed along with 74% at Authority B.

As with perceiving the use of ICT as a tool of control as fair, this section also points to a position where the positive view of ICT may be posited as a reason for a lack of both individual or collective resistance, and it is the attitude of individual workers rather than the properties of the technology as such that explains this.

8.3.3 Fear

A further aspect of why people may choose to accept rather than resist management control is fear of the consequences of such resistance, particularly the loss of employment (Kidwell and Sprague, 2009:197; Jaros, 2001:35) with no other means of subsistence (Braverman, 1998:36). This should also be understood in the context of employment being contingent on central government being the arbiter of what services are provided and in what manner (Travers and Esposito, 2003:31; Coffey and Thornley, 2014:204). The questionnaire gave the statement, "*My family and/or myself depend on the money I earn*". 93% of those responding in both Authority A and Authority B agreed with this statement. This was articulated by one of the interviewees at Authority A:

"There isn't much resistance, because they are frightened, they have other responsibilities, mortgage and things, so people feel afraid if you speak up, you'll get targeted and if redundancy comes their job will go. They will

possibly go first because of questioning more than others." (Senior Billing Clerk, Authority A, Interview 12)

The research has attempted to ascertain to what extent this financial dependence on employment may have had in terms of discouraging resistance and what role, if any, the ICT systems have played in this. Local government has been subject to a sharp reduction in funding (Wilks-Heeg, 2011:636) and one of the ways they have dealt with this is through restructuring and redundancy. As labour costs are such a high proportion of a local authority's budget, labour displacement, partially facilitated by ICT, has become an increasingly important part of management strategy (Head of Revenues, Authority A, Interview 14). It is clear from the interviews staff were conscious of the potential for job losses across local government (for example Authority A, Interviews 4,9,12; Authority B, Interviews 24,26,32) and the perception of the conditions of the labour market, as highlighted by Edwards (1979:126) may impact on any decisions they take relating to resistance. The deskilling of jobs, as discussed in Section 8.2.3, may also be relevant here in terms of workers having the confidence alternative employment could be secured, as articulated by a Billing Clerk at Authority A (Interview 10), who clearly linked the issue of skills with the difficulty of gaining alternative employment. As such the research considered the extent to which the fear of this may have curtailed any resistance employees may have engaged in:

"People might not be misbehaving and causing trouble because of the fact jobs could be going and they are thinking "when the next lot go, I don't want it to be me that's on this list, I'm going to make sure I'm not doing anything to make them want to get rid of me". (Revenues and Benefits Supervisor, Authority B, Interview 24)

"They want a good reputation so they can keep their jobs. They think if you're a trouble maker or you're not working fast enough they've got an excuse to get rid of you." (Scanning and Indexing Clerk, Authority A, Interview 4)

Some interviewees specifically mentioned the relationship between performance monitoring and redundancy selection. We can see here how the performance monitoring carried out *via* the technology and the perceived threat of job loss and the fear this generates, combine to make it less likely for those individuals who fear such a loss of employment to resist and more likely they will comply with management requirements:

"I think part of why people try and improve performance is fear. You are only as good as the last results. If your performance drops there's a potential you will go. You could be out." (Council Tax Billing Team Leader, Authority B, Interview 27)

"[Performance monitoring] turns into a competition, if jobs are going it will be those at the bottom of the pile that go. Can't do anything to put my job at risk, so have to play ball" (Billing Clerk, Authority B, Interview 26)

The relationship between technology and fear can be seen to be the role ICT has played in facilitating the loss of posts within these departments and resulted in a decrease in job security and a corresponding reluctance to engage in resistance (Edwards, 1979:126):

"Why people behave themselves might be to do with the technology, because they can be replaced, but it's not the technology in itself, it's the psychological effect it has in terms of thinking, 'I'd better behave myself because I might be out the door'. Technology is related to it but it's not a direct link." (Head of Benefits, Authority A, Interview 5)

The reduction in labour is not, in itself, determined by the technology, rather the technology has allowed employers to respond to the reduction in financial resources local authorities are subject to, as detailed in Chapter 5. As such this should not be seen as technological determinism where the use of the technology is determined by the technology itself, but rather it is the choice of management and employers (Noble, 1979:18-19; Wilkinson, 1983:18):

"I think the only way the job was secure would be if the Council didn't have as many cuts to make. I don't think the changes we have now would have happened because there wouldn't have been the need, there wouldn't be the pressure to make those changes." (Benefits Assessor, Authority A, Interview 9)

However, related to the issue of fear of job loss is the previously considered aspect of workers agreeing with the management monitoring regime. The questionnaire asked respondents to judge the following statement, "If there are job losses, I feel it is right that performance monitoring data should be used as a factor to decide who is made redundant". At Authority A 59% agreed and 24% disagreed, whilst at Authority B the response was 44% for both agreement and disagreement. The questionnaire also asked whether as an individual their performance was usually rated as good, 80% at Authority A and 73% at Authority B agreed with this, with the remainder expressing no opinion. For workers who perceive themselves as good performers, performance monitoring may be felt to be beneficial in that they may view it as a means of defending their employment. An issue to take into account

when considering this, is workers who may not be rated as good may have been less inclined to complete the questionnaire and would not have been interviewed, is that their views are not reflected here. However, the number of workers who would be deemed to be consistently operating at an unsatisfactory level is likely to be minimal due to the lack of formal action taken by management in this area (Head of Revenues, Authority A, Interview 14; Operations and Improvement Manager, Authority B, Interview 28).

This section has pointed to a fear of consequences being a contributory factor in why workers may not seek to, or admit to, resist management control. Whilst this fear is not generated as an inherent property of the technology, ICT clearly affects this by facilitating an increased level of management surveillance and deskilling and therefore increasing the options managers have in terms of labour displacement.

8.4 Conclusion

This chapter has followed on from the examination of the research findings around management control of workers to consider how the use of ICT has impacted on any forms of resistance to this. Resistance, as explained in Chapter 4, for the purposes of this thesis, is any act that challenges, subverts or constrains management's attempts to achieve control of the labour process in seeking to intensify effort and achieve a maximization of surplus labour or determine how work must be performed. The assumption here is evidence of any actual resistance shows, currently at least, the use of ICT has not been capable of perfecting management control by eliminating the possibility of resistance. However, the chapter in detailing the findings, has made the distinction between resistance in

terms of the implementation of ICT and resistance in respect of how the technology is used following this, with resistance not being seen in respect of the former. The chapter has also made the distinction between actual and potential resistance, with the latter being acts that may in certain circumstances be seen as resistant, for example absence from the workplace. In this respect evidence of such an act being able to be carried out, even where no evidence can be seen to definitively characterize it as such, is indicative of the possibility of resistance. It is also the case that where knowledge exists of how a resistant act may be performed also reveals its potential.

Previous chapters have detailed how technical control has been achieved in how work items are executed via the embedding of rules and regulations within the core RBCA system. However, this chapter, in detailing individual worker resistance, has detailed the non-standard nature of the work and, due to this, how technical forms of control have not been totally achieved. Due to a requirement for flexibility in prioritizing when certain types of work are performed, gaps are present in the core systems that appear to allow workers to discover spaces that can be exploited to subvert management control. The idea that workers have work allocated to them, therefore eliminating any autonomy that they have in work selection is potentially capable of subversion by workers. Linked to this appears to be workers' ability to cheat or manipulate performance data. The chapter has seen examples of workers who claim to know how to do this whilst not admitting to actually doing it. This would normally be treated with caution as evidence, but in this instance the fact some interviewees detailed how they do this, would point to its occurrence, even though, as with much individual resistance is by nature covert. Maintaining some control over work allocation and subverting performance data would point to a potential

resistance to management control in as much as workers are still exercising a certain regulation over effort expended. Whilst no evidence of management collusion with this manipulation could be identified, no disciplinary action appears to have ever been taken in respect of this activity. Where these occurrences are detected, as appears possible through the technology, it seems to be dealt with informally and management close the loop-holes they become aware of whilst workers find other ones. In this we can see a continually shifting frontier of control.

The chapter also considered a potential act of resistance, that of workers absenting themselves from the workplace. Whilst this form of resistance had not been totally prevented by the use of technology, the bureaucratic control systems in place had certainly appeared to reduce the incidence. The panoptic qualities of the ICT systems and their integration would make unauthorized absences during the working day difficult to go undetected, even for those working remotely. This coupled with sickness absence monitoring that utilizes ICT systems to ensure management enforcement of corporate policies make this a more problematic form of resistance from the workers' perspective. This aspect led to a consideration of the management role within this and whether they necessarily act as a homogenous group with a coherent control strategy. In both performance and absence monitoring, managers may themselves be subject to scrutiny by ICT. The technology has also had the effect of reducing the supervisory requirement and this coupled with a noted shift away from professional bureaucrats and practitioners has also seen a disruption to a once clear career path. Whilst the effects of technology on certain managerial staff at supervisory levels appears to give them a clearer identification with those they supervise and also threatens their employment and status, this could not be established by the research to lead to any resistance. It is also the case that no

manager at this level interviewed admitted to any deviation from corporate policy. However, at a more senior management level there was one example of a Head of Department refusing to carry out individual monitoring, which in itself can be seen as an act of resistance against more senior managers and an example of contestation affecting the outcome of how technology is used.

As we have seen in this discussion, a potentially fragmented management group, with the possibility managers themselves may engage in potentially resistant acts, the issue of how technology may affect skills and resistance will be pertinent to this group as well as workers. It would appear to be the case for those in the supervisory tier that technology has indeed subsumed some of their roles and removed a great deal of discretion and autonomy. Within the groups of workers, research indicates computer technology has resulted in an increased requirement for generic ICT skills but that technical control, by way of embedding rules and regulations, and automation has had the effect of reducing specific skills relating to the particular area of work. This however, does not appear to be uniform and the reduction in the requirement for specific skills does not appear to have had as great an impact with Benefits staff as with Revenues. However, the view of this thesis is there is a tendential aspect of deskilling that will potentially affect Benefits workers in the same way. The research would point to deskilling occurring not for control purposes per se but resulting from management choices, initially a desire for a more effective and accurate administration of the services and more latterly around cuts in financial resources. The resultant reduction in recruitment, loss of specific skills and new skills being of a more widely possessed generic nature point to resistance by transferring labour to a new employer being less of an option for both Revenues and Benefits staff, but with a greater impact for the former.

