ELECTRONIC MONITORING IN THE WORKPLACE:

TOOLS FOR SOCIAL CONTROL

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ABSTRACT

ELECTRONIC MONITORING IN THE WORKPLACE: TOOLS FOR SOCIAL CONTROL

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This thesis is an investigation of electronic monitoring and surveillance systems in the workplace and the ways these systems can be used as tools for social control. The fundamental objective of this research was to gain an understanding of the relationship between supervisory technology, information produced by the supervisory technology, and how organizations used the information. Specifically, the research focussed on the examination of factors that affected the use of supervisory technology, employee's knowledge of the technology, employer's and employee's ideas related to the technology, and the issue of social control.

Two types of financial institutions were considered: banks and insurance companies. Several theories were used to examine and provide an understanding of the need and use for electronic monitoring and surveillance. The foremost ideas taken into account were those of Taylorism, Panopticism, Foucault's Power and Knowledge argument, as well as proposed justifications regarding social control and Max Weber's ideal-typical bureaucracy. The method of data collection was survey interviews.

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A Teacher affects eternity; he can never tell where is influence stops.
– Henry Adams

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The family is one of nature's masterpieces.
- George Santayana

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Gratitude is the memory of the heart.
– Jean Baptiste Massieu

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CHAPTER 1: RELEVANCE OF THE INVESTIGATION

Sociology, a generalizing science, seeks not only to understand the nature of social relationships caught in a specific time and place but also to identify more general principles of human interaction that have applicability across a wide range of social reality. The goals of this thesis are therefore threefold. The first is to examine supervisory technology – electronic monitoring – to determine whether or not it is used as a tool for social control in the workplace. My second general purpose is to share with the reader some of my own experiences in attempting to study a specific social elite, namely financial institutions and insurance companies. My third and somewhat limited aim is to work toward a more general model for viewing the problems faced by sociologists in their attempts to study large-scale bureaucracies and those who control them.

We have progressed as a society through the industrial revolution to the information revolution. In organizations and workplaces around the industrialized world, we have progressed from labor-intensive jobs with heavy lifting to machines and tools that do it for us. We have switched from pencil and paper to keyboard and monitor. Along with the changes in the areas of production, there have been changes within management as well. Over the years, management styles have ranged from authoritarianism, to scientific management to Fordism.

The purpose of this research is to explain and attempt to understand why management has changed its supervisory techniques most recently to electronic monitoring. Many have gone from walking around the production area and supervising while interacting with workers to sitting in their offices and looking at video or computer

screens to observe the workings on the production area. Electronic monitoring in the workplace is a controversial issue, especially of late with the new electronic technology that is more intrusive, and is often seen as invasive. There are some advantages to using this technology, such as being able to catch thieves within an organization, but there are also disadvantages; this technology changes how employees feel about their work, which in turn changes how they feel about themselves.

Flaherty (1989: 1) reports that individuals in the Western world are increasingly subject to surveillance through the use of databases in the public and private sectors. Information is being collected about us at an alarming rate and he feels that these developments have negative implications for the quality of life in our society and for the protection of human rights.

Electronic monitoring is becoming more and more prominent in the workplace. For many years, managers had to rely on their own eyes and ears to evaluate how their employees performed on the job. Today, advanced technology makes it possible for managers to monitor their workers more closely with *electronic* eyes and ears which have eliminated much of the guesswork.

For the majority of people the greatest part of their waking hours is spent doing some sort of work. Be it as an assembly line worker, a sales clerk, or a psychiatrist, we derive our livelihood and a good deal of our individual identity from the work that we do. Technological change has been a major influence on the way we go about our work. For example, in offices, secretaries who used to write everything by hand were introduced to the typewriter, which made their lives easier, and were eventually introduced to the computer which made their lives even less complicated. It suddenly became much easier

to do correspondence, set up appointments, and keep track of the accounting. However, as Volti (1992: 107) points out, we should also be aware that the consequences of technological change are not always simple and straightforward.

Technology, including electronic monitoring, should be viewed as a double-edged sword. While there are benefits to organizations and workers in using this type of technology, there may also be drawbacks. As managers and workers we need to keep the goals of electronic monitoring at the forefront, whether it be to detect deviance within an organization, or whether the technology is being used as an aid in training. Workers should not have to feel like they are being spied upon or manipulated through this type of technology. Rather, they should be aware of its inception and be able to use it to their advantage.

This investigation attempts to analyze exactly how the new supervisory technology is being used, a pertinent and relevant topic in the workplace today which has important ramifications for the future.

Organization of the Thesis

This thesis is divided into seven chapters. The introduction in this chapter identifies what is meant by specific terms such as electronic monitoring, surveillance, and social control, and also provides a concise overview of the issues related to information technology. The second part of chapter one is the thesis objective; it outlines the goals of research, the main research questions and statements, causal model and operationalization of the variables.

The second chapter explains performance monitoring in the technological age, the managers' need to monitor employee performance, what technological performance monitoring is, and the many divergent issues related with electronic monitoring systems.

Chapter three explores current literature and extrapolates important elements in order to identify relevant theoretical schemas that are appropriate to my particular investigation. More precisely, the chapter is organized around the theoretical orientations proposed for this investigation.

Chapter four illustrates the series of methodological steps initiated, beginning with the sampling procedure. The next section provides a brief description of the questionnaire developed for this investigation. The final section presents the methods of analysis employed in this research.

Chapter five discusses the research limitations encountered in my research. A major obstacle that I faced was nonresponse. Reasons for nonresponse and difficulty gaining entry into organizations are discussed. Additionally, nonresponse is discussed and posed with solutions to this common methodological problem.

Chapter six presents the findings and results of the study. More specifically, a collection of the highlighted points from the literature review and the questionnaire as they relate to my predictions, research questions and statements are summarized.

Chapter seven includes a discussion of the research, as well as a summary of the research, implications for the workplace and suggestions for future studies and research.

Thesis Objective

Due to the importance of information technology for workplaces in the 21st century, one of the objectives of this study is to examine the form of information technology and supervisory techniques among two financial institutions: banks and insurance companies. This objective will be accomplished by investigating the effects of electronic monitoring in the workplace. In order to understand the adoption conditions and reasons why institutions are using this type of information technology, this study specifically addresses the following research question: Is workplace surveillance by computer a by-product of computerization for other purposes more so than being the original purpose of management planning?

This question is especially important for ascertaining the future use of information technology and its effects in the workplace. Ultimately, what is the driving force behind management's decision to use Computer Performance Monitoring (CPM) or any other type of surveillance? Is it to stop theft, to increase productivity, or to spy on employees? Does it improve decision-making? Does it provide better performance feedback to employees? Is the objective data provided by a computer more valuable than subjective performance evaluations?

The issue my research attempts to explore is not the existence of social control as much as determining its precise nature, and identifying the mechanisms at work in a particular context – the workplace. Who exercises control? What techniques of control are employed? In whose interests does control operate?

Research Problem

Management is asserting social control onto workers through means of electronic monitoring and or surveillance - that is, monitoring and supervision of populations for specific purposes. In this instance electronic monitoring can be defined as any type of workplace surveillance, including by camera, over the phone line, and through the computer. Social control in this instance will mean taking the information gathered from monitoring practices and using it in some way to change the behavior and actions of employees to more closely fit with managerial goals.

Main Research Questions and Statements

My main research questions start off as general and move to more specific statements that I expected I would be able to answer and or address through my research. My main research questions and statements, as used in the formation of the research instrument, are:

1) Do the employees know that they are being electronically monitored or that they are under surveillance?
1a) Those employees who agree that monitoring, as a measuring tool, is valid and acceptable will have positive attitudes towards monitoring.

2) How invasive are the forms of supervisory technology?
2a) Electronic monitoring/surveillance encourages Weber's bureaucratization and rationality: efficiency, calculability, and objectiveness.

3) Do managers use monitoring technology as a form of social control?
3a) Companies use electronic monitoring to increase production.

4) What is social control?

4a) The more pervasive the supervisory technology, the more control management will have over the employees.

5) How is social control achieved through technological supervision?
5a) Electronic monitoring encourages obedience on the part of employees.
5b) Electronic monitoring uses uncertainty as a means of control.
5c) Electronic monitoring provides a means to direct attention to important aspects of organizational performance.

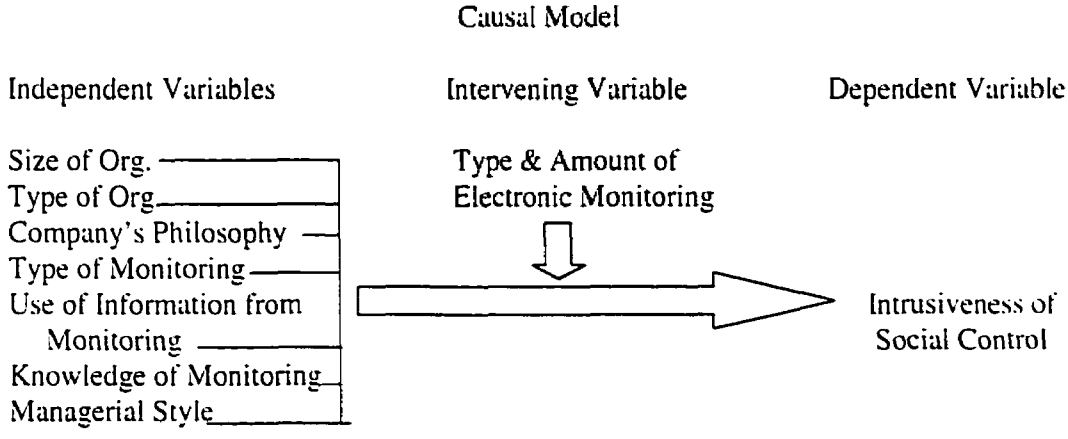
6) Do managers feel they cannot trust their employees?
6a) Workplace surveillance by computer is more often a by-product of computerization for other purposes than it is the original purpose of management planning.
6b) Electronic monitoring in the workplace is often put in place to deter any further loss to the company, after an initial loss has been suffered.
6c) Electronic monitoring reduces the possibilities for covert and insincere actions by employees.

7) Are managers crossing the privacy border?
7a) Electronic monitoring is panoptic and makes workers transparent under the watchful eyes of management.

Figure 1 illustrates the relationships between my independent, dependent and intervening variables. Table 1 provides the operationalization of the independent variables.

Causal Model

Figure 1: Electronic Monitoring and Social Control



**Type refers to whether an organization uses electronic monitoring and or surveillance.

In relation to my causal model, managerial styles is an important variable which may influence the amount of social control as well as the intrusiveness of social control that may occur within a workplace. According to Freidman (1977:78) there are two managerial styles; the first is termed Responsible Autonomy and the second is Direct Control. Direct Control as he defines it speaks directly to my topic in that it involves the close supervision of workers which limits not only workers' labour power, but also the scope of their job and its responsibilities. Workers have less power over their work and their environment if they are under close supervision, and direct control by their managers. "Direct Control type of strategy tries to limit the scope for labour power to vary by coercive threats, close supervision and minimizing individual worker responsibility" (1977:78). Close supervision is the key term here and that is what many managers are attempting to do today with electronic monitoring, to gain more control over their employees by giving them less autonomy. Employees experience uncertainty in terms of supervision. They could be monitored by their computer, by their manager or recorded and watched on video cameras. If they are being watched or supervised they must then act in an appropriate manner - a manner that is encouraged and expected by management. In other words, the uncertainty that employees are faced with causes them to behave in a certain manner while at work, and management is manipulating the employees through these technological supervisory systems which gives management direct control over employees.

Operationalization of Variables

Table 1: Operationalization of Variables

Construct/Variable Name	Operationalization
1. Size of Organization	1. Size of facility 2. Number of employees
2. Type of Business	1. Banks 2. Insurance Companies
3. Company's Philosophy	1. Restrict Monitoring 2. Allow Monitoring
4. Type of Monitoring	1. Electronic monitoring 2. Surveillance
5. Use of Information from Monitoring	1. Training 2. Evaluation
6. Knowledge of Monitoring	1. Have no knowledge 2. Have knowledge
7. Managerial Style	1. Responsible Autonomy 2. Direct Control

These are the questions and variables that motivate this thesis. I have examined the current transformation of work and managerial supervisory roles now being propelled by electronic technology in order to specify the social control of work and workers and to identify the factors that have effects on the organizations in general.

CHAPTER 2: BACKGROUND AND OVERVIEW OF SUPERVISORY TECHNOLOGY

Business and industry has always monitored and surveilled its workers. Before 1913 there were mechanical keystroke counters ("cyclometers") for typewriters, and assorted methods for measuring typing output. Telephone operators have had their calls listened to, and their speed measured, since the 1920s (Attewell, 1987:90). However, what makes the present situation unique, is the sheer scale of the monitoring, the extent to which it is unobtrusive as well as the capabilities of modern technology for the "storage, analysis, and reporting" of the gathered information.

Through advanced computer technology, managers can now continuously monitor employees' actions without the employee even knowing that he or she is being "watched." The computer's eye is unblinking and ever present. Sophisticated software allows every minute of the day to be recorded and evaluated. Human workers are being tracked like machines by machines.

As we enter full speed ahead into the information age, some managers are using new technology to spy on their workers, showing a blatant disrespect for their employees' right of privacy (Bylinsky, 1991: 133). There is almost no limit to what an employer can do in watching its employees. An employer may tap an employee's phone line, may watch his or her employees through a secret camera, may read his or her employee's electronic mail, may search through his or her employee's computer files, all of this without the employee's consent. The employee does not even have to be informed that they are being monitored.

During the past several years, there has been a growing trend among managers to monitor the actions and performance of their workers through technology. Concerns about employee productivity, quality of work, employee theft or misuse of company property, unlawful drug use, and other factors potentially affecting employer productivity, combined with technological developments, have increasingly led managers to use new ways to monitor employee performance. Managers want to be sure their employees are doing a good job, but employees do not want their every sneeze or trip to the water cooler logged. That is the essential conflict of workplace monitoring. New technologies make it possible for managers to monitor many aspects of their employees' jobs, especially on telephones, computer terminals and through electronic and voice mail. Such monitoring is virtually unregulated. Therefore, unless company policy specifically states otherwise, an employer may listen, watch, and read most workplace communications.

At present the bulk of electronic performance monitoring (EPM) takes place among clerical workers in financial services, insurance, telecommunications, federal and state government, and occupations that require extensive customer service using the telephone - i.e., airline reservation clerks and telephone company operators (Brookes, 1996: 10).

The characteristics of these occupations are that the work is of a routinized nature, divided into discrete and measurable units; workers generally require little training and consequently there is little difference between experienced and inexperienced workers. Generally, there is an ample labor supply and to collect data on them is straightforward.

However, as the means of monitoring becomes more sophisticated the scope of its reach widens.

The remainder of this chapter outlines what technological performance monitoring is, the different types of monitoring and what the monitoring does, the need to monitor employee performance, and the issues associated with electronic monitoring systems.

What is Technological Performance Monitoring?

Technological performance monitoring which is also described as *supervisory technology*, can be categorized for the purpose of my research into two main types of monitoring. The first is what I refer to as *electronic monitoring* and the second as *surveillance*. Essentially supervisory technology refers to the technology used to monitor work and workers.

The International Labour Office (ILO) (1993:12) defines technological performance monitoring in the following way:

> The kinds of practice at issue include those that use some type of mechanical device to obtain information on employees, primarily computers, telephones, video cameras and other audiovisual technology. The kind of information obtained involves employee performance in general, and how employees measure up to pre-set standards, movements, activities and behaviour of employees at work, and the discovery of wrongdoing by an employee.