Any form of collective resistance would be expected to be more often than not overt. The research has shown no evidence of collective resistance or challenge to management prerogative through trade unions at the stages of design and implementation of any of the ICT systems utilized. The research pointed to a majority of workers taking the position that this was something unions should not be trying to stop. If we accept union activity may be in response to workers raising issues with them, this inactivity may be understood. The research did point to unions, sometimes successfully, challenging management around the use of ICT post-implementation. However, the research indicated developments in ICT in this area potentially lessening the effectiveness of industrial action. Having said this, Chapter 5, provided examples of recent industrial action within local government at both national and local levels and so it is clear that as a potential form of resistance, this has not been rendered unachievable.

Further problematic aspects of ICT use for unions was raised in terms of representation in disciplinary and capability situations due to the perceived objectivity of data relating to individuals. However, this was also seen as a double-edged sword in as much as there was a possibility this perceived objectivity could be seen to encourage, challenge or prevent arbitrary management sanction against workers. Technology was seen to create problems for union organization in terms of the increasing incidence of spatial separation. The research considered a potential response to this in the form of using the very technology used in control as a means of communicating with, and organizing workers. Whilst there was seen to be some potential here, it would appear workers are currently not enthusiastic in respect of this.

The foregoing discussion has indicated management control has not been rendered absolute by the use of ICT due to the evidence that workers seem to have knowledge of how certain aspects of this may be subverted and elements of covert resistance do appear to take place. This is particularly the case where gaps are found in core systems used for certain aspects around technical control and where these feed into performance monitoring systems. However, ICT systems used to apply bureaucratic control over attendance and activity, whilst not totally preventing all resistance in these areas, do appear to have severely constrained it by enabling an increased level of management scrutiny. The research was also keen to examine whether an absence of resistance could be equated with an increased use of ICT by examining some potential alternative explanations for this. The first aspect to be considered, and one that found some agreement, was workers actually agree with how ICT is used. This was certainly not a unanimous view but did appear to be the majority perspective with over half of questionnaire respondents from both sites indicating they perceived performance monitoring as good because it identifies poor performance. Secondly, there was a view expressed in a number of interviews that technology is essentially progressive and any opposition would be considered backward or irrational. Finally, it can be seen that resistance may not take place due to fear among workers, particularly around loss of employment. Whilst this last reason can be linked to ICT and its effects on monitoring and potential labour displacement, it cannot be seen to be due to an inherent property of the technology itself but rather as an outcome of management choice and contestation. As such, the essential properties of technology may not in themselves be seen to be wholly preventative in terms of individual resistance and in certain circumstances may leave gaps for workers to subvert aspects of management control. However, it is also the case that ICT, as utilized, has had the effect of curtailing resistance. Likewise, collective resistance is still possible and the technology in itself cannot prevent collective responses such as industrial action. However, the findings do point to the use of ICT resulting in organizational issues for unions and the potential for industrial action to be made less effective in the areas being researched.

Chapter 9 - Conclusion

9.1 Introduction

This chapter concludes the thesis and draws on the literature and the material gained through the research conducted in arriving at and presenting a final view. The central aim of the thesis has been to investigate the control of the labour process through the use of ICT as exercised within Revenues and Benefits departments of local government. This central aim has three distinct strands. Firstly, the thesis has been concerned with why, when no profit motive can be established, management seek to control the labour process in the public sector, and whether this has changed over time. The second strand seeks to explore how ICT is developed and utilized in seeking to gain such control, whilst taking into account potentially changing management objectives, and finally, given the use of this technology the impact on workers' ability or inclination to engage in resistance against management control techniques.

The research process allowed for the gathering of a significant amount of relevant and valuable information in addressing the central thesis aim. The questionnaire exercise provided some valuable insight into workers views and feelings in relation to management control through ICT and attitude to work in general. The questionnaire process also provided a means of identifying workers who were prepared to be interviewed, allowing their views and insights to be more fully expressed. The interview process, consisting of interviews with workers, managers, a retired officer responsible for the design and implementation of the first computerized system of its kind within the areas researched, and a senior manager from a software supplier, ensured a rich and well-rounded perspective could be

achieved by the research. Whilst it was recognized, particularly when discussing resistant or transgressive acts, participants may not be willing to admit or discuss this aspect of their employment (Taylor and Walton, 1971:220; Ackroyd and Thompson, 1999:3), in practice a number of interviewees not only admitted such acts but also provided details as to how they do this.

There has been a recognition of the limitations of the research project. One of the first ones is the time constraints imposed by the thesis process. This means the research could only be conducted over two sites resulting in a narrower focus than could have been the case with greater time resources. The questionnaire process was also felt to have a constrained scope in terms of the relatively few surveys issued and returned. However, the researcher is clear that some useful information was obtained by this method. It is also the case that the main reason for its inclusion as a method was to provide a means of identifying subjects for the interview process. From this perspective it was very successful. Any limitations and how they have been addressed are more fully discussed in Chapter 6 on methodology. It is recognized further research may be possible for some of the strands of enquiry and this along with a consideration of the contribution this thesis makes in the study of ICT and the labour process, particularly within the public sector, is considered within this chapter.

9.2 Key Findings

The thesis commenced by exploring the motivation for control of the labour process from a Marxist perspective by initially considering the capitalist mode of production. Within this mode, profit was identified as the prime driver for control. The human capability for the separation of conception from execution of tasks (Marx K.,

1990:284) was highlighted as allowing the formation of an employment relationship to be established. The thesis went on to explain the view that what an employer purchased in a capitalist employment relationship was labour power, or the potential for labour, as distinct from actual labour (Marx K., 1990:310; Braverman, 1998:37). Following this, a distinction was made between necessary labour, that is the time required to produce the goods consumed by the worker and their family for a day, and surplus labour being the element of the working day the worker continues to work over and above necessary labour time (Marx K. 1990:300). This is possible due to the indeterminate nature of the contract of employment which is not settled by the wage nexus (King, 1990:76; Burawoy, 1979:139).

The thesis highlighted the Marxist view as seen in Marx K. (1990), King (1990) and Braverman (1998) that only necessary labour time is paid for by the employer, meaning surplus labour and the value created during this time belong to them and not the worker (Marx K., 1990:325; Thompson 1989:40). This is not only the basis of profit but also, due to diverging interests, an antagonistic class relationship. It is clear from this explanation that by increasing the amount of surplus labour, either by intensifying any labour performed or extending the working day, potentially the greater profit may be realized by the employer but also the greater the amount of unpaid labour will be performed by the worker (Marx K., 1990:429; King, 1990:82). Herein lies the struggle for control of the labour process with managers seeking to intensify effort and workers seeking to resist this.

Whilst this explanation for the motivation of control within the capitalist labour process is coherent and the basis of much of the literature examined, the thesis is researching employment within the public sector. The thesis, therefore, went on to explore this motivation for control of the labour process within the public sector.

Whilst this sector is outside of the capitalist mode of production, it operates as a component of, and not just as a separate sector within, a capitalist system (Gough, 1979:1-3) in which the state actively supports the interests of the capitalist class (Miliband, 1969). It is posited the capitalist class benefits from increasing productivity within the public sector due to the resulting potential for greater appropriation of surplus value within the private sector (Gough, 1975:82-83; Gough, 1979:117-119), thus providing a clear explanation of why the labour process within this sector is controlled. It is also true to say the displacement of labour from the public as well as private sectors discharges labour into other areas, depressing wages and thus potentially increasing capital accumulation (Braverman, 1998:265). As the state is seen to act to further the interests of the capitalist class there is clearly a motive for it to achieve control of the labour process within the public sector. This motivation for control will be expected to be reflected in the design, implementation and use of ICT (Greenbaum, 1998:124) within local government as an institution of the public sector.

Central government exercises considerable power over local authorities, including the services that can and must be provided and how these are to be delivered and managed (Wilson and Game, 2006:3; Wollmann, 2000:34). This is important to bear in mind as this means local government, though the employer of workers, may be required to act in a way contrary to their wishes as an employer. The thesis dismisses the position that local government could ever be seen as a model employer given the requirement for control as detailed above and has given examples of historical struggles over pay, grading and status to point to an ongoing level of antagonism between local and central government and workers (Coffey and Thornley, 2014;2009). However, much literature, such as Ironside and Seifert (2000)

and Gill-McLure (2014) indicates a shift in how labour management was delivered following the election of the 1979 Conservative government. Prior to this event, evidence in the literature and the research would point to a management tier of professional bureaucrats largely employed for their skills as practitioners rather than as managers of labour (Harris, 1998:843). Notwithstanding this, a critique developed regarding public services and their alleged inefficiency and privileging of producer over consumer interests that formed part of a government programme to solve these perceived issues (Kirkpatrick and Martinez Lucio, 1995:8). The literature points to a view that local government managers were seen by government as part of the problems highlighted above and consequently a change of managerial approach was required (Gill-McLure, 2014:372).