The terms monitoring and surveillance are separate terms that tend to overlap. On the one hand, for the purpose of this study monitoring is indicated when it is in relation to performance. On the other hand, surveillance implies observation of activities which is

often carried out in secrecy. An example of an overlap would be a case in which performance monitoring is also done secretly by listening in on employee conversations, for example, while dealing with a customer to assess the employee's customer service relations.

Electronic Monitoring

Baarda (1994: 5) defines CPM as a form of electronic monitoring. Although many have speculated that CPM is just another form of supervision in the workplace, Gary Marx (1985: 30) has produced a list of characteristics that shows how it differs from the traditional form of supervisory monitoring. The list makes it evident that CPM is indeed not just another form of workplace monitoring and this may be an issue that deserves a closer examination. Marx asserts that CPM:

- Transcends distance, darkness, and physical barriers;
- Transcends time; its records can easily be stored, retrieved, combined, analyzed and communicated;
- Is capital -rather than labor- intensive;
- Begins a shift from targeting a specific suspect to categorical suspicion (suspecting everyone);
- Has a major concern - the prevention of violations;
- Is decentralized and initiates self-policing;
- Is either invisible or has low visibility;
- Is ever more intensive, probing beneath surfaces, discovering previously inaccessible information;
- Grows ever more extensive, covering not only deeper, but also larger areas.

Clearly Marx outlines some facets of CPM that are questionable in terms of supervising work and not workers. CPM and other forms of electronic monitoring can have both

advantages and disadvantages for managers and employees depending on what the purposes for which information being gathered by the system is used.

Surveillance

In terms of surveillance alone, "Giddens argues that surveillance involves two activities: the accumulation of coded information and the exercise of direct supervision. Surveillance is a means of administrative power, and as such, is a means of establishing 'power containers'. Power containers are defined as 'circumscribed areas for the generation of administrative power'" (Dandeker, 1990:32). In other words, in the echoes of Foucault, (1986) surveillance or knowledge equals power. Managers using surveillance have an abundance of knowledge, in turn giving them an abundance of power over their employees.

Giddens (1990:33) states that although surveillance is a generalized characteristic of almost all social systems, its importance as a device of societal integration or harmony reaches its highest point in the age of modern capitalism. The way surveillance of individuals, especially workers, is conducted is crucial. If it is covert or unknown, it takes on a negative or distrusting connotation, and workers may think that they are being spied upon. However, if the purpose of surveillance is introduced and explained, people will more likely have a positive or neutral attitude towards the system.

Dandeker (1990:38) defines and explains surveillance in more detail:

> In a general sense, surveillance activities are features of all social relationships. The exercise of surveillance involves one or more of the following activities: (1) the collection and storage of information (presumed to be useful) about people or objects; (2) the supervision of the activities of people or objects through the issuing of instructions or the physical design of the natural and built environments. In this context, architecture is of significance for the supervision of people – as for instance

> in prison and urban design; (3) the application of information gathering activities to the business of monitoring the behaviour of those under supervision, and in the case of subject persons, their compliance with instructions. (Surveillance activities need not always be linked with relations of supervisory discipline; information gathering may simply be the means of constructing knowledgeable courses of action in relation to persons or objects, which are autonomous from supervisory control. Military intelligence gathering by one state in relation to another normally takes this form.) However, here surveillance as information gathering as a supervisory discipline is to be considered as mutually reinforcing. When these activities endure over time they can be said to comprise the administrative basis of a relationship of domination between ruler and ruled. In this context, surveillance is not simply an aspect of all social relationships but an administrative means of reproducing a social system of rule.

Although in my research surveillance did not turn out to be used as much as electronic monitoring, the consequences of using this type of system are the same in controlling employees through electronic supervision.

In summary, this section has outlined the differences and similarities of electronic monitoring and surveillance. Each was described according to differing and consensual definitions found within the literature. Both types of supervision bring me to the same conclusion that they can be used as tools for social control. If employees perform or act differently because one or both systems are in place, then management has gained control over their employees and their employees' work processes.

Performance Monitoring in the Technological Age

> *Machines are worshipped because they are beautiful, and valued because they confer power; they are hated because they are hideous, and loathed because they impose slavery (Bertrand Russell, 1928).*

Workers were supervised long before the development of electronic monitoring technology, but because managers were personally involved, it was accepted. They had to leave their office to check on the worker's performance and this often enabled fellow employees to warn targeted workers that their manager was on his or her way. Since the introduction of electronic monitoring, supervision no longer intervenes with the workflow, nor do workers get a warning as to when they may or may not be watched. Statistics on keystrokes, or phone call log information are collected unobtrusively from the manager's own computer where, to all appearances, electronic monitoring seems like a derivative of the work (Garson, 1988: 223). Still, the goal of modern management - to dictate exactly how a worker does his or her job and to make him or her accountable for every minute of the working day - is irrational. Should an employee be held accountable for *every* minute of the working day? Should this be a reasonable goal of modern management? Accountability is sometimes defended in terms of efficiency or productivity, but its only consistent objective is control for the sake of control (Garson, 1988: 169).

The first forms of electronic monitoring and new modes of industrial management came about when early industrial managers wanted to control large numbers of people in the workplace without using physical force, as was often used in the past. Laborers entered into a contract with managers to attain a living. Managers in turn kept a close watch over their employee's activities and monitoring became a means to discipline. Within this arrangement the workers had the freedom to dispose of their labor-power in whatever circumstance that they chose, while the employers were content in having this

productive and hopefully docile labor force upon which they could keep their eye (Lyon, 1994: 121-122).

Today our new electronic technology consists of a computer hierarchy. Computers control work processes generated by other computers. To control operations of work, we simply have to change a computer program. In the past, whilst still dealing with industrial and mechanical operations, it would take an entire redesigning and re-tooling to accomplish the same thing. This new electronic technology that is being experienced in industries all over the world, including banking and insurance companies, has expanded technical control and made it much more powerful (Simpson, 1999: 68). "Computer technology has spread across diverse industries, including textiles, travel, law and medicine as well as information-based industries such as banking and insurance" (Simpson, 1999: 51).

Computer technology, especially electronic monitoring and surveillance devices are giving management more constant and innovative ways to supervise employees. The ILO (1992:31) contends that modern electronic equipment has opened up new prospects for the control and surveillance of achievement at work. The report asks, how far can the technologies be weighed as legitimate tools of personnel management or, on the contrary, do they encompass an inadmissible invasion of privacy and form of pressure? Each organization, then, must decide how it is going to use the new form of technological supervision - keeping in mind how much information is now available to it and how it handles the information.

The ILO (1993: 9) goes on to point out that:

> Traditionally, employers assume some degree of control over employees related to productivity, safety and security, and the confidentiality of proprietary information.

> However, the monitoring and surveillance techniques available as a result of advances in technology make methods of control more pervasive than ever and raise serious questions of human rights.

There is a wide-range of possible monitoring devices and techniques open to the modern employer. Computer-based monitoring automatically records statistics about the work of the employee who is using a computer. This is particularly prevalent with data entry operators, as it allows the employer to count the gross number of keystrokes, the number of minutes on the machine, gross keystrokes per hour, stroke rate for each job, the number of jobs, and the number of corrections of errors (Danaan 1990:18). An important element of the whole process of data collection is that statistics can then be used to compare and evaluate employees.

This type of monitoring of employee performance is often used in conjunction with telephone service observation. While a manager may be listening into the actual telephone conversation, the computer captures information about the length of the call, time between calls, and the number of calls taken in a specific time period. Apart from its use in evaluating employees, such systems enable the employer to implement a distribution system which automatically transfers calls to free operators (Bylinsky, 1991: 134). An additional telephone-based form of monitoring is telephone call accounting systems that automatically calculate the time, duration, and destination of a call.

Another trend is the monitoring of desktop computers. An ad for *CloseUp* networking software exclaims: "look in on Sue's computer screen . . . In fact, Sue doesn't even know you're there! Hit a key again and off you go on your rounds of the company. Viewing one screen after another, helping some, watching others. All from the comfort of your chair" (Bylinsky, 1991: 135). Networking Dynamics Corporation of Glendale

makes Peek and Spy - "Peek" requires employee approval whereas "Spy" does not. American Airlines installed remote-screen monitoring software to supplement its listening operations at Dallas-Fort Worth. This additional capability allows managers to monitor data entry as well as the actual telephone conversation (Bylinsky, 1991:137). It would seem that as Local Area Networks (LANs) proliferate in the workplace the potential for this type of monitoring will be greatly enhanced.

The final types of monitoring are those that can determine an employee's actual location using a badge worn by the employee, or through video monitoring. These types of devices as well as others and what each type of supervision does is discussed in further detail throughout the remaining sections of this chapter.

Types of Performance Monitoring Technology

Supervisory technology continues to evolve and expand. Depending on the type of supervision or amount of control an employer wants within his or her organization, an appropriate type of technology is chosen. As described to me during interviews with Rick Snook from Brass Security and Bob Thiesburger from Counterforce (Security Systems), there is a wide range of electronic monitoring and surveillance technologies available to managers today. We discussed, for example, surveillance cameras, covert and non-covert, with audio and without audio capacities. Cameras are wide-ranging in their capabilities: some cameras only record when there is movement in the area at which it is directed, while others record the area constantly. The employer may have the video recording device within the organization; they may have televisions so they can observe

the activity as it occurs, or they may have to view the recording at the end of the day; they may do this in their organization or from a remote location. Cameras may look like regular video cameras, or they may be of a covert nature and appear to look like a thermostat, a motion detector, a clock, or almost anything. Employees may or may not know that the cameras are operating and when and how much they can detect. Some managers have requested security companies to install the units after hours. Whether the employer chooses to divulge this information to their employees is not known.

In addition, there is a relatively new system in production known as a Remote Telephone Video Surveillance and Security System, which allows managers to watch and listen to employees from a remote location. Managers can do this through a phone line or through their own computers that can see and hear video and audio clips that report what is happening in their organization. This device has many uses as indicated by the literature. It has the ability to check remote warehouses, watch production lines, detect employee theft, vandalism and so forth. The devices used vary from still and motion sensitive cameras to more covert devices such as cameras that are hidden in objects that appear to be something they are not (Ontario Ministry of Labour, 1979:3).

Both interviewees from the security firms indicated that usually an organization begins with primitive forms of monitoring and as their needs change, they tend to upgrade to more invasive and constant monitoring techniques. According to the two security personnel interviewed, the majority of the reasons why organizations use this type of technology is to prevent loss to the organization through employee theft, to detect deviant behaviors displayed by employees (drug taking, drinking alcohol, and inappropriate behaviour), and to watch productivity. A common reason for an

organization to invest in this type of technology is usually to target and stop a *particular* behavior of its employees such as theft, or inappropriate behaviour (sexual harassment), by observing specific actions in specific places within the organization.

The ILO (1993: 3) warrants that:

> Electronic technology is used increasingly in worker monitoring and surveillance, which can be done without the employee's knowledge. Computer-based and telephone monitoring, video surveillance, and the use of listening and tracking devices are among the more common types. Such monitoring and surveillance can be a source of fear and anxiety when used to exert excessive management control and to coerce workers to meet unrealistically high work standards. Many workers feel pressure and intimidation from the feeling of being watched constantly.

In interviews conducted with the managers of the security companies, they also indicated the same notions as the ILO and explained how technology played a role in the controlling or manipulating of employee behaviour in the workplace today.

There are a number of characteristics and components of electronic technology in the workplace that have been identified. Roger A. Clarke (1991:497) describes the basic form of surveillance as physical surveillance: watching and listening. He describes electronic surveillance as including physical surveillance (audio bugs) and communications surveillance such as telephone taps. These categories illustrate the most rudimentary and first forms of surveillance used compared to the forms used today which are often elaborations on the old as well as new inventive forms of supervision.

Today, work can be monitored in a number of ways that may be classified within Clarke's categories of physical and communications surveillance. An example of this is phone use. Monitoring technologies can record information such as to whom the phone call was made, the content of conversation, the duration of the call, and how often employees use the phone (Bylinsky, 1991:131). Managers can record conversations, or

simply listen in on conversations. This can be done sitting beside the employee or from a distance and it can be done without the employee ever knowing that it is taking place. Another example of physical or communications surveillance is the monitoring of keystrokes which keeps track of computer utilization time as well as logging on and off times. Managers can log onto their employees' computer screen now without their employee ever knowing and can see from their own desk what their employee is doing. In addition, many managers use video cameras to record their employee's actions (Bylinsky, 1991:132).

According to the report undertaken by the Office of Technology Assessment (OTA) (1987: 1), there are three types of monitoring that differ somewhat from Clarke's categories noted above. The first is "computer-based monitoring" or "electronic monitoring" which records statistics about the work of employees using computers or other telecommunication equipment throughout the course of their jobs. These statistics would include items such as the number of keystrokes, types of transactions completed, or time spent on each transaction. The second type is "service observation" which lets managers listen in on an employee's conversation with a customer to check on such things as courtesy and correctness of information in order to assess quality assurance. This type of monitoring is not automatic, but requires a human to do the actual listening albeit with the assistance of a computer. Service observation is often used in conjunction with other computer-based systems which collect information about the calls, their duration, and types of transactions engaged in by employees. This type of technology is completely silent, so neither the employee nor the customer knows when a manager is listening. The last type of monitoring is referred to as "telephone call accounting". This

type of computer monitoring/'surveillance' records the length of each call as well as the destination of each call. It can be used to manage telephone costs by perhaps reducing the use of personal calls by employees (OTA, 1987: 1).

There are other types of monitoring/surveillance programs in the workplace that measure the flow of information traffic and adjust the employees' schedules around them. For instance, one type called Forced Administration Data System (FADS) plans employees' lunch and coffee breaks. It also allows a manager to check on how much traffic has been handled by each operator in the American telephone and telegraph industries (Rybczynski, 1983: 65). In addition, there is another type of monitoring/surveillance system called Traffic Service Position System (TSPS). This is a computer program that routes long-distance telephone calls. It randomly times an operator for a half an hour twice a week. It measures the operator's average working time and determines how long it took the operator to answer a particular call. Thus, the machine knows when an operator turns off his or her handset, or puts it on busy or if it is left unattended. This in turn leads employees to conform to management norms (Rybczynski, 1983: 65).

Yet another type of surveillance/monitoring program that exists is described by Baarda (1994:1) and it is called Computerized Performance Monitoring (CPM). This is a new form of management supervision and control made possible by microelectronic technologies developed during the past few decades. Baarda (1994: 1) found that management generally feels that CPM leads to increased workplace productivity and that the system falls completely within the bounds of the residual rights of management for the purposes of collective bargaining. Meanwhile, workers are concerned about its effect

on the quality of working life and on workplace privacy. Many unions have taken action on CPM, but their progress has been frustratingly slow and legislation lags behind the development of many of the new technologies described thus far.

Baarda (1994: 2) explains that management uses the information collected through CPM in an attempt to preserve desired productivity levels, and thus in some ways, CPM is not unlike other familiar forms of workplace control. Baarda (1994:4) further notes that "The use of computers by managers and professionals leads to greater standardization and routinization of their work, and this, in turn, makes it more susceptible to CPM". However, CPM and other supervisory technologies are different forms of control. They are different in the sense that there is no human element; all monitoring is done by machines and employees may never know that someone, or something is watching them or evaluating them. There is a huge difference here in regards to this type of monitoring and conventional methods of monitoring, especially with regard to personal privacy. Baarda (1994: 5) concludes that "Ultimately the pursuit of increasing productivity is the driving force behind management's decision to use CPM".

It can be seen from the foregoing that anyone who uses a computer at work today could be subjected to being observed or could potentially be a target of CPM or any other form of supervisory technology. What has been described does not do justice to the many forms of monitoring and surveillance devices created and used, however, it provides a general overview of supervisory technologies.

What Electronic Monitoring and Surveillance Systems Do

From the information examined thus far, I can determine that the improvement in data-processing and monitoring technology have significantly extended the capacity of the employer to accumulate, store and process information associated with individual employees. Such information may be collected without the employee's knowledge and may be used for purposes other than those it was originally intended for.

The ILO (1992:10) has pointed out that:

> Automated, computer-managed information systems may at first be seen only as a new and better way to realize old aspirations. But the use of computers entails more than an astonishingly accurate processing of an equally astonishing quantity of data. The retrieval undergoes a clearly qualitative change, especially from the employees' perspective. Never before was there a chance to survey employees so thoroughly, to trace so minutely their individual profile and to categorize them totally for the purposes of the employer. The price of computerization is that the employee has become vulnerable to an unprecedented degree.

At the same time, surveillance is equally invasive as electronic monitoring techniques, and along with new surveillance technology management, managers can watch just about anything. As noted previously, cameras are currently being produced not to look like traditional cameras, but to appear as a thermostat on the wall in the lunchroom. Cameras may be hidden or be right out in the open: cameras may be running all the time or only at certain times. Employees can even be monitored while their managers are at home or at another remote location through what is called Remote Audio Visual Technology. Between cameras and other electronic monitoring accomplished by computers, employees could virtually be watched and data collected on them from the

time they walk through the organization's doors until the time they leave the organization at the end of the day.

Overall, managers now have the ability through expanding technology to take their supervisory powers to new levels. Never before in history have there been the tools available to collect so much information on so many individual workers. It is important that we monitor those doing the monitoring of workers in order to assess if they are indeed collecting information and using it appropriately.

Present-day technology can essentially alter the organization of power in Canada and with it our conservative conceptions and experiences of individual autonomy, security, privacy, and due process. In general, this can be seen in the relationship between individuals as in the case of employees and organizations (Laudon, 1986: 3). According to Deetz (1998:152), electronic monitoring and surveillance can lead to unnecessary conformity and one-sided identities and relations.

Marx and Sherizen (1986:64) further suggest that monitoring has become much more invasive in that management does not always inform the employee they are being monitored. This new hi-tech system operates outside of the work setting as well. For instance, it is possible to monitor a person working from home on a company computer or a person traveling in a company car away from the central office.

Volti (1992: 148) found that with personal computers and modern communications equipment, it is possible for workers to go about their assignments while far away from the central office. Their managers need not worry about personally supervising their work performance because it can be electronically monitored.

Lyon (1994:130) confirms that no occupation is immune from electronic monitoring when computer technology is utilized in an organization, the significance of which should not be underrated. The space-binding capacity of electronic technologies even diminishes the significance of the location of work. This can be seen in the form of monitoring truck drivers, taxicabs, and those employees who work from home. If you are connected to a computer, it does not matter where one is located since one cannot get away from one's boss. Everything that you do may be taken into account at some point. Baarda (1994:2) agrees and notes that: "...the degree of control has intensified, as more activities performed by workers in an increasingly wide variety of jobs are being measured".

Some concepts, ideas, and questions noted by Rule (1996:67) that we must keep in mind with regards to electronic monitoring and surveillance are as follows:

> How are the forms of surveillance implemented by computing and other novel technologies *different* from face-to-face patterns of surveillance long familiar in work relations? Are they inherently more intrusive? Are they distinctively more degrading? Does the ability of the new technologies bring about an *absolute* rise in the level of workplace monitoring?

Why is there such a strong desire from managers to monitor their employees? The following section attempts to answer this question and those noted above.

The Need to Monitor Employee Performance

The purposes of monitoring in the workplace vary according to the type of technology used as well as the specific reasons why an organization must employ this type of supervisory technology. The reasons can be any one or more of the following: to ensure productivity and competitiveness; to allow for quality control and customer

service; to comply with laws and regulations; to assist in training and supervision; to ensure a safe and secure workplace; and to protect employer property and assets (ILO, 1993:17). Volti (1992: 80) suggests that: "The decision to adopt a technology represents a firm's assessment of the likely benefits accruing from the use of the new technology, weighed against the uncertainties that attend its use and the speed at which these uncertainties can be dissipated".

Dandeker (1990:64) feels that in a modern capitalistic society, such as Canada, bureaucratic monitoring is made up of a combination of control over employees as well as on behalf of employees. It can work either way, for or against, depending on who is holding the power and in the way in which they would like to utilize it.

Employers use electronic monitoring for different reasons, however, there is obviously a need for closer supervision of workers. A response to this need depends on the form of supervisory technology selected. Nonetheless, Volti (1992: 6) indicates that technology does not always act as an answer to existing needs; a new technology may in fact create its own needs. Does the growing organization of today lend itself to monitoring? In other words, with companies growing larger and more dispersed today, is it necessary to have electronic technologies in place in order to maintain some regulation? For instance, what about those working from their homes? How does management keep track of their work? Electronic monitoring is one solution to this dilemma. Management can supervise an employee at home by logging onto their employee's computer screen. In this way a manager can tell if it was a wise idea to let this employee work from home. The need to supervise and control work is being met with new technology.

Furthermore, Rule and Attewell (1989: 227) argue that technologies and the social practices into which they are embedded, create the "needs" to which the only warranted response is more rationalization and further technological innovation. In other words, we are back to the same question: does technology create monitoring, and the practices that go along with it, or do traditional forms of monitoring simply provide an advantage with new technology? Either way what the latter suggests is that once the new technology is in place, managers need more and want more, and hence, the need for further adoption of new technologies. As an example, monitoring might have started out with simple surveillance cameras for theft purposes, but when management realized their potential they may have been upgraded with audio as well as being placed in more areas of the workplace. In addition, workers may have been monitored at work, but when management realized the far-reaching capabilities of the monitoring systems, they allowed employees to work at other locations such as at their homes knowing full well that they still have the ability to adequately supervise their employees.

What brings monitoring to organizations?

Dandeker (1990:63) described the increase in size and breakdown of a large organization into much smaller firms and subsidiaries; hence the need for monitoring to control and supervise those far from the main office, or far from the main power. This is an account of external forces. This was also evident in my research findings - respondents indicated that the sheer volume of employees and clients made it difficult to monitor employees in the traditional way.

Employers introduce electronic monitoring equipment for various reasons, but essentially as an extension of limited human capabilities. Whether the purpose of the monitoring is security (e.g., to deter theft), health and safety (e.g., to monitor safety control) or controlling automated processes (e.g., time and motion study), such monitoring is usually an attempt to increase the duration and dependability of supervision (Ontario Ministry of Labour, 1979:4).

Internal forces, or pulls for closer supervision, originated in the birth of scientific management. Dandeker (1990: 64) feels that, "since that period, *[scientific management]*, the managerial monitoring of the labour process has extended beyond that area of work and roles are more narrowly conceived. Firms have sought to extend their monitoring powers into the social and psychological context of workers' lives, particularly in the spheres of 'morale' and career regulation". Dandeker suggests that managers use this new form of supervisory technology to do more than just account for productivity gains and losses.

Lyon (1994: 125-126) argues that new styles of management are progressively more dependent on the use of new technologies and that employees are subjected to intensified forms of monitoring. Workers typically find themselves more watched, not just by managers but by workmates and, in a sense, by themselves. This may be a latent function of monitoring.

In sum, it seems clear that a majority of organizations today feel they require supervision of employees and many rely on one or more forms of electronic monitoring. Whether it is because an organization is growing beyond the boundaries of typical traditional supervision or whether an organization wants closer and more precise control

of organizational affairs, far many more organizations than not, are employing some form of electronic monitoring. The concern that remains are the outcomes of this type of supervision. We do not know all the elements that are associated with the repercussions of many such monitoring technologies. Some of the repercussions and issues associated with supervisory technology are outlined in the following section.

Issues Associated with Electronic Monitoring Systems

There are several issues to be taken into consideration when management decides to implement any form of supervisory technology. The issues that I have outlined are those that appear most significantly throughout the literature. The issues are the following: management style, trust, risks and danger, privacy and power, and control that management can exert over employees. All of these issues are at the forefront when dealing with any form of supervisory technology.

Management style would indicate whether or not management decides to use electronic monitoring as a form of supervisory technology, what type, and how they intend to apply it as well. The relationship between management and the employees is also integral to this decision making. Of course the issue of trust comes into play, but does management trust their employees? If so, why the need to install such investigative forms of supervisory technology? Does management foresee risks and dangers to the company or to the employee, and is that why management has installed surveillance or electronic monitoring? The privacy of employees must be taken into consideration when installing electronic monitoring devices. Management has the responsibility to not

infringe on employee privacy. Lastly, the most important question is does supervisory technology (surveillance and electronic monitoring) indeed give management more control over their employees? Since there are consequences to all our actions as human beings, I contend that management needs to address the above issues and consequences when dealing with supervisory technology.

Baarda (1994: 24) points out that CPM and any other type of electronic monitoring within the workplace is often seen as contentious technology that involves many in debates regarding management rights, employee rights, good management practices, technological progress, and the social good. Many researchers reject the idea that CPM and other monitoring techniques are evil in themselves and they argue that it is corrupt management and poor implementation which precede negative consequences. Others believe that the power and control available through CPM and other monitoring techniques may be too much for anyone to handle in a truly advantageous way.

Along with this the ILO (1993: 19) contends that while employers tend to put forth business training and coaching purposes and security related reasons for monitoring, dissatisfaction with monitoring is based on the intrusive nature of the practices on the privacy and integrity of the workers. Objections are also raised concerning the manner and process of carrying out such practices.

In a report by the ILO (1993:20), there were five main objections raised with regards to electronic monitoring within the workplace. The most important and relevant of the five to my study was the last one which stated that: "Monitoring and surveillance involve both issues of exercising control over workers and control over data relating to specific workers". Hence, the issue of control is critical. The more knowledge

management has about its employees and their work, the more control management has over the work process and subsequently over employees.

Management Style/Supervision

The ILO (1993: 11) points out that the type of work within an organization and the organization's management style continue to be indicators of the type, implementation and use of electronic monitoring. When organizational structures rely on a division of labour which places basic knowledge about the production process in the hands of managers rather than on individual workers, the need for coordination, control and systematization of work is increased. By using new forms of supervisory technologies, such as secret electronic monitoring, there can be an association with a negative, controlling style of management. In the past workers or foremen held considerable control over their own work, however, with the growing work force there becomes a growing demand from management to be in control. The more restrictive the management style and the more numerous the employee levels, the more supervisory technologies are employed in the workplace today. In accordance, Baarda (1994:4) points out that "The use of computers by managers and professionals leads to greater standardization and routinization of their work, and this, in turn, makes it more susceptible to CPM".

Trust

The issue of trust, or lack thereof, is a large problem when discussing electronic monitoring within the workplace. "Trust, in short, is a form of "faith," in which the confidence vested in probable outcomes expresses a commitment to something rather than just a cognitive understanding" (Giddens, 1990:27). Trust in the workplace is something a manager has affirmed in his or her employees, and in turn, employees have also affirmed trust in their manager or place of work. Both have developed a sense of trust in each other, a commitment to each other to behave in certain ways. In simpler terms, employees have become aware of what is expected of them. For instance, they have been trusted by their managers not to steal from the company or organization. In return, the employees have placed trust in their managers not to treat them unfairly. Employees are under the impression, for the most part, that they can be trusted and also that they have a sense of security while at work.

"The term 'mistrust' applies most easily when we are speaking of the relation of an agent to a specific system, individual, or type of individual. In the case of persons, it means doubting or disbelieving the claims to integrity their actions embody or display" (Giddens, 1990:99). In other words, managers may not believe in or have faith in their employees to perform their job as prescribed. They may mistrust the authenticity of the integrity that employee's display to them through their words and actions.

According to Luhmann, trust should be closely related and understood in relation to risk, a term he declares only comes into being in the modern epoch (Giddens, 1990:

30). It makes sense that if managers equate trust and risk and they have trust issues at work, then the need for electronic monitoring to perhaps reduce the risk is identified.

Giddens (1990:33) outlines ten separate points about trust to define it as well as to show the different factors that interact with it, however one is relevant to my study. "Trust is related to absence in time and in space. There would be no need to trust anyone whose activities were continually visible and whose thought processes were transparent, or to trust any system whose workings were wholly known and understood" (Giddens, 1990:33). This regresses to what is commonly referred to as Taylorism, or scientific management. F.W. Taylor did not essentially trust his employees to get the most out of their work day; hence, he performed time and motion studies to begin to understand the processes that they went through so he could fully understand it and modify it. Subsequently, there was no need to rely on the worker, or to trust them to put in a productive day. Management was in control; they knew how everything operated and they made the game plan which the employees simply had to follow. As Giddens maintains, if you can see what all employees are doing, there is no need to trust employees because you can observe them yourself rather than having to trust their reports on productivity. You do not have to worry that when your back is turned, that employees are not doing their work. Using electronic monitoring/surveillance, you can walk into your office and look at a monitor that lets you see exactly what they are doing or not doing. You can even observe workers from home, therefore not having to trust them when you are absent.

Zuboff (1988:344) suggests that employees who are being monitored feel mistrust. This feeling comes from the "silent dance of the observer and observed". To be visible in

this way evokes a sense of vulnerability and powerlessness. The person observed begins to wonder, "Am I exposed in some way that I would not choose to be? How can I be certain about precisely what I have exposed? What is it that they might see?" The resistance to such exposure reflects in part an effort to retain a sense of self-control and to avoid feelings of shame".

Zuboff (1988:69) implies that when information and control technology is used to turn the worker into "just another mechanical variable", the immediate result is the withdrawal of the worker's commitment to and responsibility for the work. This lack of care requires additional managerial vigilance and can lead to a need for increased automatic control.

Overall, electronic monitoring gives management the capability and legitimacy not to trust employees. They may no longer put their faith in humans to be productive and trustworthy, but may put their faith in technology to expose those who are not.

Risk and Danger

Following trust is the issue of risk and danger. Are there high risks involved in the workplace? What is the level of risk and hence danger encompassed in employee behaviour while at work?

"Danger and risk are closely related but are not the same. What risk presumes is precisely danger (not necessarily awareness of danger). A person who risks something courts danger, where danger is understood as a threat to desired outcomes" (Giddens, 1990: 34-35). In other words, we might speculate that management uses electronic monitoring to minimize risks and hence danger. If the desired outcome is an organization

that is high in productivity and low in negligent employee behaviour, then tightening supervision is a way to minimize danger and risk. If trust and danger (risk) are weaved together as Giddens postulates, then there must be a balance of trust and risk. For example, do I trust my employees to work without technological supervision, or is the risk of them becoming lazy or negligent too great? If management has trusted their employees in the past and there has been a breach of that trust, then perhaps the danger is too high and electronic monitoring is used as a way to combat the danger and subsequently reduce the risks involved. Thus, electronic monitoring may be seen as a form of social control, however, it is balanced with a heightened risk as determined by management. Management is seeking to weigh the benefits and risks to their organization and this may be perceived as the only practical option.