Both the literature and the research would point to a change in how managers managed the labour process, shifting towards an increased focus on outputs (Pollitt, 2007:110; Gill-McLure, 2014:373). This shift from a professional bureaucratic towards a more managerial style, often referred to as NPM, as seen in the private sector, with its attention to profit, was influenced by central government-imposed restructure of local government in the mid-1970s (Gill-McLure, 2014:370), resulting in an increase in the size of employment units and accelerated by a raft of policy initiatives from the 1980s onwards. The policies of CCT that have either resulted in actual privatization or specific trading conditions being enforced on successful inhouse bids (Wilson and Game, 2006:355), a regime of performance indicators and central government targets (Kurunmaki and Miller, 2006:97; Martinez Lucio and MacKenzie, 1999:164-165), and finally an increasingly severe contraction of local authority budgets (Wilks-Heeg, 2011:636) leading to a requirement for displacement of labour where services are still required. These central government policies, which

local government as a subordinate body has little choice but to implement, have seen a widespread importation of private sector management techniques (Ironside and Seifert, 2001). The use of technology, specifically ICT, has been central in facilitating this shift (Thornley *et al*, 2000:152) and has been actively encouraged by central government initiatives (Local Government Association, 2014:13).

Following on from establishing an imperative for control of the labour process within the public sector, an examination was made utilizing Edwards' (1979) conceptual model of types of control. However, whilst this conceptual model is useful for explanatory purposes, the thesis rejects an evolutionary view of methods of control, highlighting that there are incidences of supposedly more developed forms and examples of different control types existing simultaneously. The types identified by Edwards (1979) were as follows. Simple control as a direct form delivered by owners of firms or managers acting on their behalf. This was seen as problematic, as the size of organizations increased so would the managerial requirement in terms of numbers. The result of this from Edwards' (1979) view, was the development of structural forms of control, initially a technical form applied via modern technology (Dawson, 1988:120) assuming a central role in the labour process and work organization (Hall, 2010:171). In essence, technical control can be seen to be where technology sets the pace and directs the labour process (Edwards, 1979:113; Littler, 1990:60) with a resultant potential for skill to be removed from the process due to technology assuming control over processes that would once have been the domain of the worker.

Technical control, however, was only seen as appropriate to production jobs and as such Edwards (1979) posited that a form of bureaucratic control was developed to provide control for non-production roles. Bureaucratic control is "a form of structural

control achieved through bureaucratic means" (Dawson, 1988:140n1), such as rules and procedures formally governing employee conduct within an organization. The thesis disputes the view that the development of bureaucratic control can be seen as a chronological development. In actuality, forms of control have not necessarily been exclusive, with all the forms so far discussed being seen used concurrently (Hall, 2010:171; Thompson, 1989:152). A final type of control was considered, namely the employer seeking to gain consent of workers (Burawoy, 1979). The research was keen to examine this in the context of the effectiveness of control being exercised through ICT, inasmuch as whether an absolute form applied through technology (Fernie and Metcalf, 1998; Delbridge et al, 1993) would result in no non-technological types of control being required (Grint and Woolgar, 1997:119). The research considered the use of ICT systems within the Revenues and Benefits functions with the conceptual model of types of control as proposed by Edwards (1979) providing a framework. The initial core (RBCA) ICT system implemented within the departments being considered was designed with the intention of providing a system to administer the Revenues and Benefits functions in terms of the correctness and legality of the billing and recovery of General Rates, and the awarding of benefit entitlement in relation to this tax. This was achieved by designing a system, implemented in the late 1970s, that would embed the rules and regulations for the two functions within it. Following standardized input from workers of relevant information, these rules and regulations were applied to administer the functions (Hall, 2010:172-173). The research indicated a system designed to apply technical control inasmuch as the autonomy and discretion of workers was curtailed by the requirements and parameters of the system. The system could not, however, determine work allocation or pace. However, it could be seen in certain aspects to provide a level of technical control for non-production staff as had been proposed by Braverman (1998). An important point is that this system did have the capability to monitor the amount of work completed by individuals as an inherent property (Robins and Webster, 1985:37), but interviews indicated that this was not utilized by management at the time of implementation and did not occur until the CCT regime was implemented by government. This would indicate that control in the employment relationship is about the requirements of the employer and not part of any generalized system as proposed by Foucault (1995). The implementation of EDM as a further core system occurred later than the application of performance monitoring and was ostensibly motivated by a more effective way of dealing with correspondence. It did allow for the automatic allocation of work to individuals, potentially removing their autonomy in terms of self-selection and adding another facet of technical control.

ICT systems designed for the purpose of bureaucratic control, the second of Edwards' (1979) structural forms, have been implemented at both sites. These govern rules and policies with the particular aspects of interest here being concerned with timekeeping, attendance and absence. These systems can be seen to curtail managerial discretion in dealing with any transgressions regarding the behaviours listed above, as failure to deal with workers transgressing policy is electronically reported to the central HR department. We can see therefore diminution of managerial autonomy (Grugulis and Lloyd, 2010:105). The research concurs with the view expressed in the literature (Rosen and Baroudi, 1992:215) that ICT has proved a potent tool in delivering bureaucratic control.

We have seen how individual performance monitoring and surveillance was not carried out until the requirement for performance indicators and CCT impacted on

the services being researched. As such the thesis posits that the development and utilization of ICT can be seen to have been shaped by the changing objectives and requirements of management. These developments have become more sophisticated over time, as witnessed at Authority B, by the development of performance monitoring systems that extract information from the core and bureaucratic systems and calculate superficially objective performance scores. Authority A monitored performance without recourse to any sophisticated use of data extraction, instead relying on objectivity being achieved by the random nature of system allocated work to even out any differences in work allocation over time. The research concluded that neither method was objective in operation and implementation was to achieve an intensification of effort (Bradley et al, 2000:105-106) as a response to central government policies, rather than the provision of any objectively useful data. This conclusion was confirmed by a number of interviewees during the research. What could be seen from the use of the ICT systems was how they can be integrated and combined to establish an overarching level of control that could be seen to be panoptic in its operation, in that every aspect of a worker's behaviour was subjected to constant scrutiny recognized by the workers, in a computerized system of simple control. Having different forms of control operating concurrently is not new, but the level of integration now seen would not have been possible without the specific properties of ICT. In essence ICT provided a level of scrutiny comparable with having a supervisor for every worker (Garson, 1989:223). Indeed, the physical presence of a supervisor is no longer necessary (Zuboff, 1988:322) as witnessed by workers being allowed to work from home.

When considering the design and implementation of these systems the research was clear neither workers nor their representatives were involved to any meaningful

extent in design, which is now largely contracted to external suppliers. Implementation of ICT therefore, could be expected to reflect the potentially shifting interests and objectives of management and so is in no way neutral (Dyer-Witheford, 2015:29). This is equally as true in how the systems are used. The research concurred with the view that there can be an inherent quality within ICT systems that can be used to control and monitor the work of individuals (Robins and Webster, 1985:37). However, initially it was clear management, although aware of the monitoring capacity, chose not to use it. The technical control element, although not recognized as such by managers interviewed, achieved through the embedding of rules and regulations was highlighted in the research as specifically part of the design objective. The result of this can be seen to be a sharper division between conception and execution (Beirne *et al* 1998:146) with those carrying out the work having no input into the former.

The research, therefore, concluded that the use of ICT systems in terms of control of the labour process is not technologically deterministic but is rather a result of management choice in application or design to achieve their objectives at that particular time (Hall, 2010:164) and that this can be seen to change, particularly as a result of external pressures applied from central government. The method of technical control applied *via* embedding of rules and regulations can be seen to be consistent with a requirement for a system of professional bureaucracy based on processes. Whilst the research could find no specific evidence of such a motivation, the implementation of ICT from the outset, resulted inevitably in a level of deskilling (Grugulis and Lloyd, 2010:91), albeit unevenly impacting on different groups (Wilkinson, 1983:8), with interviews indicating workers in Benefits currently due to a more fluid regulatory framework having a more resilient skill-set. Following the

policy changes from central government highlighted, we can see a change in both how the technology is used and designed to achieve the objective of intensifying the effort of labour. Increasingly, as detailed particularly in the interview with the Head of Revenues at Authority A (Interview 14) we are also seeing development of ICT that removes labour from the process altogether by automating whole processes. When combined we can see the cheapening and displacement of labour as a result of a reduced requirement in respect of skill and automation, coupled with an intensification of effort of those remaining. However, again it needs to be stressed this is as a result of management choice, albeit in response to external pressure, and not a predetermined property of ICT.

Management seeking to control the labour process by eliciting consent from workers was considered as a potential alternative or complement to control exercised through technology. The research did highlight some form of participation from workers in two areas. Firstly, both sites were accredited IIP employers. The research, however, pointed to this not being an active component of either authority's activity. The research was unable to distinguish the reason for this, which was seen to be either due to more effective control facilitated by ICT, as suggested by Grint and Woolgar (1997:19), or lack of resources, or potentially a combination of both. The second aspect was participation in the procurement of the core systems, and in respect of Authority B the development of the performance monitoring system. However, in terms of this participation, the choices workers were allowed to make were all within a range of what would be considered managerially acceptable outcomes (Price, 1988:256). At no stage did workers participate in any manner that could have resulted in ICT not being implemented or used for the

purposes of control of the labour process. Workers, therefore, were unable to intervene in a resistant manner prior to implementation of ICT systems.

The main area of research examined in evaluating the effectiveness of the control regimes implemented by management via ICT systems considered the extent to which they could be resisted individually or collectively. As such the thesis considered whether a frontier of control exists within the areas researched as well as being an integral component of the capitalist labour process. The thesis first sought to arrive at a working definition of resistance and concluded that this was any act that either prevented or subverted management's attempt to control the labour process to achieve intensification of labour or remove worker discretion in how work can be carried out through the use of ICT systems. A problem was acknowledged in terms of whether an act could be considered resistant as it will not necessarily be known whether resistance can be imputed without knowing the reason the worker attaches to such acts. The thesis, however, in seeking to determine the extent to which ICT has prevented worker resistance to management control, was less concerned with the meaning of a specific individual act than whether it could, in certain circumstances, be used as a means of resistance. The example of worker absence is useful in illustrating this point. Absence could either be as a result of a genuine debilitating illness or as an act to remove the worker from management control. If ICT does not prevent absence then this form of resistance will still be potentially available to workers.