"Risk is not just a matter of individual action. There are "environments of risk" that collectively affect large masses of individuals..." (Giddens, 1990:35). An "environment of risk" may be any work environment. The banks and insurance companies that I examined were viewed by management in this way; the whole organizational environment was susceptible to risk and danger not to the employees but *from* the employees. Risks might include embezzlement, fraud, and theft. In order to minimize the "environment of risk" stricter supervision is enacted, giving management more control over the work environment and their employees.

Privacy

Associated with the above consequences of employing electronic technology are ethical and privacy issues for managers. As Shaiken (1985: 177) has observed

information is not an abstract or neutral quantity. How data are defined, how they are gathered, and how they will be used are all socially charged questions. Information-gathering systems can be designed in a way that provides more data for autonomous and decentralized decision-making so management can seek to monitor every aspect of what a worker does on the job.

Interestingly, even though we all know it is wrong to go through someone's filing cabinet, desk drawers or appointment book, the world of business is accepting of someone rifling through computer screens, and this is becoming acceptable business etiquette (Garson, 1988: 221-222).

Dunlop and Kling (1991b: 655) argue that morality becomes an issue with reference to technology when computers are given roles formally reserved for human judgement. In the workplace computers are often left to do the monitoring for management. It has been said that they provide only the facts and hence are more objective than humans. however, not every situation examined in this way accurately reflects the situation. We are humans and we make mistakes: we are subjective beings, and hence tasks should be undertaken in that fashion-subjectively. For instance, if a worker is slowing down the line, perhaps he or she has a personal problem on his or her mind. If a computer starts beeping and then a manager goes out onto the floor and reprimands an employee, it can be said that the manager is not looking at the situation subjectively. If workers are able to obtain help and discuss their problems it may be possible to resume their normal productivity. What this suggests is that even if the problem is initially detected in an objective manner through technology, it should be dealt with in a subjective manner through a more humanistic management style. This is not always the case within

organizations that are ultimately concerned with efficiency and productivity. "Management believes that CPM increases productivity as is well within management's rights, but many unions and employees see it as an invasion of worker privacy which leads to increased stress and a decline in productivity" (Baarda, 1994: executive summary).

Essentially, the whole concept of privacy is changing. Issues that would have been frowned upon in the past are not at present; the advent of more sophisticated technology is setting new limits and expanding the boundaries. But where does it stop? Where does the workplace stop and home begin? (Marx and Sherizen, 1986:64). To put it succinctly: "Just because an intrusive form of monitoring can be done does not mean it should be done" (Marx and Sherizen, 1986: 65).

In the past, employee's expectations about privacy and supervisory monitoring were defined by what the senses were capable of detecting. And hence, the traditional workplace offered limits to the gathering of information with these simple tools. However, in today's workplace, monitoring technologies easily transcends these old boundaries to collect data. Since machines can monitor automatically, managers are no longer limited in what they can observe and employees are no longer able to tell if they are being observed (Marx and Sherizen, 1986:65).

Intrusive monitoring may conflict with workers' established expectations of what is reasonable in terms of supervision on the job. There is no formal protection for whispering, or being far from the eye of your manager at work, however, most employees do need some sense of privacy at work, especially when it concerns their communications. Marx and Sherizen suggest that the new technologies are threatening

this privacy and for some workers at particular companies, this privacy is becoming obsolete.

Zuboff (1988:404) describes a breed of North American workers who cherish the autonomy and sense of self-control sustained by his or her skills and protected by the union contract. When these workers contemplate the prospect of the socially integrated high-technology workplace, they feel despair. They anticipate a loss of their unique identities, of freedom and autonomy, and of well-defined rights and responsibilities. They fear that without the traditional sources of protection provided by their job descriptions and their contract, they will become prey to every capricious whim of their superiors.

The OTA (1987: 5) expresses concerns about monitoring in the workplace as well. There are strong arguments that computer based monitoring can be abused and that monitoring has the potential for invasions of employees' privacy, as well as assault their autonomy, personal dignity, and health. As an example, CPM gives management minute-by-minute records of employee work, and hence, could potentially be used to exert unfair work standards by speeding up the pace of work (OTA, 1987: 5).

Service observation, or listening in on calls without notifying those on the phone can lead to feelings of being spied upon and may have ramifications on the privacy of both the employee and the customer. This in the end may lead to feelings of animosity towards the employer (OTA, 1987: 5). Further, if the customer is aware of the service observation, it could impact the companies' image and ultimately their profit.

Recording all aspects of calls, as is done with telephone call accounting, a "profile" or record may be compiled about an employee which denotes who they call. Some

believe that by using this information in the wrong way, managers may begin to harass employees about their phone calls. Overall, the chief concern here is that these new tools may give managers monitoring and control techniques and thus power that might be abused. The technology may be used simply for the sake of being able to control others beyond what is substantive to organize the work process (OTA, 1987: 5).

Baarda (1994: executive summary) concludes that employers should view the technology as a management tool, not as a management substitute. "The quality of human supervision is critical". This new technology should be seen as an aid, not as replacing a person or their managerial duties. Monitoring should be done of the work area/work, not workers. This is where privacy issues arise. "The conflict between privacy and surveillance is neither new nor unique to the workplace. Technological breakthroughs in surveillance technology, however, have produced a qualitative change in the nature of surveillance. It can now be total" (Ontario Ministry of Labour, 1979:ii).

Over the years, there has been a growing concern regarding the loss of workers' privacy with the introduction of electric monitoring techniques (ILO, 1993: 3). Brown and Beatty (1984:449) point out that some arbitrators, when consulted on issues regarding supervisory technology, have insisted that the right of an employer to install electronic monitoring devices and electronic monitoring systems must be equally sensitive to, and in certain circumstances, give way to the employee's interest in protecting his or her personal privacy and human dignity.

Power/Control

One last issue evolving from the literature is the power and control that employers gain over employees as a result of electronic monitoring. We all know that we have to be at work at a certain time and perform certain duties while there. This is a somewhat necessary form of control. However, new supervisory technologies give management more power and control than what is needed to efficiently run a business. The issue becomes that of how many organizations will employ the new technology to further control employees, abusing the technology and its power. What exactly are organizations using the technology for? Why do employers have to learn more about a worker's every move, if not to control workers beyond what is necessary?

Another issue that Zuboff (1988:357-8) raised is that of discipline. Many managers did not have clear conduct rules for this particular area. They had the information often at the touch of a button, but could not think of a way to manage the discipline factor. She suggests that managers are no longer certain of their span of control and how far it reaches. The computer can provide information on almost anything in the plant, but where does this position the manager? It is almost as though they have to go back to the beginning, as if industry was just being born. How were the initial decisions made? Technology introduces the same problems, or in Zuboff's (1988:358) words, it "radically alters the context of what is possible". Thus, before vast

information systems are adopted in an organization, there are several factors that should be foreseen and discussed at the outset.

Flaherty (1989:9) notes that the accumulation of personal data can be used to limit opportunity and to encourage conformity, especially when associated with a process of social control through monitoring. For instance, in the workplace, if an organization has collected information about an employee for a long period of time, this can have a limiting effect on the employee's behavior. Employees who know that they are under some form of monitoring or surveillance may think twice about performing a certain activity such as standing around the water cooler too long, logging on to certain sites on the Internet, or attending a management-bashing meeting. Hence as the author points out, data collection introduces a base for the increase of power of an organization (Flaherty, 1989: 9).

With the increasing power of an organization, comes more control of employee behaviour. To illustrate the ILO (1992:11) notes that,

> The greatest threat for the employee follows from the undoubtedly decisive advantage of computerization: the multiple use of the data. Employees are confronted with a system entailing unceasing control, thus leading to a continuous re-evaluation of their behaviour. Whether the employer explicitly envisaged the use of monitoring devices is ultimately irrelevant.

In addition, the mere fact that an employer has at his or her disposal the means to retrace employee activities influences employee's behaviour. Computerization generates growing pressure on employees to conform to the real or assumed expectations of the employer (ILO, 1992: 11). This is one form of social control. Employers are manipulating employees in one form or another and hence controlling how their employees behave and perform at work.

Outcomes

There are several comprehensive accounts detailing the impacts and outcomes of using electronic monitoring within the workplace (Zuboff, 1988: Howard, 1985; Volti, 1992; Kipnis, 1990; Marx and Sherizen, 1986; Garson, 1988; and Lyon, 1994).

To begin, Zuboff (1988:400) states that within the realm of an information panopticon, managers frequently tried to simplify their managerial tasks by replacing face-to-face engagement with techniques of monitoring and control. As a consequence they became isolated from the realities of their organizations and employees as they were increasingly insulated by an electronic text.

Kipnis (1990: 32) found that there are consequences, psychological in nature, that arise from monitoring technology both for the watcher and the watched. There have been studies that conclude that those who do the watching begin to distrust and depersonalize the relationships they have with those that they are observing. And the individual who is being watched loses his or her behavioral freedom. In other words, employee behavior is less divergent and he or she begins to adhere to the rules and standards of those who are watching. Since employees are never sure when they are being monitored, they increasingly conform to expected behavior (Kipnis, 1990: 33). It becomes the case of the "I had better be good all the time" syndrome because you never know when you are being watched.

Another somewhat related outcome of monitoring is discussed by Marx and Sherizen (1986). The authors point out that the increased use of monitoring in the workplace also stands the chance of backfiring. They go on to elucidate that people are ingenious and many find ways to distort and deceive monitors. For example, telephone

reservation agents may learn to dodge calls that will add to their average case time. They do this by either disconnecting the call or simply withholding information to get the customer off the phone quicker (Marx and Sherizen, 1986:67). How does this impact on customer service? This was probably the one issue that the company was trying to improve, noting that if each operator spent less time on each call, they would be able to handle more calls and hence improve customer service. In this situation, the strategy did not work.

An additional danger in terms of monitoring is that it might also make for adversarial relations within the workplace, especially if workers feel violated and powerless, because they are aware of the monitoring (Marx and Sherizen, 1986:67).

Finally, workers may increase the behavior that generated the monitoring in the first place. They may feel challenged to beat the system, reacting out of anger and estrangement. If people feel that they are not trusted or they feel like they were being accused of some behavior, some may then feel that they should act in this manner if their employer wishes not to trust them. Thus, if one's manager thinks that you stole from him, then you might as well prove him right (Marx and Sherizen, 1986:67).

Increased monitoring can introduce two other problems. The first concerns quality. If an employer automatically speeds up the work process, the employee no longer has control and may not do his or her job properly which leads to an inferior product. The second problem is that electronic supervision has the tendency to displace people. Employees may feel at a loss of not having a personal relationship with their manager which could lead to a less satisfying work environment. In addition, the potential for growth and learning on the job may be lost (Marx and Sherizen, 1986:70). Monitoring

employee's performance through computers and having little or no interaction with them diminishes reciprocity. This means that members are less active in both giving and receiving support, an important variable in work relations. For example, the 'I need you to do this for me now and I'll be sure to return the favor when you need it' type of exchange ceases to exists and the human element is diminished from the work environment. Interaction becomes an option as opposed to a necessity.

In summary, there are many consequences and issues with regards to using electronic monitoring within the workplace. Workers become displaced and managers may begin to see them as 'cogs in a machine'; there are issues of reduced trust, risk and danger, privacy and power, and control over workers. Management needs to deal effectively with this new technology as it changes the whole organizational and managerial schema. And lastly, what has been suggested is that workers begin to monitor themselves sometimes without even realizing it consciously, tailoring their behavior to what is acceptable – the end goal of supervision.

CHAPTER 3: LITERATURE REVIEW

This chapter introduces the relevant themes, persons, and theories that strive to explain the relationships between the workplace and the need for greater control through supervisory technologies. Because the issues related to workplace monitoring are so complex and diverse, one cannot utilize a single theory as a conceptual framework. Therefore, I have chosen relevant subject matter and topics which are appropriate for this particular investigation. Topics covered include the following: the effects of electronic monitoring in the workplace, the adoption conditions, and reasons why companies are using supervisory technology.

The Role of Supervisory Technologies in the Workplace

Since the Industrial Revolution, the desire of owners and managers has been for greater control of process and populations. This lies behind the development of what James Beniger calls "the control revolution," now greatly enhanced through the application of new microelectronic technologies (Lyon and Zureik, 1996: 4). In addition, monitoring, which is now dominated, and to some degree driven, by technological advancements has become an increasingly global and integrated phenomenon (Lyon and Zureik, 1996: 5). Information is now flowing across national and international boundaries as well as between public and private sectors.

Lyon (1994: 45-46) has suggested that it was not so much the triumphant railroad as the humble timetable and the mechanical clock that actually served to co-ordinate human activities in time and space in the early industrial era. They also have much to do with

monitoring. The timetable and clock, together with the gathering of coded information, give order to relationships within bureaucratic organizations of both the nation-state and the capitalistic workplace. They enable monitoring and supervision to occur on a day-to-day and even minute-to-minute basis. Accordingly, monitoring may be seen on the one hand in the theft ledgers of the Victorian clerk, and on the other, in Henry Ford's automobile assembly line which is constantly regulated by the clock.

Volti (1992: 4) suggests that technologies are developed and applied so that we can accomplish tasks not otherwise possible, or so that we can do them more economically, faster, and easier. Monitoring technology then, allows us to observe or monitor employees as we always have in the past, however, with machines or computers now doing the monitoring for us, we have more time on our hands to do other tasks. This technology offers a more efficient way of checking on employee progress.

Lyon (1994: 5) suggests that monitoring has evolved in subtle ways, that is, often as a result to implement some technology or another for its use in attaining more efficiency or productivity. He goes on to note that most monitoring goes unnoticed because of its electronic character which occurs out of sight in the domain of digital signals. Hence, most of us do not even know when we are being watched, but if we do know, we do not know to what extent and how much information others may have about us.

For instance, to illustrate the subtly of electronic monitoring Kipnis (1990: 4) notes that,

> At its best, as David Dickinson has observed, technology expands what people can do; it creates possibilities where none existed before. Perhaps the major achievement of technology has been to reduce the amount of time and energy that we must devote to any given activity.

To expound, managers no longer have to make the effort to walk around the shop floor; all they have to do is turn on their computer to monitor their workers. Technology in this way is expanding what managers can do from a supervision perspective. From this we can deduce that technology (cameras, and computer programs), allows managers to spend less time monitoring on their own, since they do not have to physically leave their office to supervise; they can do it whenever they want, for however long they want, and can observe whomever they want. This requires less time because they do not have to get up to walk around, take notes, and so forth. This also allows them more freedom to choose when and whom they will be monitoring because the person who is being watched may not even be aware of it. Being covert it does not raise suspicions of workers who may be watched for security reasons.

Literature on the topic of electronic monitoring and or surveillance is mainly American; overall, the literature suggests that visual surveillance devices are those most commonly being introduced within the workplace. The devices used vary from still and motion sensitive cameras to more covert devices such as cameras that are hidden in objects that appear to be something they are not (Ontario Ministry of Labour, 1979:3). Having given a brief overview from chapter two, regarding the types of devices, it would be relevant to also discuss what effects the devices have.

What do these monitoring devices lead to? Workers now participate in their own monitoring, unwittingly of course. Technical mechanisms automatically record data that employees generate. The technologies may secure information from voices, or movements such as keystrokes, and they measure employee's effectiveness in this way. For instance, in a data processing job, the computer may monitor the number of errors

and corrections made, the speed of work, as well as time spent away from the desk (Marx and Sherizen, 1986:65-66).

There are also programs on the market that will allow managers to tell employees how they are doing while performing a task. For example, a message may come across an employee's screen that says, "you are not working as fast as the person beside you". In addition to these software programs, there have also been developments in even subtler behavior modifying techniques. These are subliminal programs, messages, and even images which pass so quickly in front of the employee's eye that it cannot be detected consciously. For instance, one company displays images of mountains and streams with a message that says, "my world is calm". Managers can also send messages such as "relax", "concentrate" or, "work harder". These are all forms of monitoring and behavior modifying that encroaches on a person's life without their knowledge (Marx and Sherizen, 1986:66).

Computers and programs can by the manager's own intent, enable him or her to surpass the specifics of distinct data and instead gain access to broad patterns of circumstances and actualities in the workplace. The result is that this manager can then idealize his or her work more broadly and more readily control whole categories of process, or people, rather than reacting to an event on a piecemeal basis (Rule and Attewell, 1989: 234). In other words, monitoring can be used for several different reasons on a daily basis to watch specifics, or to gain an idea of the whole picture. Monitoring and data collection produces electronic records for management that allows them to see a different view of the overall process of their workplace. Electronic monitoring and surveillance makes work more "transparent" to use Zuboff's terms (Rule

and Attewell, 1989: 234). To summarize, monitoring provides management insight into particular processes within their work environment, which in turn, provides them the opportunity to have control over these processes (Rule and Attewell, 1989: 237).

Electronic technology encourages managers to think more pragmatically about how to pursue interests they have experienced but have never been able to act upon Rule and Attewell, 1989: 238). For example, if a manager felt that employees were often spending too much time on the phone and were randomly typing to look busy, managers now have the opportunity to log onto that employee's computer and see exactly what he or she is doing. Managers may also check phone logs. Management may do this in 'real time'; they do not have to wait until the end of the month for results to come in. Managers can 'observe' their employees on a daily basis if they wish to. Electronic monitoring allows this to occur by simply extending the range of managerial attention or insight, thus making it possible for management to formalize and implement polices for circumstances that would otherwise have to be confronted in the traditional way. The consequence is that it broadens the power of managers to analyze the processes that shape their organization and to intervene in the process if they see fit and streamline them accordingly (Rule and Attewell, 1989: 239).

Depending on who is doing the watching and who is being watched, monitoring can be seen as a tool or trap. Laabs (1992:96) feels that dominant businesses need monitoring, but it must be counterbalanced with employee privacy. Somewhere in the middle, human managers must direct their organizations to choose between man and machine, or a mixture of both. A subsequent topic that was discovered in the review of

the literature was the explanation on why management chooses monitoring technology as a form of supervision.

Why does management choose electronic technology to assist them with their supervision duties? Auguste Comte once said, "know in order to foresee; foresee, in order to control" (Rule and Attewell, 1989: 239). Although Comte was referring to the spirit of science and its role in human affairs, it can apply to electronic technology as well. In this regard, electronic technology encourages managers to rationalize their practices, to observe broad working patterns, and to meditate policies for dealing with eventualities. Only the computer is able to assimilate and condense these large amounts of data and information that is necessary for the above noted tasks (Rule and Attewell, 1989: 239). Hence, to apply Comte's idea, technology allows managers to know, which allows them to foresee, which allows them to control workers.

It is easy to see the implications of such control in the workplace. As Salerno (1991: 128) points out:

> if automation can make work arrangements more flexible, it can also introduce rigidity. Workers who once enjoyed some discretion about how they did their jobs now find themselves limited by procedures designed to answer the demands of the computer. And the machine can do more than specify workers' tasks; it can measure how fast they do them.

Lyon (1994: 69) would agree with Salerno, as Lyon points out that the extremely precise computer systems of today's organizations permits minute monitoring of various occurrences and performances within the workplace.

Monitoring devices help keep track of, and manipulate, the timing and spacing of work. They can also assist management in locating workers at any given point in time. Electronic monitoring is also capable of keeping track of the actual pace or quality of

work done, for example, keystroke counting, and the checking of telephone calls. Hence, new forms of monitoring in the workplace may be less obtrusive to an employee, but more invasive (Lyon, 1994: 130).

There are many themes that are relevant to my research topic which strive to explain the relationships between electronic technology (surveillance/monitoring) and workplace organizations. Rybczynski (1983: 63-64) points out that it is not necessary to argue that industrialization is *always* introduced specifically in order to control the worker, but as machines are increasingly used, their role as controlling mechanisms is soon appreciated by management. Management enjoys the technology because it gives them more knowledge, more power, more calculations, so they can know exactly what is occurring in the workplace, not to mention the time and effort it must save them.

In a study conducted several years ago by a group of sociologists at the University of New York, it was indicated that computers allow manager to 'see' more distinctly and precisely what occurs within their businesses. Managers are, among other things, able to scrutinize exactly what workers are doing and how well they do it (Lyon, 1994: 131). The ultimate result is that managers obtain deeper knowledge of workers by means of computer monitoring (Lyon, 1994: 132).

The goal of many organizations with reference to monitoring, measuring, and routinizing work is not always efficiency; sometimes it is for reducing labor costs. Again, this stems back to Fredrick Taylor, the original time-study man in the steel industry, who felt that all the planning and "brain work" needed to be done in the office. Only when the planning and "brain work" is done in the office can persons run the shop floor with virtually no training at a cheap labor cost (Garson, 1988: 165-66). If work is

routinized it does not matter if you are building spaceships or processing loans. For example, you can use individuals with little or no training if they can respond to beeps and buzzes that indicate to them when to add their piece of the spaceship. What it comes down to is that the "brain work" and decision making are becoming centralized. This leaves workers with virtually no decision making power, restricted freedom, and reduced skills. This dehumanizes the whole process of work; employees simply become interchangeable cogs in a well-oiled machine (Garson, 1988: 166).

As Garson (1988: 166) points out, this is not only occurring on the shop floor but in the office, service, and professional vocations as well. These employees and their jobs are also being catalogued like factory work and workers, so that they too can become cheap and disposable. Ultimately it is employees who suffer emotionally and in other ways because this new production system and supervisory techniques makes them feel inadequate (Garson, 1988: 166). Workers become so routinized and alienated that they begin to feel like a part of the machine or computer terminal that they are working at.

Lyon (1994: 89) cites Michael Rubin as stating that the reason behind the massive expansion of monitoring in administrations across the USA is profit and nothing else. Rubin is referring to the need to minimize risks in the face of the ever accelerating pace and size of financial transactions. Lyon (1994:89) also cites George Simmel in noting that modern society is fraught with the growth in relationships between strangers, and consequently, institutions find it more and more difficult to judge the risks that may be involved in these transactions and hence monitoring of accounts and individuals becomes the norm.

Another example of a use for monitoring within organizations is for quality control which depends on traceability. And as more quality control is sought, more monitoring will be used to meet this demand (Lyon, 1994: 90). There can be times, however, when the link between economic growth and monitoring techniques is weak. For example, Lyon (1994: 91) suggests that organizations use monitoring systems for two purposes: to keep track of those who are obeying and disobeying rules as well as to determine and locate those in the latter group.

Dunlop and Kling (1991b: 191) argue that managers work with several competing reasons when deciding whether or not to implement supervisory technology. They may be concerned with maintaining control over their employee's time and pay as well as allowing for flexibility and self-direction to ensure quality work and retain quality employees.

Attewell (1991: 240) notes that both monitoring of hourly workers and piece-rate payments are used to determine the diligence as well as the work ethics of employees. He goes on to suggest that "although piece-rate and surveillance systems appear to be methods for intensifying and maximizing the effort of each individual worker, in practice they often erode into systems for maintaining an average acceptable level of effort, determined by a formal tacit or inferred agreement between management and labour" (Attewell, 1991: 241). If employees are pressed to go harder and faster by either of these methods, conflict usually ensues which is damaging to managerial goals. Hence, Attewell suggests that the desire to maximize production has to be balanced against worker moral as well as other factors (Dunlop and Kling, 1991b: 241).

Attewell (1991: 238) outlines theories that correspond with monitoring or an issue surrounding monitoring. The first is Neo-Marxist. This type of theory provides a framework for organizing issues of discipline in work, monitoring, and the pace of work. According to Attewell (1991: 238), Marx posits that capitalists purchase the labor power of employees, and hence it is up to management to ensure that this labor power is turned into labor performed and labor performed that will maximize profitability. Attewell (1991: 238) also points out that for Braverman and Taylor, scientific management fragmented jobs into narrow categories to cut costs but also to enhance managerial control over their workers. In this way, technology is not seen as a way to improve work or working condition, but as a deliberate way to enhance managerial power and control. Coming from this theoretical perspective one would think that monitoring, especially computer or electronic monitoring, is too important and useful for management to ignore, and is fated to become widespread until organized labor attempts to put a stop to it.

An additional theory discussed by Attewell (1991: 239) is Contingency Theory.

> This school posits a fit between various structural and environmental features of firms and seeks to explain the variation in any one element, such as surveillance practices in terms of variations in other features. It expects to find systematic relationships between business strategy, technology, and organizational procedures, for example (Attewell, 1991:239).

In other words, change is implemented often in organizations and technology, usually some form of monitoring, is used to gauge the effectiveness of the change.

Attewell (1991: 237) has also outlined some corporate culture theories that may have an influence on whether a company chooses or chooses not to monitor their employees. He believes that different organizations have divergent or distinctive ways of

behaving. This can range from the simple dress code, to managerial style, to philosophy, or to company development. Attewell (1991: 238) states that,

> The corporate culture can be applied to industrial relations or to technological change. Some firms have strong traditions of caring about the welfare, security, and aspirations of their work forces, while other companies have a corporate culture that emphasizes managerial prerogative above employee moral, views workers in a suspicious or adversarial light, and feels that "driving" workers is necessary in order to be profitable.

Attewell calls these Theory X and Theory Y corporate cultures, respectively. This corporate culture will in turn affect how new technology, like surveillance and other monitoring techniques, will be implemented (Attewell, 1991: 238). For instance, if the company is more concerned with it's employees than it's product, then when a new technology is implemented, employees will be notified immediately and will even make decisions about how it should be used if used at all. It would be fair to say that if a corporation believed in theory Y they would employ monitoring technology from the top down and exploit their new found capacities for monitoring their employees.

Volti (1992: 43) also suggests using the supply and demand theses to help visualize the philosophy behind monitoring. Technology will not be introduced to the organization unless there is some demand for it – unless an organization, person or group wants to buy it and use it. Certain forces push technology but it is also pulled by effective demand from others. "The decision to adopt a technology represents a firm's assessment of the likely benefits accruing from the use of the new technology, weighed against the uncertainties that attend its use and the speed at which these uncertainties can be dissipated" (Volti, 1992: 80). Further, "Organizations can shape technological change through their ability to affect the supply and demand for a particular technology" (Volti,

1992: 249). Organizations want more control than in the past (demand), so the need for monitoring technology (supply) develops.

To recall the main research question of this research which asks why management chooses to use electronic monitoring as a supervision device. I am suggesting, as many other sociologists and authors have, that organizations today are utilizing technology in a negative manner. Organizations are using the knowledge and information they gain from supervisory technologies to manipulate and control their workers. There is a demand or need for more control as the supply of technological supervision devices are produced.

Another way to look at the supply and demand theory supplied by Volti is through the structure and dynamics of specific organizations to not only shape technological changes, but also by the type of relationships between organizations (Volti, 1992: 253). In other words, if one company in the same business as yours is using electronic monitoring and other forms of monitoring and they seem to believe they are reaching their goals better, then you may think it is also a good idea to try out some of this technology within your organization.

For whatever reason a company chooses to use electronic monitoring technologies, there are also results and outcomes. The first is usually that management obtains more knowledge and hence more control over their workers and their workplace. "Technology, then, represents the means by which humans exercise control over their physical and social worlds in order to achieve practical outcomes" (Kipnis, 1990: 4). A practical outcome in this situation may be getting workers to do their work, and organizations may choose to use technological innovations such as surveillance cameras.

or other computer programs that can monitor employees to make sure they are doing just that – their job and nothing else.

Volti (1992: 24) provides some generalizations about the effectiveness of technological solutions to social problems. First, he points out that while a technology may work and produce the desired result, in this case having more control over their employees through monitoring, the mechanisms through which the technology produces a change are very often inadequately understood. As already mentioned above this kind of monitoring can have many different effects on personnel; they may feel inferior, or like slaves. Volti (1992: 25) goes on to point out that technological shortcuts, such as monitoring, often produce uneven results. That is, they work when applied to some portions of the targeted population (workers), but do nothing for the rest. For example, the technology may work best to monitor those employees that work at home or in an area of the factory where troubleshooting is warranted, but might not be needed in an office or factory situation in the same company. In addition, the author also points out that while a technological fix is employed, some workers do not understand that it is being used in lieu of some other method of achieving a desired end (Volti, 1992: 25). Thus, an organization just uses technology to monitor their employees without realizing that they are indeed using a form of monitoring that could just as easily be provided by a human. Perhaps if it were still a human doing the supervision, employees would not feel that their privacy is being infringed upon and that they are being alienated.

In conclusion, what causes most of the controversy surrounding electronic monitoring in the workplace is the claim that it is increasingly focused on the worker

instead of the work (Lyon and Zureik, 1996: 21). This is where one runs into issues such as privacy, autonomy and social control.

> ... computerization creates certain new *occasions* for the monitoring of work. These occasions arise, it seems to me, when computerization provides either the opportunity or the goal necessary for managers to rationalize areas of work life that previously were left to chance and happenstance (Lyon and Zureik, 1996: 73).

In other words, management can now observe 'occasions' in the workplace that were often not observable before electronic monitoring. They may be infringing on the rights of employees by observing them in particular areas, or observing constantly.

Social control by managers through supervisory technologies is what I set out to explore; this is what I conclude is really behind electronic monitoring, ultimate control, eventually. My argument then is that the more pervasive the supervisory technology, the more control management will have over their employees. A computer can now often conduct monitoring that could not be done before by a person. Supervision of certain activities was at one time impossible because of changes in shifts, and time constraints, the supervision can now be done by a camera, a computer and viewed later by management. The type of monitoring that is being conducted now that could not be done before is wrong and unethical. Electronic monitoring uses uncertainty as a means of social control. There was a reason it could not be done before and now organizations are extending the lines and blurring the boundaries of appropriate and inappropriate monitoring/supervision. Perhaps there is no reason to observe certain practices, but now computers and technology provide management the opportunity, and as a result, they take advantage. Giving management more insight into a workday offers them more control and power over employees. I am arguing that conformity is advocated by and enforced

by means of electronic monitoring/surveillance. More specifically, Lyon (1994:4) suggests that:

> surveillance denotes what is happening as today's bureaucratic organizations try to keep track of increasingly complex information on a variety of populations and groups. Yet it is more than just 'bureaucracy'. Surveillance is strongly bound up with our compliance with the current social order, and it can be a means of social control

Howard (1985: 121) found that when the very purpose of corporate management becomes the harnessing of human values and emotions to the ends of corporate competitiveness and market success, "the result is the antithesis of the humanization of work. It is the utmost rationalization of the brave new workplace: not merely the rationalization of work and technology but the rationalization of the human personality as well".