The first area to be considered in terms of resistance were individual acts, although it was recognized these may have a collective element to them. A number of acts were identified that could be seen as a way of workers resisting management attempts to control the effort expended by labour. The research clearly pointed to

management accepting performance monitoring had the effect of intensification of labour (Bradley *et al*, 2000:105-106), including an implication by The Operations and Improvement Manager at Authority B (Interview 28) and concurring with Taylor (1947) that without this form of control workers would be naturally lazy. However, the research also pointed to a knowledge among workers of how to falsify the data making it appear they had performed more work than they actually had. A number of interviewees freely admitted they engaged in this form of behaviour, giving examples of how it could be achieved. The research indicated technical control could not be fully realized due to the non-standard nature of the work being completed and provided a clear account of the operation of a frontier of control with management closing loopholes and workers creatively seeking to discover new ones (Thompson and Smith 2010:16; Taylor and Walton, 1971:242).

The second area the research considered in terms of resistance was of workers absenting themselves from the workplace (Edwards and Scullion, 1984). The research pointed to this being curtailed by the use of ICT systems in the following ways. Firstly, it was recognized staff may absent themselves from the workplace citing illness. As discussed, in this thesis it is enough to identify the potential for the act to be an act of resistance to recognize its possibility. The bureaucratic systems in place at both sites reflect the corporate policy on absence. This consists of trigger points where absence in excess of this results in managers being instructed to hold meetings and issue warnings to the worker concerned. The managers themselves are subject to monitoring to ensure they comply with this requirement and are not allowed to exercise discretion. The research, whilst not totally excluding absence as an option for resistance and a means of effort control on behalf of the worker, did point to the use of such systems resulting in a significant reduction, but not

elimination, of absence. This reduction is at least partially resulting from workers who are ill attending work and therefore reducing sickness absence, whether as a result of genuine illness or not, potentially achieving an intensification of labour that may not otherwise have occurred. Another type of absence identified was where workers absent themselves without authorization for part of the working day. The research pointed to this virtually being eliminated due to the panoptic qualities possessed by the integrated systems that could detect periods of inactivity. This also means workers who are geographically dispersed can be monitored in terms of their activity without the need for a physical supervisor (Zuboff, 1988:322).

In terms of individual resistance then, the research has shown at least some workers are still able to resist management control in terms of intensification of labour by manipulating performance figures. This points to limitations within technical control when requirements for flexibility and non-standard items of work exist that workers can and do exploit. However, in terms of the technical control applied through embedded rules and regulations, no evidence was found that this could be resisted. The research indicated workers absenting themselves and citing illness as a reason is still possible but has been severely curtailed. Unauthorized and unrecorded absence during the working day has been largely prevented due to the panoptic combination of core and bureaucratic systems. In short, a key finding is ICT has not entirely eliminated the potential for individual resistance but it has clearly imposed limitations on it. As much individual behaviour that could be classed as resistant is covert by nature, we can see why ICT with its capability to exercise a panoptic form of control has constrained individual resistance by subjecting it to an increased level of scrutiny.

The research went beyond the usual binary relationship of managers controlling and workers resisting, which may be the case if a unity of purpose in delivering a coherent strategy of control could be demonstrated (Friedman, 1990:182). However, the research indicates managers themselves can be subject to monitoring. The research also points to a decline in the number of managers, particularly within the supervisory tier due to the technical and panoptic qualities of the ICT systems used. As such it may be the management group should not be perceived as homogenous (Wardell, 1990; Hyman, 1987) and certain members of the group may have more in common with those they manage than more senior managers. The research found a senior manager at Authority A who had successfully resisted implementing individual performance monitoring within her department thus pointing to a heterogenous potential among the management group. However, the research failed to identify any other instances of managers deviating from required behaviour and so could not establish any concurrence of interests between managers and workers. However, it needs to be recognized when considering this, as Braverman (1998:290) highlighted, these managers are also employees who may be unwilling to divulge their transgressions.

Collective resistance, particularly through the actions of trade unions, was considered. The research largely concurred with the view advanced by Garson (1989:219) that unions lacked policy on, and failed to resist control exercised through electronic monitoring. It was also seen unions tended not to resist at the stages of design and implementation, potentially due to a lack of technical knowledge (Bamber, 1988:216). The research highlighted a general view that the members themselves did not wish to see unions resisting the implementation of ICT and there was scant evidence of members raising issues with unions around this.

This may explain unions' lack of activity at these stages. There was, however, at Authority A evidence of unions collectivizing a grievance (Taylor, 2013:74) to resist how management sought to use ICT following implementation and this concurred with the view that unions tend to challenge how, rather than if, technology is used (Taylor and Bain, 1999:114) and unions at both sites also recognized this was where union resistance may have to occur.

The research pointed to some difficulties potentially arising in terms of collective resistance due to developments in ICT removing some of the ways industrial action could previously paralyze systems (Shaiken, 1985:247-248). It is the case with systems now being hosted on remote servers and many processes running automatically will limit the effectiveness of industrial action. Workers in Revenues would no longer be able to cut off an important money supply to their employers as once they were able to do. Other aspects, outside of the area of ICT have hindered union organization and resistance, in particular central government anti-union legislation (Ironside and Seifert, 2000) and a tendency for industrial relations to have been decentred due to the effects of CCT and BV (Gill et al, 2003:261) and these need to be factored into any analysis regarding the impact of ICT and the occurrence of resistance. However, whilst no industrial action has been taken at either of the two sites in respect of implementation and use of ICT, national strikes have taken place around pay and pensions and other authorities have seen strike action over a variety of issues and so withdrawal of labour can still occur (for example, Coffey and Thornley, 2014:203; Lyddon, 2015:738; UNISON, 2016). As such the thesis rejects a simple causal effect of increasing ICT use and a reduction in collective worker resistance to management initiatives.

A further problem for unions, in terms of organization caused by ICT was the increase in remote working, facilitated by more effective control, as highlighted by Zuboff (1988), leading to a geographical dispersion of workers and issues around communication. The research indicated the possibility of unions using ICT as a tool of organization but this appears to be a potential rather than an achieved situation. Simply equating a lack of union resistance with the properties, effects and increasing use of ICT is, in the view of this thesis, overstating its impact (Hyman, 1988:55).

We can see in terms of resistance whilst ICT does appear to have the effect of curtailing certain acts of resistance, there is still evidence of its potential or occurrence. We can say therefore, ICT has intensified but not perfected management control. The research also examined whether any absence of resistance could necessarily be attributed to ICT per se and sought to identify other potential reasons externally that may explain its absence. The first aspect related to a view highlighted in the literature and research findings that ICT is seen as a progressive force and it would be backward to resist its use (Bamber, 1988). This is also connected to the view given that trade unions should not attempt to prevent its utilization. The second aspect considered was workers are fearful of the consequences of such action and therefore comply with management. Whilst this aspect cannot be seen to spring from some inherent property of the technology, it is clear the effect ICT has on labour displacement and skills has made workers perceive their employment to be less secure (Dyer-Witheford, 1999:196). The research also indicated a perception among many workers that the control exercised, particularly through performance monitoring, is fair, objective, notwithstanding evidence to the contrary, and beneficial thus making any resistance to it less likely (Marx G.T., 1990:13). As such the reasons discussed mean it is

erroneous to simply equate a lack of resistance with an increase in the use of ICT and whilst the technology may have implications for resistance this does not stem from essential qualities of the technology itself but rather the choices made in its design and utilization (Noble, 1979:18-19; Wilkinson, 1983:18). It also needs to be seen in the context of the relative power between workers and management as influenced by the labour market conditions, skill, union organization and action, all of which may be influenced by, and shape the use of, technology.

9.3 Contribution of the Thesis

The thesis draws much of its inspiration from Marx K. (1990) and Braverman (1998) in detailing the imperative for control within the capitalist labour process and seeks to extend this into the public sector by using the work of Gough (1975;1979) to understand why the labour process is controlled within local government. The thesis highlights the literature, such as Ironside and Seifert (2000) and Gill-McLure (2014) that demonstrates changes in the management of the labour process within local government in response to the changing priorities, policies and legislation emanating from central government from the 1980s to date. However, the thesis does not see this as a disjuncture in moving from local government as a model employer (Coffey and Thornley, 2009;2014) but rather should be seen as a continuous but fluid process due to its operation within, and as a component of, a capitalist system, where surplus labour generated within the public sector can be seen to be of value to the capitalist sector (Gough, 1975;1979). A contribution of the thesis is the linking of these changes in labour management shaped by central government policy, the increasing use and development of ICT, the objectives and interests of local government and managers and how this has been reacted to by workers and their organizations. In this sense a more complex dynamic can be seen between these elements than in a straightforward control and resistance model.

Much of the literature in this area of control stems from a Marxist analysis of the capitalist labour process and its motivation in its drive to increase profit (Marx K. 1990; Braverman, 1998). It is also the case much of the literature, as regards ICT as a tool of control within the non-productive labour sector, focusses on the phenomenon of call-centre work, examples are Fernie and Metcalf (1998) and Bain and Taylor (2000). This thesis examines the labour process within local government and particularly in Revenues and Benefits departments with their focus on the administration of specific local authority provided public services. This extends the research of the labour process into this area, with much of the labour being administrative and clerical in nature and employing much of the same technology. The thesis has attempted to relate how changes in central government policies and legislation have resulted in changing priorities for local authorities and managers within local government and how this has shaped the design, implementation and use of ICT as a potential tool of control. The examination of these links allows consideration of the extent to which ICT is used in a technologically determinist way, or alternatively as a result of choice and contestation among the various actors involved.