In summary, the literature on monitoring and electronic technology from its initial conceptualization has been examined. The concepts, characteristics and components of monitoring in the workplace have been identified and defined. What has become more and more significant in recent decades is the role of information and telecommunications technologies in aiding the process of workplace monitoring.

Kipnis (1990: 34) sums up this topic best by stating that the ways we seek to control others are linked to the norms of society and its various settings on the one hand, and to the control of power and technology on the other. Kipnis illustrates that power originates from many sources, both personal and institutional, and presented evidence that as power increases, influencing agents or organizations are drawn to the use of strong and controlling tactics. Organizations appear to move with little thought from concerns about respecting the rights of persons they wish to influence, to a desire to restrict their

rights, as their power increases, and people appear reluctant to do what they want. But, Kipnis argues, there is a price to pay for the use of strong tactics. Organizations may get their way, but control changes the form of that organization as well as those it chooses to influence. The information revolution ultimately becomes a two-edged sword. That is, as organizations and management rapidly pursue their own agendas, employees must adjust and do not always do so affirmatively.

In spite of the debate to discover whether technology produces monitoring or monitoring is the product of technology, they affect each other in a circular manner. We must remember and realize that it is not the computer that is in control; it is the management's choice to use the technology (Howard, 1985: 67). Like all technologies we need to explore it before we use it and examine its possible ramifications, both positive and negative. Howard (1985: 197) posits that:

> What may appear to make sense, (monitoring) viewed from the narrow perspective of corporate management, can prove to be extremely costly and counterproductive, seen from a broader social point of view. By expanding their own power and control over work, the managers of the brave new workplace have undermined the traditional institutional framework regulating working life without putting anything in its place.

This chapter focused on relevant themes that strive to explain the relationships between electronic technology (surveillance/monitoring) and workplace organizations. This chapter addressed some major issues and questions, where electronic monitoring originated, why organizations may choose to use it or not (theory X and Y) as well as an outline of the different types of supervisory technology. Lastly there was an introduction regarding social control in the workplace.

What remains of this chapter is a discussion of the topics and the people who somehow influenced my topic of research or relate to supervisory technologies. In turn I

review Weber and his concept of bureaucracy, Taylorism, Jeremy Bentham and his concept of the panopticon, Foucault and his thoughts on power and knowledge, and finally the concept of social control itself and how it applies to my research and the workplace. In terms of the following theoretical orientations, Lyon notes that Karl Marx looks at electronic monitoring with regards to the struggle between labor and capital. For instance, monitoring workers for Marx is seen as a way of sustaining managerial control on behalf of capital (Lyon, 1994:7). Karl Marx was one of the first to express that by keeping workers under one roof, employees were indeed obtaining control over the workers. He also foresaw that new technologies would be developed to further this control and he saw this in very negative terms.

For Max Weber, on the other hand, the process of bureaucratic monitoring in the workplace had as much to do with the socially distinct impetus to rationalize production as with control by a capitalist class (Lyon, 1994: 122). Many analysts see information technology as aiding in making organizations more predictable, more closely coordinated, more efficient, and more open to managerial control (Rule and Attewell, 1989: 226). All the above attributes listed are those describing Max Weber's ideal typical bureaucracy. An ideal-type incorporates hypothetically the chaotic multiplicity of individual phenomena into an 'ideal'. Ideal-types for Weber are 'ideal' in two ways: on the one hand, they are always based on a concept of logical and ideational perfection and they pursue this through many considerations to a conceivable extreme. On the other hand, they are also related to 'ideas', in that they are analytical constructs, they are plans for thought. Ideal-types are not real. Ideal-types can be used as a heuristic device to understand historical phenomena from the viewpoint of its cultural significance.

Lyon suggests that through the phases that Marx, Weber and Foucault discuss in reference to monitoring, the worker has faced more and more alienation on a daily basis. Employees have found themselves working to an increasingly rigid timetable, within enclosed closely monitored spaces (Lyon, 1994: 124).

Max Weber and Bureaucracy

Sociology, and my study in particular, is concerned with the transformations which bureaucracy has introduced in modern societies. It is generally agreed that democratization, industrialization, and bureaucratization go hand in hand. Bureaucratic administration as we know it developed with the modern financial economy, although no exclusive causal relationship can be established between them, since other factors are involved: the rationalization of law, the importance of the phenomena of the masses, growing centralization in the concentration of industry, and particularly the development of a rationalized technology.

Beniger (1986:6) notes that Max Weber was the first to direct social analysis at the most important control technology of his time: bureaucracy. Bureaucracy was new in the sense that it acted as a control for the societal forces unleashed by the industrial revolution. After World War II, however, generalized control began to turn slowly to computer technology. "Indeed, bureaucratic organization tends to appear wherever a collective activity needs to be coordinated by several people toward explicit and impersonal goals, that is, to be *controlled*" (Beniger, 1986:13). Almost all organizations today are arranged by the ideal typical bureaucracy that Weber profiled so very long ago.

In his work Economy and Society Weber explains that technical superiority over any other form of organization is why a bureaucratic organization thrives and advances in a modern capitalistic state. Knowledge and monitoring also plays a large role in this, for the management of a bureaucratic organization must have complete knowledge of what is occurring within. Weber (1978: 973) states that:

> Precision, speed, unambiguity, knowledge of the files, continuity, discretion, unity, strict subordination, reduction of friction and of material and personal costs – these are raised to the optimum point in the strictly bureaucratic administration, and especially in its monocratic form.

The financial institutions that I chose to study are very much what Weber has described above, the reason that they are superior to their bureaucratic organizations is because of technology and that encompasses supervisory technology.

> The following are major characteristics of the ideal typical bureaucracy:
>
> 1. It consists of a continuous organization of official functions (offices) bound by rules.
> 2. Each office has a specified sphere of competence. The office carries with it a set of obligations, and the means of compulsion required to do the job.
> 3. The offices are organized into a hierarchical system.
> 4. The offices may carry with them technical qualifications that require that the participants obtain suitable training.
> 5. The staff that fills these offices does not own the means of production associated with them; staff members are provided with the use of those things that they need to do the job.
> 6. The incumbent is not allowed to appropriate the position; it always remains part of the organization.
> 7. Administrative acts, decisions, and rules are formulated and recorded in writing (Ritzer, 1996: 238).

Bureaucracy as an ideal or pure type are to be "considered as merely border cases which are of special and indispensable analytical value, and bracket historical reality which almost always appears in mixed forms" (Weber, 1978:1002). However, most

modern day bureaucracies, such as financial institutions focus on calculability, efficiency, and predictability. Supervisory technology helps managers reach these goals.

Simpson (1999: 68) notes that bureaucracy can be seen as a governance system that displaces traditional authority exercised directly through personal relationships by embedding control in the social structure of work relations and today, places control more so in the hands of managers through new technologies.

Barker (1993: 410) points out that, "Weber articulated the bureaucracy as the dominant form of modern control, in both positive and negative senses". For instance, having all employees of a bank in one building during regulated work hours with designated roles is a benefit to the customer and perhaps to the employees, but moreso a benefit for managers as they can coordinate work and workers more easily. Today's electronic monitoring technologies gives management more knowledge of the organization and hence control, which may be a positive aspect, but could also be a negative aspect. Positive aspects include organizations being able to detect theft within, and gaining a larger conception of what is occurring within. Negative aspects include management gaining more knowledge of the organization and its workers, giving management more control within the organization and over its workers. Barker goes on to say that, "We become so enmeshed in creating and following a legalistic, rule-based hierarchy that the bureaucracy becomes a subtle but powerful form of domination" (Barker, 1993:410).

Lyon notes that Max Weber's theory involves monitoring under the assumption of efficiency within bureaucracy as noted above. All modern organizations attain methods of sorting and retrieving data in the form of files, and such files generally hold personal

information so that such organizations can 'keep tabs' on their employees; this is all done under the auspiciousness of being efficient (Lyon, 1994: 7). "New organizational needs arose to discipline and supervise workers and to coordinate their separate work activities in the interest of productivity. Bureaucratization accomplished all these tasks, and it did so in novel ways. It was the companion process to industrialization" (Simpson, 1999: 49). This is an extremely important quote, especially in relation to Weber and his theory on bureaucratization and rationalization of the work process because it illustrates that a concept that was new in the 18th and 19th centuries is still thriving today in the 21st century. In addition, new technologies of the 20th century did not do away with these old forms of organizations and bureaucracies but instead helped strengthen the forms of bureaucracies, tightening the forms of control that employers have over employees. Industrialization and bureaucratization go hand in hand; without bureaucratization there would be a very unorganized and unproductive industry, and a very disorganized and profit-losing capitalism. Hence bureaucratization works in favor of capitalism and therefore goes hand in hand with capitalism.

Foucault and Giddens have more recently taken up the idea that originated in the works of Weber and his ideas regarding bureaucracy and the iron cage; they have determined that bureaucracy is a highly rationalized mode of information gathering and administrative control. Farganis (1996: 108) defines Weber's "iron cage" as a highly rational and bureaucratically organized social order, in which people are trapped. Monitoring has grown, in the eyes of Foucault and Giddens, because of modernity and bureaucracy. Monitoring, in this way can be seen as the expansion of supervisory and information gathering of modern day organizations, companies, and firms. Therefore,

they have concluded that modern bureaucracy stands as a highly effective and impervious mode of monitoring (Dandeker, 1990:2).

Weber (1978: 987-988) concluded in his work Economy and Society that "where administration has been completely bureaucratized, the resulting system of domination is practically indestructible". Furthermore, "the individual [managers] cannot squirm out of the apparatus into which he has been harnessed. The professional bureaucrat is chained to his activity in his entire economic and ideological existence." Additionally, "the ruled, [employees] for their part, cannot dispense with or replace the bureaucratic apparatus once it exists..." In sum, "all order in public and private organizations is dependent on the system of files and the discipline of officialdom, that means, its a habit of painstaking obedience within its wonted sphere of action". While this may seem very oppressive and pessimistic, it is bureaucracy in its rawest form as I see it. We are all attached to one bureaucracy in one way or another in some capacity: bureaucracies in our society play a silent but powerful part in our lives. Bureaucracies have power and knowledge, which can be impeding on society but very hard to destroy once in place.

Before discussing Foucault and Bentham, it is necessary to also introduce a man named F. W. Taylor and explain why his work had an influence on the type of monitoring we see today in the workplace.

Taylorism

The origins of monitoring and social control can be traced to the ideas of Taylor, and Bentham. The idea of bureaucratic efficiency, which is another control mechanism, is the ultimate goal of all organizations and bureaucracies according to Weber.

The notion of workplace monitoring can be linked to Fredrick Taylor among others. Zuboff (1988:41) notes that with the growing intricacy and size of factories, expanding markets exerted a strong demand for an increase in the volume of production. A concomitant result that emerged was a new and pressing concern to systematize the administration, control, coordination, and planning of factory work. The man who emerged as the chief symbol of the rational approach to management was Fredrick Taylor.

Taylor, who lent his name to scientific management, (a program of production related tasks, and worker strategies that was developed for organizations), started systems of central management control over a hierarchy of workers, each of whom had specific tasks. This required considerable planning for time and resources by management. For this reason, there was a major concern with what each task involved, how much time it took, and how much it was worth (Lyon, 1994: 124). Scientific management involves three processes: controlling and evaluating what workers actually do every minute of every day so that costs can be counted accurately, incorporating this with detailed control of production, and planning and *monitoring* production by means of a central management system (Lyon, 1994: 124). The process of scientific management gave central management the means of controlling every move of an employee who performed any task. After this system was implemented, management knew exactly how much work each task involved, how long it should take, and how much money can be realized. Not only did this allow for *more* monitoring of employees but also made it easier to monitor employees, since there were set rules as to what to expect from each employee.

Taylorism, as it came to be known, was based on the radical departure of the execution and performance of work from its design. The organization of work was entrusted to a new school of men trained in the techniques of scientific management. These men put into practice the division of labor, the specializing of jobs, and they came up with work standards and quotas from "objective" time and motion studies. This allowed them to be able to routinize work so that they could guarantee the most economically efficient way of doing things while still having the utmost in managerial control (Howard, 1985: 19). Today many might still say that Taylorism is alive and well and takes the form of our computer-based work systems. Taylor had a fascination with measurement and efficiency as many of our manager's do today, and with the present technology, managers can use a computer's vast information-processing capabilities to measure and monitor work more closely with less involvement (Howard, 1985: 19).

Howard (1985: 28) found that standardized work is controllable work. In the Taylorist system of control, the author points out that the most effective way to measure work was through time and motion studies. Today, however, the effectiveness is ten times that because monitoring can be constant, whereas in the past monitoring was limited to visits from time monitoring specialists (Howard, 1985: 28). Monitoring through computers, cameras and other devices can be done on a minute by minute basis if one so desires, and hence work and workers become more controllable.

Simpson (1999: 69) points out that "Whereas mechanical technology controlled mainly the pace and movement of workers, electronic technology evaluates and records performance as well. It effectively marries performance and disciplinary monitoring, the very issues that Taylor's scientific principles addressed". Technologies are now linking

the monitoring of the process of work as well as the worker. Not only can the number of parts be counted and monitored, but how an employee is producing those parts as well. In my own research, managers have knowledge regarding how many accounts, transactions, or sales were made in a specific period, by whom, when and how. Employees' performance can be tracked and monitored through computer usage, phone usage and monitoring devices.

Garson (1988:167) introduces the idea that in the office, owners/managers are automating automatically, and are using technology as much for its labor controlling abilities as for its laborsaving abilities, such as computing and typing. However, she points out that while the owners/managers are applying the traditional Taylorist cost-cutting procedures, they are not attempting to measure whether the technology is actually cutting costs. To elaborate on Garson's point, office automation has nothing to do with efficiency, since we cannot really measure it. The office employees just accept new technology without ever asking if it is for the better if they simply fall into the mindset that it has to be better because it is new. Or perhaps it does some things better so it must be better. For instance, a computer may make it easier to write a letter than in the past, it is faster etc., however, what else does it do? It creates dependency and allows the worker to be monitored virtually anytime his or her employer feels like it. So while it might be a friend, it can also be a foe; it could get a worker reprimanded or worse - fired.

Overall it is clear to see that in today's techniques of monitoring and supervising employees are laid out in the model of Frederick Taylor's scientific management. All jobs today in most organizations are broken down into different categories, are specialized in that only certain people can perform them and all jobs are highly routinized

– that is, there are rules and the rules must be followed to have the most efficient workplace. This all rests of course on the heels of Weber's ideal-typical bureaucracy and the evolvement into an industrialized and capitalized society.

Another sociological thinker of the times is Jeremy Bentham, while his work was more focused on prisons and how to make prisoners more docile, his ideas can also be transformed into the work world as is discussed in the following sections.

Jeremy Bentham's Panopticon

Jeremy Bentham's idea of the Panoptic Prison or 'all seeing place', initiated much interest in the area of electronic monitoring (Lyon, 1994: 63). "He (Bentham) advertised the virtues of the panoptic as being appropriate for any context in which supervision was required for" (Lyon, 1994: 65). The panopticon is a form of social control and for Michel Foucault, the panopticon is the social discipline of modernity. Whereas in earlier times the lack of social control would result in punishment that was public and brutal, modernity and Bentham introduced clean and rational forms of social control and punishment through supervision and monitoring (Lyon, 1994: 65). Dandeker (1990:25) notes that "Panopticisim is a system for ensuring the automatic operation of power".

Although Bentham's panopticon prison was never implemented, his ideas aroused many interests and it is clear to see that his ideas influenced the administrative and sometimes architectural construction of bureaucratic organizations. This included schools, hospitals and of course workplaces in which individuals are seen as peculiar problems to be managed and measured against appropriate norms (Zuboff, 1988:322).

Zuboff's main argument is that " the key to contemporary management technique, is panopticisim, enabled by the use of new technologies" (Lyon, 1994: 69).

A more radical approach to the issue of monitoring in the workplace can be derived from the work of Jeremy Bentham and Michel Foucault. Utilizing Bentham's idea for a prison architecture called the Panopticon, Foucault shows that architecture which allows for constant monitoring - or at least the perception of constant monitoring - "coerces by means of observation." The worker, prisoner, soldier or student is not only transformed by observation but internalizes the values of the overseeing organization and becomes an element in their own repression.

Using Panoptic power as a theoretical model, electronic monitoring becomes the means by which managers can inexpensively assert their control in the workplace, and still allow a measure of participation and employee input. Increased productivity and improved customer service may be the professed goals of employers but the sub-text is an attempt to reassert their traditional prerogatives in the workplace. Therefore, attempts to curb employer excess fails to address the real issue of power between labor and capital.

Zuboff (1988:321) asserts that the attraction of the panoptic worldview is, above all, the guarantee of certain knowledge based upon the totality of supervision it allows. The psychological effects on workers of visibility alone are enough to ensure appropriate conduct (conformability). Certainty can be attained even without observational effort.

Zuboff explains that the allure of this panopticisim for management is overwhelming. It gives them 'the promise of certain knowledge'. They have the 'facts' in their hands within seconds if needed from computer systems (Lyon, 1994: 69).

Employee performance becomes 'objective' data with new electronic monitoring technologies (Lyon, 1994:70). Does this not mean that employees themselves are objectified? They become objects, even robots; they lose all humanization, and perhaps that is what makes it easier for management to adopt such systems, when people are no longer people. This makes it easier to enforce punishment, and perhaps even terminate people with ease if management does not see employees as no longer human when they simply rely on 'facts' from a computer. Management can cling to these 'facts'. For instance, management could ideally say 'well the computer said you did not produce as many as Joe beside you, so you will be demoted or punished in some way'. Ethical issues are involved if management does not stop to ask why an employee's performance is suffering. Management can use this technique to control their workers by scaring them. For instance, if Joe had a bad day on the job and he was punished, it discourages others from performing poorly, and hence management is controlling employee actions. An additional method that management can use to scare workers into behaving in a certain manner is to inform them that they may be under observation at any given time and there will be no warning. Employees behave in a certain manner then for fear of being under the constant eye of management. Savage (1998:68) points out that:

> In many respects the Panopticon was simply another example of the new type of regulatory institution which allowed the detailed inspection and monitoring of individual bodily behaviour. But it differed in one vital respect. Because it allowed individuals to be inspected without their knowing whether they were in fact being observed, it marked a new stage in the elaboration of disciplinary power in which surveillance no longer depended on direct visual observation between people. This allowed surveillance to be extended much more deeply into social relationships. Power rested less on direct control of the body and more on techniques designed to elicit 'self regulation' as people began to act as they were being observed.

In other words, management has power over workers through observation and knowledge.

Foucault (1972:71), who examined concepts such as power and knowledge said, "By the term 'panopticisim', I have in mind an ensemble of mechanisms brought into play in all the clusters of procedures used by power. Panopticisim was a technological invention in the order of power, comparable with the steam engine in the order of production". Panopticism "was not so much to punish wrongdoers as to prevent even the possibility of wrong-doing, by immersing people in a field of total visibility where the opinion, observation and discourse of others would restrain them from harmful acts" (Foucault, 1972:153). He further points out that, "In the panopticon each person, depending on his place, is watched by all or certain of the others. You have an apparatus of total and circulating mistrust, because there is no absolute point. The perfected form of surveillance consists in a summation of *malveillance*" (Foucault, 1972:158).

Power or monitoring gives persons in society the ability to dominate an entire population whether that population is at work, at school, or in a hospital. The new technologies of today originate from the changes made in industry in the eighteenth century: industrialization, Weber's theory regarding bureaucracy and Taylor's scientific management. These changes and progresses have allowed us to observe almost anybody but also have allowed us to gain sufficient knowledge of what is occurring in any given situation. Foucault explains this better in regards to Jeremy Bentham's idea of the panopticon when he states that "Bentham poses the question in terms of power-population as object of relations of domination" (1972:151). However, Foucault (1972:151-152) pointed out that

> power had only a weak capacity for 'resolution', as one might say in photographic terms; it was incapable of an individualizing, exhaustive analysis of the social body. But the economic changes of the eighteenth century made it necessary to ensure the circulation of effects of power through progressively finer channels, gaining access to individuals themselves, to their bodies, their gestures and their daily actions. By such means, power, even then faced with ruling a multiplicity of men, could be as efficacious as if it were being exercised over a single one.

Put more simply, in the past a manager had power over all employees, and it was difficult to have control or power over certain individuals without the knowledge that today's technology and yesterday's panoptic vision provides.

In sum, Bentham's idea of the panopticon evolved from seeing the need for stricter control in prisons but has been expanded throughout society and presently includes the workplace. The main idea behind panopticisim is that by being able to observe every action of particular individuals, we can then begin to control their behaviour. The individuals, once they know they are being constantly monitored, change their behaviour and conform to the needs and wants of those watching them – in this case managers.

The analysis of electronic monitoring that is derived from Foucault and Bentham's concept of the Panopticon places power in its rightful place at the center of the debate. The use of monitoring is a fundamental means by which the employer inexpensively and effectively exercises power. The beauty of the electronic Panopticon is the cooption of the worker into the very system that is used to administer control and discipline. Foucault's propositions regarding supervision in the workplace are expressed in more detail in the following section

Michel Foucault

The majority of Michel Foucault's ideas and concepts that I integrate with my own research come from his 1975 work Discipline and Punish. Foucault examines concepts and ideas such as changes in penal systems (as did Jeremy Bentham) the 'micro-physics' of power, and the regulation of body and soul. He believes that the strategies of confinement in the prison eventually become the model for the whole of modern society: a regime of observation, monitoring, classification, hierarchy, rules, discipline and social control. There is again an overlap here with Weber's own concepts from his ideal typical bureaucracy – classification, better known as division of labour, hierarchy, and rules.

Foucault takes Bentham's concept of the Panopticon in order to describe and analyze its effect as an instrument of wielding power within institutions and society as a whole. Using the term "hierarchical observation" he depicts "a mechanism that coerces by means of observation: an apparatus in which the techniques that make it possible to see induce effects of power, and in which, conversely, the means of coercion make those on whom they are applied clearly visible" (Foucault 1979:170-171).

Foucault states that the modern disciplinary society emerged at the close of the 18th century with the introduction of the first modern prison. He claims that the prison set the pattern for other social institutions. Schools, hospitals, and factories have copied the form of institutional dominance imposed by the prison, and the type of routinized control it maintains has thus become symbolic of the entire disciplinary society. With the prison serving as prototype, modern society has acquired symbolic and actual control over the

totality of the lives of its members through supervision of their daily activities in all major societal institutions. However, Louise Shelley finds it hard to accept this main thesis of Foucault's work Discipline and Punish that the prison provides the model for all other institutions of disciplinary society. Shelley (1979:228) states that Foucault overstates the disciplinary role of the prison when he writes "it is surprising that prisons resemble factories, schools, barracks, hospitals, which all resemble prisons". Shelly (1979: 1509) thinks that a more justifiable thesis than the one presented by Foucault would be that "all social institutions stem form the same concept of discipline or dominance that characterize modern society." Therefore, prison, as an concept of discipline is not realistic. Stating that *all* discipline within our society comes from the root of a prison is not realistic, but stating that discipline within social institutions stems from *one form* of discipline, as a concept by itself is realistic.

Foucault's theory rests on the fact that monitoring is a form of ordering society: it is a disciplinary practice which ensures that life continues in a regularized, standardized way (Lyon, 1994:7). Monitoring then is a means of control. Surveillance and electronic monitoring within the workplace today would be comparable with Foucault's ideas. Foucault (1986:155) stated in Power/Knowledge: "Just a gaze. An inspecting gaze, a gaze which each individual under its weight will end by interiorizing to the point that he is his own overseer, each individual thus exercising this surveillance over, and against himself". While Bentham saw the need for a large measure of actual monitoring, Foucault suggests that the Panopticon seduces and draws the individual into the administering of his or her own control. The Panopticon becomes "a machine for creating and sustaining a power relation independent of the person who exercises it; in short, that

the inmates should be caught up in a power situation of which they are themselves the bearers." (Foucault, 1979:201)

For Foucault monitoring has two forms of power: the accumulation of information and the direct supervision of subordinates (Lyon, 1994: 66). If we take Foucault's two forms of power and transform them onto the working world, we can speculate that managers collect abundant data about employees, on a daily basis. This ranges from application forms and resumes to daily punch in cards. The building and the devices within the buildings are the way management has direct supervision because work is not generally done at home or in dispersed areas anymore as was done in the past. Work is centralized into a factory or some type of organization, and within the factory or organization there are video cameras and electronic monitoring devices set up to monitor workers and their work.

Townley (1993: 520) suggests that "Power is relational: it becomes apparent when it is exercised. Because of this relational aspect, power is not associated with a particular institution, but with practices, techniques and procedures". Power becomes apparent through the exercising of monitoring and surveillance in the workplace. Power is associated with the knowledge gained from monitoring technologies and devices. Managers gain power over employees through their relations with them and the relations managers have with today's supervisory technology.

Townley (1993: 521) goes on to suggest that "Knowledge is the operation of discipline. It delineates an analytical space and in constituting an arena of knowledge, provides the basis for action and intervention-the operation of power". In other words,

electronic monitoring gives knowledge to managers and hence it can be seen as an operation of discipline.

When Bentham suggested that prisoners be placed in a panoptic system, Foucault thought that individuals at work must also be rendered visible. The purpose of the architecture is to allow an internal control that transforms the individual while also modifying and regulating behavior (Foucault 1979:172). In organizations there must be methods to inspect workers, to observe workers' presence and practices, to inspect the quality of the work, to compare workers to one another, and to classify workers according to skill and speed. As Foucault (1980:125) recognized, in order to obtain productive service from individuals "power [managers] had to be able to gain access to the bodies of individuals, to their acts, attitudes and modes of everyday behaviour." This is done today through supervisory technologies (Townley, 1993:533).

Deetz (1992:40) suggests that another key aspect of Foucault's conception of disciplinary power is the presence of new forms of monitoring. While the worker was always watched, disciplinary control allowed a new form of surveillance: self-surveillance. Foucault (1977) refined Bentham's 'panoptic' prison design as the root vision of this new self-surveillance. In Bentham's design a single guardhouse stood with a view into each cell, but the prisoner could never tell when he was being watched. The monitoring, hence, could be more complete than from a number of guards walking the cellblock; the prisoner imagined being watched constantly. Certainly this is a feeling enforced in the modern organization, particularly at the managerial levels. Workers begin to "self-surveil" themselves knowing that they are always being watched or could possibly be electronically monitored or under surveillance. Workers conform to what

they know their managers want them to do –perform more efficiently, make more products, handle more transactions, answer more phone calls etc.

> In the seventeenth and eighteenth centuries a form of power comes into being that begins to exercise itself through social production and social service. It becomes a matter of obtaining productive service from individuals in their concrete lives. And in consequence, a real and effective 'incorporation' of power was necessary in the sense that power had to be able to gain access to the bodies of individuals to their acts, attitudes and modes of everyday behaviour. (Foucault, 1972: 125)

Although Foucault is referring here to the very beginning of industrialization and the infusion of the factory, I argue we are still experiencing this type of power, through electronic monitoring; it is a way of acquiring production from employees in their jobs. It does this, however, through the notion of invisible eyes or the panopticon; managers gain power through the knowledge they have of their employee's behaviors, mannerisms, production, and attitudes while at work. Managers can, in turn, use this knowledge to act according to how they see fit in regards to their worker's actions. They have the power to declare an employee fired from the organization if he or she was caught stealing through monitoring. Hence, power comes from tighter and all-knowing technological forms of supervision.

Foucault suggested some hypotheses regarding strategies and power and the following are directly related to what my research explores. All individuals realize that there are aspects of power and domination in all aspects of life, and work is no exception. Foucault explains, however, that power co-habits with other social bodies, social hierarchies, and overlaps in different aspects of our life (work, home) and generally is not the be all and end all. There is no clear division between the dominated and the dominators in this case, especially in the work world. However, power and domination

does exist, but is not to be thought of as an overbearing and controlling situation. Foucault has various general statements that he laid out in his work Power/Knowledge (1972:142):

> (i) that power is co-extensive with the social body; there are no spaces of primal liberty between the meshes of its network; (ii) that relations of power are interwoven with other kinds of relations (production, kinship, family, sexuality) for which they play at once a conditioning and a conditioned role; (iii) that these relations don't take' the sole form of prohibition and punishment, but are of multiple forms; (iv) that their connections delineate general conditions of domination and this domination is organized into a more-or-less coherent and unitary form; that dispersed, heteromorphous, localized procedures of power are adapted, re-inforced and transformed by these global strategies, all this being accompanied by numerous phenomena of inertia, displacement and resistance; hence one should not assume a massive and primal condition of domination, a binary structure with 'dominators' on one side and 'dominated' on the other, but rather a multiform production of relations of domination which are partially susceptible of integration into overall strategies.

All of the general statements that Foucault proposed are related to my own research in that power comes in many forms within the workplace: through managers themselves, rules and regulations laid out for workers, hierarchy, and finally, domination through power and knowledge provided by supervisory technologies.

In Forget Foucault, Jean Baudrillard proposes that we 'forget Foucault' because Foucault's theory on power is obsolete. Baudrillard suggests that previous discourses on power like Foucault's,

> are obsolete because the phenomena which they describe (and helped constitute) have radically changed. Power no longer resides securely anchored in spheres like the economy or institutions like the state, prisons and so on, but is radically dispersed throughout society in an era in which postmodern semiurgy proliferates signs of power, and power comes to resides in codes, simulations, media and the like, rather than in actual institutional forces and relations (Kellner, 1989: 133).

Overall, Baudrillard is suggesting that Foucault's theory of power visualizes an earlier stage in society and social structure, where power took discernable forms and was

actively visible, but should now be obsolete. Because today, power is not visible, it resides in media, signs and simulations produced by society, not institutions like schools, prisons and the workplace. Whereas, Foucault saw power as residing in discourses, institutions norms and practices which made individuals produce conformity and act in certain ways, Baudrillard is suggesting that this kind of power no longer exists.

Steffy and Grimes (1992:191) point out that in general, for Foucault, power over the employee is established through electronic monitoring devices, gaze and documentation allowed by the knowledge products of personnel/organizational psychology (POP). POP's epistemological approach requires the following procedures: objective reliable and accurate measurement systems to gauge individual differences on variables of interest (e.g. production, keystrokes, transactions); simplistic, reductionist perceptive models to evaluate relationships between individual and job variables (e.g. division of labour, job descriptions); and an intensive program of data collection and data storage (e.g. video tapes, computer hardrives and disks). These measures in turn affect organization and supervisory practices. For instance, individuals are presented as numerical commodities that can be watched, held over time, located, examined and shared by interested parties. Workers become unidentifiable as humans; they become numbers or case files. Information not measured, often information representing the employee as singular dynamic and ever fluid individual or human, may be largely withheld and ignored. Thus, to the extent that narrow and delimiting systematic models influence administrative decisions, the organization is objectifying the worker.