The thesis links Edwards' (1979) conceptualization of the types of control with the ICT used within the areas researched and demonstrates how they are identifiable within the separate systems utilized and how these have been developed using the capacity for integration by combination into an overarching panoptic network. The thesis examined the view this panoptic quality had ended the possibility of any worker resistance (Fernie and Metcalf, 1998). The thesis, therefore, contributes to

the debate on the continuing possibility of management control being resisted in a significantly unionized environment by examining the forms, potentially novel and covert, any such resistance may take. As such it supports the view that even though technology may have curtailed resistance, the frontier of control still exists and has not been definitively settled. Furthermore, the thesis has extended the debate around resistance into the area of management itself, arguing management should not necessarily be seen as a homogenous group with a coherent and unified strategy (Wardell, 1990; Hyman, 1987). The thesis contributes the views and perspectives of managers and workers and therefore relates the working experience of those employed within this environment to the theoretical aspects found in the literature.

It is accepted there are limitations to the thesis and how definitive any conclusions may be. It is the case the study was relatively narrow with only two out of hundreds of local authorities being researched. It is also the case the two authorities in the study were geographically relatively close. They were also of similar size. Whilst this has value in itself with the thesis not being a comparative study as such, this does leave some scope for further research. Aspects such as regional variances and changes in approach for authorities of different size may provide an interesting point of investigation, as would the development of, and motivation for, government policy and its relationship to the development of ICT in the public sector. It is also the case this study, concentrating as it did, on local government within the public sector, did not research those Revenues and Benefits departments transferred to the private sector. This would also provide an interesting point of comparison as it would place the same function within a sector where the profit motive was present. A further limitation in the study could be seen to be the historical perspective, with the first

computerised systems being implemented in these areas almost four decades ago. As such many people taking part in the research did not have experience around the whole period being researched. The research did, however, have access to a number of people who had the length of service required or who were present and involved prior to and following the implementation of the first computerized systems in this area. Whilst the thesis, in examining the use of ICT, necessarily focused on the period immediately prior to, and then developments following implementation, there is a recognition this occurred in the context of a much longer historical period. Overall this thesis extends an examination of control of the labour process into the public sector where there is no profit motive. It, therefore, considers the motivation in this area for controlling labour. It also widens the debate from a position where the employer's motivations would be constant and consistent, such as the production and maximization of profit, to one where the motivations of the employer are influenced and shaped, potentially in an unwelcome manner, by central government acting in the overall interests of the capitalist class. Within this examination the role of technology in general and ICT in particular is of central importance.

9.4 Conclusion

There is clear evidence labour was intensified within the areas of local government studied, from the election of the Thatcher government in 1979 and also successor administrations (Ironside and Seifert, 2000; Gill-McLure, 2014). This can be seen to be consistent with the view advanced in this thesis that surplus labour performed within the public sector can benefit the capitalist class and therefore the state, in its role as a promoter and defender of the interests of the said class, has a motivation

in controlling the labour process within local government to maximise this (Gough, 1975;1979). As such it is not only the profit motivated private sector (Marx K., 1990; Braverman, 1998) that witnesses management attempts to control and intensify the labour process. The thesis is clear ICT has had a central role in this intensification (Thornley *et al*, 2000). However, what cannot be definitively demonstrated is the changes in managerial control highlighted and facilitated by the specific type of utilization of technology were carried out consciously by managers within local government to attain such intensification for the reasons given *per se* and it would seem more likely such actions were reactions to the conditions created by external pressures. This certainly should not be read that control of the labour process was not seen until the 1980s, indeed supervisors were employed, but is more the case ICT gave managers the tool to tighten control and intensify labour in response to external pressures. Further cuts appear to be planned and this may result in further technological facilitation particularly in terms of displacing labour as recognized by managers within the interviews.

The evidence from the research, particularly with interviews from managers, points more towards a situation where the full range of control capabilities of the initial systems were known but not fully utilized. What appears to have caused management to adopt such control systems, most notably through monitoring and surveillance, was the policies and legislation emanating from central government around performance indicators, CCT and increasingly severe financial constraints (Ironside and Seifert,2000;2001). Following these central government initiatives, it can clearly be shown existing ICT systems became used as a tool of monitoring workers in addition to the inherent technical control element that must be a factor of the original core system with its embedding of rules and regulations (Robins and

Webster, 1985:37), and that future ICT systems designed had a more unequivocal control imperative. The above points to a position where the way technology is designed and used is a matter of choice and not a matter of technological determinism (Edwards, 1979). This can also be seen in the different control strategies employed by Revenues and Benefits at Authority A.

The thesis used the types of control as conceptualized by Edwards (1979) to draw attention to how the various ICT systems utilized operated. However, the thesis posits what makes these systems qualitatively different from forms of control proposed by Edwards (1979), which had been seen prior to the advent of computerization, is the development in this technology to integrate discrete systems (Berdayes, 2002:35). The thesis concludes this has led to what can be seen as a panoptic form of control with the capability of extending the initial concept of the panopticon as proposed by Foucault (1995) by means of its certainty of application. The thesis concludes this view of a panoptic form of control is consistent with a Marxist LPT view due to the evidence from the research clearly pointing to its utilization within the workplace for the purpose of intensifying labour.

The thesis was concerned to examine if the points raised above has led to the creation of a powerful management control tool and to what extent this can be seen to have curtailed or removed the potential for individual worker resistance. In general, the thesis concludes resistance from workers has been made more problematic, but not impossible, by the implementation and utilization of the ICT systems as an instrument of control. The evidence clearly shows workers individually do not intervene at the points of design or implementation. As such there is no resistance or challenge to the management objectives reflected in the ICT

systems as designed and utilized (Greenbaum, 1998:124). This means any resistance is only currently seen post implementation.

Following implementation, and particularly integration, of the various ICT systems considered, it would appear to be safe to say there has been a strengthening of management control of the labour process leading to an intensification of labour. However, there is evidence of some resistance by way of falsification and manipulation of performance data showing a clear motivation to violate the expectations of management (Robinson and Bennett, 1995:556) and so management control cannot be said to be total. Other acts of potential resistance such as absenteeism (Edwards and Scullion, 1984), have been reduced but remain possible, albeit at a lesser frequency. Individual resistance has also been shown to not be exclusive to workers but managers as employees also, and also subjected to control *via* ICT systems, are not necessarily a homogenous group with a coherent strategy (Wardell, 1990; Hyman, 1987). As such the thesis concludes it is not necessarily accurate to pose the control and resistance dynamic in the simple terms of management *versus* workers.

The thesis has also noted problems in terms of collective resistance through trade unions resulting from the use of ICT systems within the areas researched. As with individual resistance there has been no involvement or challenge by unions at the stages of design and implementation, so any resistance will necessarily be *post-hoc* (Noble, 1979:45). However, there was some evidence of unions being able to collectivize grievances in how management were utilizing the systems and successfully resist specific practices (Taylor, 2013:74). Whilst the research indicates no industrial action taken at the two research sites in respect of ICT and its use, there has been national strike action taken by local government unions and also

strike action involving groups of workers at individual authorities (for example, Coffey and Thornley, 2014:203; Lyddon, 2015:738; UNISON, 2016). As such, it would appear somewhat premature to assume ICT will necessarily prevent such action. However, it does need to be pointed out that ICT as it has developed, particularly in the area of automation, will have reduced the specific effectiveness of strike action for the particular groups concerned in this study. Other groups within local government less dependent on technology may not be impacted in a negative way in terms of the effectiveness of industrial action. The ICT facilitation of geographic dispersal of workers also creates challenges for union organization and so may have a detrimental effect on collective action.

The question as to whether ICT is directly, due to its inherent properties, responsible for any reduction or curtailing of resistance (Fernie and Metcalf, 1998; Delbridge *et al*, 1993) requires a more nuanced answer. The thesis has provided evidence that a proportion of workers actually agree with management control techniques applied (Challykoff and Kochan, 1989:811), whilst some point to the perceived progressive qualities of technology and posit this as a reason why workers should not obstruct it (Burnes *et al*, 1988:7). As such, technology can be seen to have a role in the potential reduction in occurrence of resistance but is not the direct cause. Likewise, a number of interviewees discussed the fear they have around the loss of employment as a reason why no resistance is undertaken (Dyer-Witheford, 1999:196). The link with technology in facilitating choices in terms of the displacement of labour has been shown, but this does not indicate this being an inherent quality of the technology but rather a management choice.

The overall conclusion of the thesis is that within the public sector, as a component of a capitalist system, there is a motive for controlling the labour process to achieve

an intensification of effort. Whilst control has always been present within the public sector, the policies of central government, as implemented by local government employers and managers and facilitated by the use of ICT, do appear to have intensified management control and labour within the areas researched. Resistance, whilst still evident does seem to have been rendered an option that has become increasingly problematic for employees. As such, the researcher would state ICT has shifted the frontier of control in management's favour but that it cannot be said to be finally settled.

There is a recognition of the relatively narrow field of focus in respect of this thesis and some recommendations for future research clearly emerge from this in respect of control and resistance and the relationship these aspects have with technology. Firstly, the close geographical proximity and similar size of the research sites means that it may be interesting from a comparative view to investigate authorities from the perspective of a more clearly differentiated location and size. Secondly, the thesis is concerned with the discipline of revenues and benefits within local authorities. This is one of a number of functions carried out and a similar study of other functions would indicate how general the trends identified here may have become within local government. A further recommended route of investigation that may also be fruitful is of identical functions that operate across sectors as will be seen when functions are privatized. Finally, this thesis can only take us to the present point in time and given the final comment in the preceding paragraph, shifts within the frontier of control will need to be mapped and explained.

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Appendix 1: Revenues and Benefits Staff Questionnaire

This questionnaire is looking at the use of technology in your workplace. It is up to you whether you complete the questionnaire and all questions are optional. Any information provided is confidential and your employers will not get to see any individual responses. Should you choose, the questionnaire can be completed anonymously. However, a space is left for your name and this will be required should you be willing to take part in any follow up interviews. I would like to take this opportunity to thank you for any participation in this research.

By returning this questionnaire it is assumed that you are consenting to take part in this research.

I confirm that I have read and understood the information sheet for the above study and have had the opportunity to ask questions.

| ad the opportunity to ask question | | | | | _ | |
|---|-------------------|------------------|----------------|----------|----------------------|--|
| | | | | | | |
| Section 1: Personal information. | | | | | | |
| Male Female | | | | | | |
| Would you consider yourself a member of an o | ethnic minority | y? Yes No | Prefer not t | o say | | |
| Full-time Part-time | | | | | | |
| Age | | | | | | |
| In what year did you start your current job? | | | | | | |
| What is your current salary? | | | | | | |
| Do you work in: Revenues Benefits | Combined | Revenues and Ber | efits Division | Otherple | ase state) | |
| Do you ever work from home? Always Sometimes Never | | | | | | |
| Do you work as part of a team? Yes No Don't know | | | | | | |
| Are you a member of a trade union? Yes No | | | | | | |
| If yes, which one? | | | | | | |
| Section 2: The following questions are about your attitude and motivation in your job. You will be given a series of statements. Please indicate whether you strongly agree, agree, disagree, strongly disagree or have no opinion by marking the relevant box. | | | | | | |
| | Strongly Agree | Agree | No opinion | Disagree | Strongly Disagree | |
| My family and/or myself depend on the money I earn | | | | | | |
| The salary I receive is fair for the performance expected of me | | | | | | |
| I find my job interesting | | | | | | |
| The social aspect of work is important to me | | | | | | |

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| I feel my job is secure | | | | | |
|--|-------------------|----------------|---------------|--------------|----------------------|
| Staff are encouraged to participate in deciding how work is carried out | | | | | |
| | Strongly Agree | Agree | No opinion | Disagree | Strongly Disagree |
| Senior managers are always prepared to listen to the views of staff | | | | | |
| My line manager is always prepared to listen to the views of staff | | | | | |
| I am actively looking for a job outside my current area of work | | | | | |
| If I could, I would take early retirement or voluntary redundancy | | | | | |
| I would be happy to spend the rest of my career in my current area of work | | | | | |
| Section 3: The following questi controlled and monitored. You w strongly agree, agree, disagree, s | vill be give | en a series of | statements. P | lease indica | ate whether you |
| | Strongly Agree | Agree | No opinion | Disagree | Strongly Disagree |
| I am subject to performance monitoring | | | | | |
| If my performance was not monitored I would not work as hard | | | | | |
| I feel pressured to keep my performance figur at a level that management require | res | | | | |
| The way my performance is monitored is fair | | | | | |
| Performance monitoring is good because it identifies poor performers | | | | | |
| Colleagues are aware of each other's performance figures | | | | | |
| If I know my colleagues' performance figures I will work harder | | | | | |
| Being monitored makes me less willing to help my colleagues | | | | | |
| I take a break whenever I need to | | | | | |
| Being performance monitored causes me stress | | | | | |
| I know how to manipulate performance monitoring figures | | | | | |
| Managers take personal circumstances into account when looking at performance figures | | | | | |
| I can always make up a plausible excuse if my performance figures are too low | | | | | |

is

| Being monitored undermines my morale | | | | | |
|---|-------------------------|--------------------------------|------------------------------|--------------|----------------------|
| | Strongly Agree | Agree | No opinion | Disagree | Strongly Disagree |
| If there are job losses, I feel it is right that performance monitoring data should be used as a factor to decide who is made redundant | | | | | |
| Performance monitoring is not about accuracy it is about getting us to work harder | /, <u> </u> | | | | |
| Being monitored means I am less likely to help management | | | | | |
| My performance is usually rated as good | | | | | |
| Section 4: The following question are dealt with. You will be given answer. On all others please in disagree or have no opinion by m | a series o dicate wl | of statements nether you st | . Some quest rongly agree | ions require | a 'yes' or 'no' |
| I have raised concerns about performance monitoring with management | Yes | No 🗌 | | | |
| I have raised concerns about performance monitoring with a trade union | Yes | No 🗌 | | | |
| | Strongly Agree | Agree | No opinion | Disagree | Strongly Disagree |
| Any concerns about performance monitoring I have raised with management have been taken seriously and acted upon | | | | | |
| I work longer than I would like as a result of performance monitoring | | | | | |
| Any concerns I have raised with a trade union have been taken seriously and acted upon | | | | | |
| Trade unions should try and prevent performance monitoring | | | | | |
| Trade unions are forceful in their dealings with management | | | | | |
| I am active in a trade union | | | | | |

Section 5: The following questions are about how you feel about working with new technology. You will be given a series of statements. Please indicate whether you strongly agree, agree, disagree, strongly disagree or have no opinion by marking the relevant box.

| | Strongly Agree | Agree | No opinion | Disagree | Strongly Disagree |
|--|-------------------|-------|------------|----------|----------------------|
| I enjoy working with new technology | | | | | |
| Changes in technology never benefit staff | | | | | |
| I feel the technology used in Revenues and/or Benefits requires a high level of skill | | | | | |
| The job would require a higher level of skills without the use of computerized systems | s 🗌 | | | | |
| A high level of training is required to do my job | o 🗌 | | | | |
| The skills I have gained by using the computerized systems in Revenues and/or Benefits would be useful in other jobs | | | | | |
| Management set strict rules on the use of technology | | | | | |
| I always follow the rules regarding technology set by management | | | | | |
| I can adapt the computerized systems to suit my own ways of working | | | | | |
| Management encourage staff to adapt the computerized systems to their own way of working | | | | | |
| I have a better working knowledge of the technology used than my managers | | | | | |
| Section 6: The following question be given a series of statements. | | • | | | |
| I use social network sites (e.g. Facebook) You | es 🗌 | No | | | |
| I use social network sites to keep Ye in touch with trade unions | es | No | | | |
| I use social network sites to keep in touch with political parties, groups or campaigns | es | No | | | |
| | Strongly Agree | Agree | No opinion | Disagree | Strongly Disagree |
| I am interested in using social network sites to keep in touch with trade unions | | | | | |
| | Strongly Agree | Agree | No opinion | Disagree | Strongly Disagree |

| I am interested in using social network sites to keep in touch with political parties, groups or campaigns | | | | | |
|--|-------------|-----------------|----------------|----------------|-----------------|
| Please use this section to mak the issues it raises. | e any comi | ments you wou | ld like regard | ing this quest | ionnaire and |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| I would like to thank you for cobe useful in some cases to dosplease complete the section be the strictest confidence. | ome follow | v up interviews | . If you would | be interested | d in doing this |
| A prepaid envelope is provided | for your re | sponse. | | | |
| Name: | | | | | |
| Email: | | | | | |
| Telephone: | | | | | |
| Address: | | | | | |

Appendix 2: Questionnaire Participant Information Sheet

Information Sheet: Questionnaires

Study Title: Technology and workplace control: A study of the use of new technology in Local Government Revenues and Benefits departments.

Aims of the Research

The aim of the research is to investigate the use of new technology in the workplace in terms of how it may be used as a tool for exercising control over workers. The study will be carried out over a number of Revenues and Benefits sites. The research will seek to determine who chooses to implement technology and why and also how it is used once implemented. This will include how technology may be used to monitor staff and how it may be used as a tool of surveillance. The research will also consider how workers may seek to accommodate, adapt or resist technology and its use in control.

Invitation

You are being invited to consider taking part in the research study "Technology and workplace control". This project is being undertaken by Andrew Maybury as part of his doctoral studies at Keele University, supervised by Professor Carole Thornley.

Before you decide whether or not you wish to take part, it is important for you to understand why this research is being done and what it will involve. Please take time to read this information carefully and discuss it with friends and relatives if you wish. Please feel free to ask me if there is anything that is unclear or if you would like more information.

Why have I been chosen?

You have been chosen to take part in this study because your employment involves working within a Revenues and/or Benefits Division. As such your experience will provide a high level of insight into the work of this division and the technology used within it.

Do I have to take part?

You are free to decide whether you wish to take part or not. You are free to withdraw from this study at any time and without giving reasons. There will be no consequences for you should you decide not to take part.

What will happen if I take part?

You will be asked to complete a questionnaire compiled by Andrew Maybury. The questionnaire will take approximately 10 minutes to complete. All questions are optional and questions can be left out should you wish to do so. The questionnaire can be completed anonymously. However, there is a place for you to put your name. This will be required should you be willing to take part in any follow-up interviews. Your anonymity will be guaranteed.

If I take part, what do I have to do?

The questionnaire will allow you to give your views on aspects of the use of technology within the Revenues and Benefits divisions. A prepaid, addressed envelope will be provided for you to return the questionnaire.

What are the benefits (if any) of taking part?

You will be participating in a piece of research that will look at the use of technology within the workplace from the perspective of those who work with it.

What are the risks (if any) of taking part?

There are no risks to those agreeing to participate in this questionnaire.

How will information about me be used?

The data will be collected and presented qualitatively. Returned questionnaires will be used in the completion of a PhD thesis and may be used in future research where completed anonymously. All personal information held on paper will be kept by the researcher in a lockable cabinet. All information and data held on computers and portable storage devices will be password protected. Questionnaires that identify individuals will be destroyed after the completion of the thesis unless consent is given by the individual for its retention.

Who will have access to information about me?

The data collected for this study will only be accessed by the researcher, Andrew Maybury, and his supervisor, Professor Carole Thornley. This means that the researcher will protect your identity as a participant by ensuring that you remain unidentifiable in the research. Only the researcher, Andrew Maybury, and his supervisor, Professor Carole Thornley, will have access to the personal data you may disclose in the questionnaire. Any personal data will, therefore, remain confidential. If discussed in the research you and your organization will be given a false name so that you will be unidentifiable. The data from this study will be securely stored by the principal researcher, Andrew Maybury, until completion of the PhD at which time it will be destroyed, unless consent for its retention is gained from the participant concerned. All information will be held in compliance with the Data Protection Act 1998.

Who is funding and organising the research?

This research is independent and has no third party funding.

What if there is a problem?

If you have a concern about any aspect of this study, you may wish to speak to the researcher who will do his best to answer your questions. You should contact Andrew Maybury on a.d.maybury@keele.ac.uk. Alternatively, if you do not wish to contact the researcher you may contact Professor Carole Thornley, Keele Management School, Darwin Building, Keele University, Staffordshire, ST5 5BG, or via email at c.r.thornley@keele.ac.uk. If you remain unhappy about the research and/or wish to raise a complaint about any aspect of the way that you have been approached or treated during the course of the study please write to Nicola Leighton who is the University's contact for complaints regarding research at the following address:-

Nicola Leighton

Research Governance Officer

Research & Enterprise Services

Dorothy Hodgkin Building

Keele University

ST5 5BG

E-mail: n.leighton@uso.keele.ac.uk

Tel: 01782 733306

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Appendix 3: Interviews Conducted

| Interview Number | Authority | Job |
|------------------|-----------|---------------------------------------|
| 1 | А | Head of Benefits |
| 2 | А | Deputy Revenues Manager |
| 3 | А | Assistant Benefits Officer |
| 4 | А | Scanning and Indexing Clerk |
| 5 | А | Head of Benefit |
| 6 | А | Billing Clerk |
| 7 | А | Senior Benefits Assessor |
| 8 | А | Benefits Assessor |
| 9 | А | Benefits Assessor |
| 10 | А | Billing Clerk |
| 11 | А | Systems Officer |
| 12 | А | Senior Billing Clerk |
| 13 | А | Billing Clerk |
| 14 | А | Head of Revenues |
| 15 | А | UNISON Branch Secretary |
| 16 | А | UNISON Workplace Steward |
| 17 | В | Benefits Clerk |
| 18 | В | Revenues and Benefits Manager |
| 19 | В | Benefits Officer |
| 20 | В | Benefits Assessor |
| 21 | В | Billing Clerk |
| 22 | В | Benefits Assessor |
| 23 | В | Billing Clerk |
| 24 | В | Revenues and Benefits Supervisor |
| 25 | В | Benefits Assessor |
| 26 | В | Billing Clerk |
| 27 | В | Council Tax Billing Team Leader |
| 28 | В | Operations and Improvement Manager |
| 29 | В | Billing Clerk |
| 30 | В | Benefits Assessor |
| 31 | В | Benefits Officer |
| 32 | В | Recovery Officer |
| 33 | В | UNISON Branch Secretary |
| 34 | | External Software Development Manager |
| 35 | | Retired Chief Rating Officer |

Appendix 4: Indicative Interview Schedule

Senior Managers/Directors

- How long have you been in your current post?
- Where did you work prior to this?
 - In what capacity
- What changes have you seen in Revenues and Benefits?
- Can you tell me how technology has developed in these areas?
- What IT Systems are used in Revenues and Benefits, both core and peripheral?
- Can you tell me whether the systems were bought in or whether they were designed in-house, and why this decision was made?
- Can you talk me through the procurement process and the reasons the particular systems were chosen?
- Has the technology been modified since implementation, and if so why?
- Can you explain to me the organizational structure of Revenues and Benefits and how work is allocated to staff?
 - o Has this changed since the implantation of the core systems?
- How have staff numbers changed since the implementation of these systems, and do you know why?
- Has staff absenteeism increased or decreased since implementation of core systems and do you know why?
- What is the purpose of IT?
- Can you explain any staff consultation process prior to procurement of the systems?
- Can you explain whether or not these systems are used to control staff in any way, e.g. monitoring, surveillance, recording, and why?
- Are staff always aware that monitoring or surveillance is being carried out?
- Can you tell me whether and how the use of technology by staff prescribed?
- Do any staff work from home?
 - o If yes, does the monitoring or surveillance capability of the technology have any benefits for this type of work, and was it important in deciding to follow this type of working arrangement?
- Apart from the use of the core computer systems in what other ways are staff controlled?
- How is an acceptable level of performance calculated or set?
- What happens with any performance data generated?
- Has information from these systems supported disciplinary action against any staff?
- Can you explain how you feel technology used in Revenues and Benefits has affected the skills required to do the job?

- Are the skills required to do the job transferable outside Revenues and Benefits?
- Can you explain any staff consultation process that took place prior to instigating any monitoring or surveillance procedures?
- In terms of monitoring their work, are staff entitled to any privacy?
 - o Why (not)?
- Are you a member of a trade union, and why did you make the decision to join or not to join?

Middle Managers

Senior Managers/Directors

- How long have you been in your current post?
- Where did you work prior to this?
 - In what capacity
- What changes have you seen in Revenues and Benefits?
- Can you tell me how technology has developed in these areas?
- What IT Systems are used in Revenues and Benefits, both core and peripheral?
- Can you tell me whether the systems were bought in or whether they were designed in-house, and why this decision was made?
- Can you talk me through the procurement process and the reasons the particular systems were chosen?
- Has the technology been modified since implementation, and if so why?
- Can you explain to me the organizational structure of Revenues and Benefits and how work is allocated to staff?
 - o Has this changed since the implantation of the core systems?
- How have staff numbers changed since the implementation of these systems, and do you know why?
- Has staff absenteeism increased or decreased since implementation of core systems and do you know why?
- What is the purpose of IT?
- Can you explain any staff consultation process prior to procurement of the systems?
- Can you explain whether or not these systems are used to control staff in any way, e.g. monitoring, surveillance, recording, and why?
- Are staff always aware that monitoring or surveillance is being carried out?
- Can you tell me whether and how the use of technology by staff prescribed?
- Do any staff work from home?
 - o If yes, does the monitoring or surveillance capability of the technology have any benefits for this type of work, and was it important in deciding to follow this type of working arrangement?
- Apart from the use of the core computer systems in what other ways are staff controlled?
- How is an acceptable level of performance calculated or set?
- What happens with any performance data generated?
- Has information from these systems supported disciplinary action against any staff?
- Can you explain how you feel technology used in Revenues and Benefits has affected the skills required to do the job?

- Are the skills required to do the job transferable outside Revenues and Benefits?
- Can you explain any staff consultation process that took place prior to instigating any monitoring or surveillance procedures?
- What are your views on whether staff are entitled to privacy whilst at work?
- Are you a member of a trade union, and why did you make the decision to join or not to join?

Supervisors/Team Leaders

- How long have you been in your current post?
- What was your job prior to this?
- Have you seen major changes in Revenues and/or Benefits?
- Can you explain your role as a supervisor/team leader?
- Are staff organized in teams?
 - o Why?
- How is work allocated?
- Have the number of staff you supervise increased or decreased over time?
- Can you tell me about any staff participation schemes (e.g. IIP, suggestion schemes, staff forums)?
- What is the purpose of IT?
- Is the use of technology by staff strictly prescribed?
- Are the skills required to do the job transferable?
- How do you feel the use of technology has affected the skills required to do the job?
- What do you feel about the monitoring and/or surveillance of workers?
- How is technology used to monitor or check up on staff?
- How do you feel about the level of monitoring and/or surveillance you are asked to perform on staff?
- Are staff always aware that monitoring or surveillance is being carried out?
- In what ways, if any, do you monitor or check on staff without using technology?
- Do you have to pass monitoring information or statistics onto any more senior managers?
- When monitoring are any checks done to ensure data accuracy?
- How are the results of any monitoring presented to the staff?
- · How is an acceptable level of performance calculated or set?
- What happens if workers performance is deemed to be unsatisfactory i.e. what do you do?
- Are you subject to monitoring or surveillance?
 - o Is this fair?
 - o How does this make you feel towards your managers?
- Have unions raised any issues with you about monitoring or surveillance of staff?
 - o If yes, what happened and what was the outcome?
 - o How did you feel about this?
- Are you a member of a trade union, and why did you make the decision to join or not to join?

Workers (certain questions may not be asked as workers will have been asked to complete a questionnaire prior to the interview)

- How long have you worked in your current job?
- Where have you worked before working here?
- Do you work in teams?
 - o If yes, do you know how the members of your team perform?
 - o If yes, how do you know this?
 - o How does this make you feel?
- Do you ever work from home?
 - o How do you feel about this?
- Can you explain how is work allocated to you?
- As the employer is paying you to work, do you that it is fair to continuously monitor you whilst at work?
- How do you feel about your workload and how you cope with it?
- Can you tell me what you feel about the future security of your job?
- Do you feel this is in affected by new technology?
- Have you had any say in how the technology is used?
- How has using this technology affected the skills you use in your job?
- What do you think about staff participation schemes (e.g. IIP, suggestion schemes, staff forums)?
- Can you adapt the technology to allow you to work in different ways?
- Do you have access to the internet at work (officially or unofficially)?
- Have you ever been disciplined because of your use of the internet at work?
- Can you explain how your work is checked and monitored?
- Do you feel it is important for managers to monitor your work and performance?
 - o Why?
- If you have work targets set, how does this affect the way you work?
- How are the results of monitoring your work communicated to you?
- Do you feel the information used in your monitoring/targets is accurate?
- Have you ever been disciplined as a result of performance issues?
- Can you tell me about any effect that monitoring of your work has on you and how you deal with it?
- Do you know what your colleagues performance scores are and do they know yours?
 - o How do you feel about this?
- Are you a member of a trade union?
- If yes, have you taken any issues up with them about workloads, monitoring or performance?
 - o If yes, what was their response?
- How did you feel about this?

Software Suppliers

- Can you tell me what systems you provide for Revenues and Benefits?
- In terms of the market, what sort of market share does your company have?
- Can you explain the design process for the system?
- Do customers have any input into the design?
- What is the main purpose of the system?
- Are aspects of the system concerning staff monitoring and/or surveillance important for customers?
 - o If yes, are they specifically requested or specified? OR is this something that has been developed as a selling point?
 - O Why are they important?
 - o Can you explain how these aspects work?
 - Are they embedded in the system or are there separate bolt on systems?
- Can the system be modified by the user after implementation particularly in the area of performance management?
- Are any software updates inclusive of performance management aspects?
- Have the requirements for performance management systems increased over time?
- What do you think the purpose of performance management is?
- Do you know of any ways that end users can manipulate the system to adapt it to the way they work?
- Do you know of any ways that the end user can manipulate performance management systems or data?

Trade Union Officers

- Can you tell me about your background in the union and your current position?
- If there are any homeworkers in Revenues and Benefits, how has this affected organizing workers?
- Can you tell me about the union density in Revenues and Benefits, and whether it has changed over time?
- Does Revenues and Benefits have any work place stewards or representatives?
- Can you explain about any procedures that exist for consultation concerning implementation of technology?
- Can you give me the details of any agreements negotiated with the employer regarding the implementation and use of technology?
- Are members coming to the union with issues around the use of technology and if so, what are they and how do you deal with them?
- Can you give me the details of any disputes between the union and management arisen over the use of technology?
- Have the union been consulted over the use of surveillance and monitoring?
 - o If yes, what happened?
- Can you detail any agreements you have made with the employer regarding the surveillance of staff?
- Can you detail any agreements you have made with the employer regarding the surveillance of staff?
- Have any of your members come to the union with issues around the use of performance monitoring?
 - O What were these and what did the union do?
 - o What was the outcome?
- Have any of your members come to the union with issues around the use of surveillance?
 - O What were these and what did the union do?
 - o What was the outcome?
- Can you tell me about any disciplinary or grievance issues that have arisen as the result of performance monitoring or surveillance of staff?
- Have any disputes between the union and management arisen over the use of performance monitoring?
 - o If yes, what happened and what was the outcome?
- What options do you feel you have in terms of action you can take regarding the implementation and use of technology?

Appendix 5: Interviewee Information Sheet

Information Sheet:Interviews

Study Title: Technology and workplace control: A study of the use of new technology in Local Government Revenues and Benefits departments.

Aims of the Research

The aim of the research is to investigate the use of new technology in the workplace in terms of how it may be used as a tool for exercising control over workers. The study will be carried out over a number of Revenues and Benefits sites. The research will seek to determine who chooses to implement technology and why and also how it is used once implemented. This will include how technology may be used to monitor staff and how it may be used as a tool of surveillance. The research will also consider how workers may seek to accommodate, adapt or resist technology and its use in control.

Invitation

You are being invited to consider taking part in the research study "Technology and workplace control". This project is being undertaken by Andrew Maybury as part of his doctoral studies at Keele University, supervised by Professor Carole Thornley.

Before you decide whether or not you wish to take part, it is important for you to understand why this research is being done and what it will involve. Please take time to read this information carefully and discuss it with friends and relatives if you wish. Please feel free to ask me if there is anything that is unclear or if you would like more information.

Why have I been chosen?

You have been chosen to take part in this study because your employment involves working within a Revenues and/or Benefits Division. As such your experience will provide a high level of insight into the work of this division and the technology used within it.

Do I have to take part?

You are free to decide whether you wish to take part or not. If you do decide to take part you will be asked to sign two consent forms, one is for you to keep and the other is for our records. You are

free to withdraw from this study at any time and without giving reasons. There will be no consequences for you should you decide not to take part.

What will happen if I take part?

You will be asked to take part in an interview conducted by Andrew Maybury. The interview will be expected to last approximately one to one and a half hours. You may be invited to participate in follow up interviews in due course. Your anonymity will be guaranteed.

If I take part, what do I have to do?

If you take part you will be asked to sign a consent form before the interview commences. The interview will allow you to give your views on aspects of the use of technology within the Revenues and Benefits divisions. You will be free to stop the interview at any stage should anything pressing crop up, or indeed for any reason that you wish. As a one to one interview may give rise to issues around lone working it would be of benefit if the interview could be conducted at your workplace. However, if an alternative venue would be preferred, this can be accommodated and arrangements discussed prior to it taking place.

What are the benefits (if any) of taking part?

You will be participating in a piece of research that will look at the use of technology within the workplace from the perspective of those who work with it.

What are the risks (if any) of taking part?

There are no risks to those agreeing to participate in these interviews.

How will information about me be used?

The data will be collected and presented qualitatively. Interviews will be used in the completion of a PhD thesis and will not be used for any future research projects without your consent. A box is included for this purpose, on the consent form you will be asked to complete prior to the interview. Interviews will only be recorded with the consent of the participant and any recordings will be destroyed after the completion of the thesis should you wish. All personal information held on paper or on voice recording equipment will be kept by the researcher in a lockable cabinet. All information and data held on computers and portable storage devices will be password protected.

Who will have access to information about me?

The data collected for this study will only be accessed by the researcher, Andrew Maybury, and his supervisor, Professor Carole Thornley. This means that the researcher will protect your identity as a participant by ensuring that you remain unidentifiable in the PhD thesis and any resulting publications. Only the researcher, Andrew Maybury, and his supervisor, Professor Carole Thornley,

will have access to the personal information you discuss in the interview. Any personal data will,

therefore, remain confidential. When discussed in the research you and your organization will be given a false name so that you will be unidentifiable and will remain anonymous. The data from this

study will be securely stored by the principal researcher, Andrew Maybury, until completion of the PhD at which time it will be destroyed, unless consent for its retention is gained from the participant

concerned. All information will be held in compliance with the Data Protection Act 1998.

Who is funding and organising the research?

This research is independent and has no third party funding.

What if there is a problem?

If you have a concern about any aspect of this study, you may wish to speak to the researcher who will do his best to answer your questions. You should contact Andrew Maybury on

<u>a.d.maybury@keele.ac.uk</u>. . Alternatively, if you do not wish to contact the researcher you may contact Professor Carole Thornley, Keele Management School, Darwin Building, Keele University, Staffordshire, ST5 5BG, or via email at <u>c.r.thornley@keele.ac.uk</u>. If you remain unhappy about the

research and/or wish to raise a complaint about any aspect of the way that you have been approached or treated during the course of the study please write to Nicola Leighton who is the

University's contact for complaints regarding research at the following address:-

Nicola Leighton

Research Governance Officer

Research & Enterprise Services

Dorothy Hodgkin Building

Keele University

ST5 5BG

E-mail: n.leighton@uso.keele.ac.uk

Tel: 01782 733306

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Appendix 6: Interview Consent Form

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CONSENT FORM: Interviews

Title of Project: Technology and workplace control: A study of the use of new technology in Local Government Revenues and Benefits departments.

Name and contact details of Principal Investigator: Andrew Maybury, Research Institute for Social Sciences, Room CM0.18, Keele University, Keele, Staffordshire, ST5 5BG

Telephone:

Email: a.d.maybury@keele.ac.uk

Please tick box if you agree with the statement

| 1 | I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions. | |
|---|--|--|
| 2 | I understand that my participation is voluntary and that I am free to withdraw at any time. | |
| 3 | I agree to take part in this study. | |
| 4 | I understand that data collected about me during this study will be anonymised before it is submitted for publication. | |
| | | |
| 5 | I agree to the interview being tape recorded | |
| 6 | I agree that data collected may be used in future research | |
| | | |

| 7 I agree to be contacted about participation in future rese | | | earch projects | |
|--|--------------------|------|----------------|--|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Na | ame of participant | Date | Signature | |
| | | | | |
| | | | | |
| Re | esearcher | Date | Signature | |

Appendix 7: Consent Form for Quotations

CONSENT FORM: Interviews and Questionnaires (for use of quotes)

Title of Project: Technology and workplace control: A study of the use of new technology in Local Government Revenues and Benefits departments.

Name and contact details of Principal Investigator: Andrew Maybury, Research Institute for Social Sciences, Room CM0.18, Keele University, Keele, Staffordshire, ST5 5BG

Telephone:
Email: a.d.maybury@keele.ac.uk

Please tick box if you agree with the statement

| 1 | I agree for any quotes to be used | |
|---|--|--|
| 2 | I do not agree for any quotes to be used | |

| Name of participant | Date | Signature | Signature |
|---------------------|------|-----------|-----------|
| | | | |
| | | | |
| | | | |
| | | | |
| | _ | | |
| Researcher | Date | Signature | |

Appendix 8 – Ethical Clearance Confirmation Letter

SERVICES

20th December 2013

Andrew Maybury

Dear Andrew,

Re: Technology and control of workers: A case study of Revenues and Benefits departments in local government

Thank you for submitting your application for review. I am pleased to inform you that your application has been approved by the Ethics Review Panel. The following documents have been reviewed and approved by the panel as follows:

| Document | Version | Date |
|-----------------------|---------|----------|
| Summary of Proposal | 2 | 11/12/13 |
| Letters of Invitation | 2 | 11/12/13 |
| Information Sheets | 2 | 11/12/13 |
| Consent Forms | 3 | 11/12/13 |
| Questionnaire | 2 | 11/12/13 |
| Interview Schedule | 1 | 23/09/13 |

If the fieldwork goes beyond the date stated in your application, you must notify the Ethical Review Panel via the ERP administrator at uso.erps@keele.ac.uk stating ERP1 in the subject line of the email.

If there are any other amendments to your study you must submit an 'application to amend study' form to the ERP administrator stating ERP1 in the subject line of the e-mail. This form is available via http://www.keele.ac.uk/researchsupport/researchethics/

If you have any queries, please do not hesitate to contact me via the ERP administrator on uso.erps@keele.ac.uk stating ERP1 in the subject line of the e-mail.

Yours sincerely



Dr Jackie Waterfield Chair – Ethical Review Panel



RESEARCH AND ENTERPRISE SERVICES

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Research and Enterprise Services, Keele University, Staffordshire,

Telephone: + 44 (0)1782 734466 Fax: + 44 (0)1782 733740

CC RI Manager