The central point of this analysis becomes the "knowability" of the worker - the process by which the worker is exhibited as knowable, or the process by which the

worker's actions are constructed or produced (Townley, 1993:522). Managers become knowledgeable of workers through electronic monitoring devices. They are able to watch and interpret every move that is made by their employees during working hours.

> The question that is prompted by a body of knowledge from a Foucauldian perspective, therefore, does not concern the truth or falsity of such processes, or whether the knowledge that is generated is objective or subjective. Issues are not posed in such terms. Rather, the emphasis is on what is involved in rendering an arena or an individual knowable: What are the processes by which they become known? How do these processes become established and used? What are their effects? The emphasis is on the techniques through which human beings understand themselves and others. It emphasizes the importance of studying, in detail, the actual practices that introduce domains and individuals to enunciation and visibility-the mechanisms of inscription, recording, and calculation that constitute the discursive practices that make knowledge of both arenas and the individual possible. The focus, therefore, is how disciplinary practices operate to create order, knowledge, and ultimately, power effects (Townley, 1993:523).

This quote sums up all the main points I examine in my research. Electronic monitoring allows for complete knowledge on the part of the manager in regards to the employees which suggests that managers also use the technologies to gain power and domination over their employees or discipline their employees. The "mechanisms of inscription, recording and calculations" are electronic monitoring devices that are used to control workers by giving managers the means to make decisions. Many managers base decisions, policies, production rates, and employees in general, by these mechanisms. The process that is used is what needs to be investigated.

The idea of supervisory technologies and the concepts of power and knowledge and control over workers has its roots in several different areas that converge to form a solid background for my research. It all began with Weber's bureaucracy and the characteristics it formed in the revolution of the workplace followed closely by Taylor's scientific management techniques, which aimed to help make workplaces run even

smoother. Bentham and Foucault support the idea of the 'all seeing all the time' in order to gain knowledge, power, domination and control over individuals. These are all foundations for social control in the workplace, the next section in this chapter.

Social Control

Social control has thus far been referred to through the works of Weber, Taylor, Bentham and finally Foucault, but what is social control? Social control as defined in the Oxford Dictionary of Sociology (1998: 610) is "... social processes by which the behaviour of individuals or groups is regulated".

How did social control originate in the workplace? Simpson does an excellent job of explaining how the history of organizations and the industrial revolution actually gave managers complete control, slowly but surely, over workers. She discusses workers' movement from cottage industry to factories, where employees were forced to be at work at certain times, given breaks at certain times; whereas in the cottage industry, the workers themselves had control over these issues, as well as many others. Next, Simpson recounts how the mechanical equipment of the factory took over the tools used for individual craftwork, hence, the machine began to dominate work instead of humans. Employees had to work at the pace the machine was set, not at their own pace as previously done. Workers were thus robbed of their freedom, of movement, and coming and going when they pleased; they were controlled by the machines, or in this sense by their managers through the machines. Management wholly controlled work; work schedules were developed to maximize production, efficiency and the natural rhythm of

the day was cut off (Simpson, 1999:48). The control of work came into play with scientific management and the many time series tests that were conducted; management gained complete control over the work processes.

"The administrative system of the capitalistic state, and of modern states in general, has to be interpreted in terms of the coordinated control over delimited territorial arenas which it achieves" (Giddens, 1990:57). The delimited territorial arena in my study would refer to the workplace, where there is intense administrative control over everything that occurs within the arena. "Such administrative concentration depends in turn upon the development of *surveillance* capacities well beyond those characteristic of traditional civilisations, and the apparatuses of surveillance constitute a third institutional dimension associated, like capitalism and industrialism, with the rise of modernity" (Giddens, 1990:57-58). In other words, administration only has a certain amount of control that is contingent with the amount of monitoring that occurs, and monitoring, in its most inclusive forms originates not in the traditional nation state but in the modern capitalistic and industrious states. So, with the advancements in modernity and consequently in technology, the administration begins to gain more control over others, in this case employees.

Deetz (1998:164) explains that in direct strategies of control, management watches the work effort, rewards and punishes corresponding to personal preferences or standards for desired work qualifications. In more indirect versions, management instrumentalizes the employee by turning him or her into a productions means and then consults experts to produce systems to get the most from the employees.

Additionally, Deetz (1998:151) reiterates that

> Workplaces throughout the world are rapidly changing owing to new technologies, new market conditions, and new conceptions of employer-employee relations. With this has come new concerns with workplace control concern from dominant groups on how to acquire and exercise control, and concern from others regarding new forms of domination, representational failure, and less satisfactory company performance.

Workers also need to be concerned about their privacy and how these new technologies can infringe more so on it. Supervision has been a constant since time began, however, new technologies are making it easier for management to gain more knowledge of the workday. It can become not supervision of work so much as it becomes supervision of employees themselves. This causes changes in the relations between management and employee; there is a loss of trust and perhaps an extension of contempt on the part of the employees. Management has been trying for decades to find the best possible way to manage employees and to supervise them adequately, but some might suggest that surveillance and other forms of electronic monitoring made possible by today's technology is becoming more than natural supervision; it is a strong form of domination and social control. Social control in an indirect way when employees could feel eyes on them and see their supervisors; now the employees are mostly guessing as to whether or not they are being watched and many employees would suggest it is just best to act like you are being watched and perform accordingly. Hence, managers are controlling employees, getting employees to do what management wants them to, perform their job accordingly. That can mean several different things, high productivity, or using the phone and computer for business relations only. This is accomplished with the aid of technology – computers in particular.

As noted by Deetz. (1998:153), the problem is not the form of constraint that is put on the workers, but the domination – the naturalization of overbearing productions and closure of responsive options. In other words, almost everyone feels constraint in any job, that is, we are obliged to work whether we like or not in order to survive in our capitalistic society, but that is not the problem. The problem is the type of power that managers have over employees and the ways in which managers choose to make use of it.

Power, subsequently, leads to greater control. The ILO (1993: 11) suggests that "The search for greater control leads to more intense monitoring so that management is fed with information to make future decisions. The monitoring might be of work processes, work groups, or individual workers".

The ILO (1993: 11) goes on to point out that,

> Since controlling the work performance and movements of employees is not new, the question is why electronic monitoring raises problems that differ from more conventional forms of monitoring. Much of the concern involves the radical changes in the nature of the monitoring, which can involve secrecy, continuos monitoring of every act and movement, and a variety of consequences on working conditions and health of workers.

According to Freidman there are two managerial styles; the first is termed Responsible Autonomy and the second is Direct Control. Direct Control relates specifically to my research. It is defined as trying to limit particularly harmful effects such as theft, low productivity, and treats workers as machines or objects (Freidman, 1977:78). What management sees as a potentially preventative method of supervision could be seen by employees and others as a means of control and subordination.

Cohen (1985:221) describes the type of social and direct control that exists at present within workplaces as preventative control, which relies on much of Foucault's panoptic vision. Preventative control is comprised of four factors:

> Visibility — we as a society, or employees in this case, are aware of the cameras and TV screens as well as the information data banks;
> Unverifiability – we never know when we are being watched;
> Anonymity – we have no idea who is operating the system, it could be a computer;
> The absence of force – in other words, because of the previous three factors we want to be on our best behaviour.

All four of these factors play a large role in how employees behave when they are under surveillance or when their employer uses electronic monitoring to evaluate their work. The above factors describe the typical response to social control of employees by managers. Managers have direct control and power over employees. Social control is having power over others, and manipulating the behaviour of others. As an example,

> Foucault argues that power is not a thing possessed by an individual or group, but a *strategy*, the effects of which are realized through a network of relations and tactics. This network is in a constant state of tension, owing to the resistance of those subjected to it, and so power is always in the process of being achieved. Foucault also rejects the separation of power from knowledge (Dandeker, 1990:23).

In other words, Foucault argues that without knowledge a person(s) would have no power or power strategies over others.

Dandeker (1990:23) explains that, "The history of power strategies, e.g. modes of punishment and social control is simultaneously a history of the forms of knowledge which constitute the mental assumptions and categories of both the subject populations and those in strategic positions of power". Simply stated, social control depends on the knowledge that those who hold the power have in regards to the population that those in power are attempting to control.

Within the framework of Bentham's panopticon and Foucault's thesis regarding knowledge and power, Dandeker (1990:24) states:

> Populations [workers] were not managed *en masse* but individually and in detail in regard to specific bodily movements and gestures. Moreover, the objective was to control behaviour by a discipline of the body rather than through a process of persuasion. Discipline was exerted through a continuous, uninterrupted process of supervision of the activities of the body according to arrangements that involved the partition of time, space and bodily movements.

This is my main premise: managers control workers not through threats to job security with words but with silent actions, such as electronic monitoring. People are controlled because they are being supervised all the time; there are no limits to the type of supervision that is in place today.

The Ontario Ministry of Labour (1979:1) goes so far as to suggest that:

> Such pervasive surveillance invokes images of Huxley's Brave New World and Orwell's 1984. Previously, surveillance in the workplace was limited by the availability of supervisory resources. Also, while human surveillance usually allowed employees to be aware that they were being watched or overheard, electronic technology makes covert surveillance much easier.

Not only is surveillance much easier but so is control, if an employer can see what an employee is doing at all times; this also increases the level of control managers have of the environment and hence, the employee. In Huxley and Orwell's work, surveillance was used as a tool for control and similarly, this can be seen in the workplace today. It is much easier to control others if management knows exactly where employees are, what employees are doing and hence, can subject employees to their rules and make employees do what management desires.

In summary, Garland (as cited in Townley, 1993:533) identified, "The successful control of an object...requires a degree of understanding of its forces, its reactions, its

strengths and weaknesses. The more it is known the more controllable it becomes." Thus, the more an employee is known, the more controllable he or she becomes.

Lyon and Zureik (1996:3) define social control as the element that most fear with regard to computerized surveillance and thus it features-alongside privacy-most prominently in discussions of new technology.

Rybczynski (1983: 72) points out that: "Many of the contentious issues are similar and are concerned with control of the machine. And the issue of control is not, as some philosophers and historians would have us imagine, that of man versus machine. It is the much older conflict of man versus man". What it makes clear is that managers are still trying to control employees just as they did in the old cotton or steel mills but now management does not have to do it directly, management can use technology to help us.

It is clear that through technological developments and the wants and or needs of management workers are subsequently under more and more closer supervision by computers. The supervision may be through electronic monitoring, surveillance cameras, or other technological supervision devices. The end result is that management is gaining more knowledge over employees and hence can manipulate the environment and an employee to perform in a way that is in line with management's goals.

Control of work and machines is admirable according to Howard (1985: 30): however, control becomes not so admirable when the control moves from machines to people. This is when it becomes what he terms a 'dangerous manifestation of management approach'. In concurrence, Volti (1992: 17) suggests that technological development has been responsible for a vast amount of economic advance, but it has also come with cost. Even if monitoring saves the management of an organization time and

money what about the social costs it has on the employees? They may feel they have less freedom; they may feel entrapped; or employees may not even know that they are being monitored and in this instance they are being deceived. The final section of this chapter summarizes the consequences and gives suggestions for the future to keep technology in check.

Consequences and Suggestions for Keeping Technology in Check

The topic of social control with reference to electronic monitoring, and other supervisory technologies is a current and controversial subject. I feel it necessary to discuss the consequences and suggestions with regards to regulating this technology as considered by sociologists and authors alike within the discipline.

All actions are met with equal and opposite reactions in life, and supervisory technology in the workplace is no different. The ideas I have reviewed so far, Weber's Bureaucracy, Taylor's scientific management, Bentham's Panopticon, Foucault's power and knowledge and the concept of social control itself also have repercussions, outcomes, and reactions.

Lyon makes several suggestions in hopes of containing monitoring. He starts with public awareness and education. Lyon feels that one cannot resist the growth of electronic monitoring, admitting it might be more helpful to channel it in an ethical and political manner. Computer professionals can also play a role in channeling monitoring in the right direction, that is away from the dystopian nature of 1984 and the 'Big Brother' scenario. In a sense Lyon is suggesting that although many people view

monitoring in a paranoid fashion and seek out its evils, it has also served people for the greater good. Lyon (1994: 224) illustrates an example of caller identification; women and minority groups can protect themselves from direct marketing, or other infringements.

At the same time, James Rule, Douglas McAdam, Linda Stearns and David Uglow suggest, "...so long as what we term the "efficiency criterion" continues to guide bureaucratic innovation in these respects, the potential for extension of surveillance to more and more areas of life is endless" (Dunlop and Kling, 1991a: 474). What is the end result of this amount of monitoring not only in the workplace but also within all the other realms of our lives – home, work, school, shopping? Where will this level of sophistication of technology take us?

In terms of social control, Rule et al. suggest that "a fundamental trend in modern, highly developed societies is the progressive centralization of social control in large bureaucracies and the incorporation of more and more personal information in these bureaucratic systems to guide the workings of control" (Dunlop and Kling, 1991a: 475). The industrialized world of today is an excellent example. Our social insurance numbers hold vast amounts of information on us, once an organization has our number, it is easy to find out information about us. In the workplace, all the devices, rules, and limitations combine to form files on individuals. The more knowledge an organization has about a person, the more able they are to control that person, or his or her environment.

One concern I share is if we are being so closely watched at work, and our cards and forms tell the rest of society everything about us, where does the monitoring stop? What does it take to become George Orwell's 1984 society? Lyon suggests that such a

surveillance society requires only two things: a range of personal data systems, connected by telecommunications networks, with a uniform identification scheme (Lyon, 1994: 48). He suggests that the first of these requirements is already in place; governments and commercial organizations have a large range of personal databases. The first requirement is filled by records of our milestones in life (birth, marriage, death) and commercial organizations build them from our warranties when we purchase their products, any personal information given when purchasing goods is filed and kept. The other two requirements may be present or in the process of being developed. It is a scary thought that as individuals we may not know if information is being collected about us and by who and for what reason. This is a negative social consequence to monitoring and surveillance within society.

Collingridge (1980: 16) feels that two things are key for the escape from the harmful social consequences that technology can bring with it. First, it must be understood by all that indeed technology has or will eventually have harmful effects. Second, in order to avoid these effects it must be possible to change the technology in some way. However, Collingridge (1980: 16) warns that as a society and individuals we do not fully understand the interaction of technology and society. The social consequences of the fully developed technology cannot be predicted during its introduction, at least not with adequate confidence, to warrant the strain of disruptive controls or rules. The author feels that this is the one part of the dilemma about control with regards to technology. In accordance, nobody scrutinizes technology to attempt to stop it before it gets out of control because, simply stated, not enough people envision technology as being harmful. Rather they absorb what corporations sell - the

innovations, the efficiency, and the ease by which technology can help us carry out our daily lives. We are so blinded by the positives, we forget to look for the negatives, or even think that there might be some negative.

The second control dilemma Collingridge (1980: 18) points out is that once a technology has permeated society and its unwanted consequences manifested, the technology is no longer easily controllable. He explains that when new technology comes aboard, society gradually adjusts to it, and often other technology has to be changed to adjust to the new technology and eventually it is assimilated into our lives. Hence, to try and control it is very difficult, expensive and slow, and sometimes not possible at all (Collingridge, 1980: 18). In other words, trying to control and perhaps change a technology that has become so ingrained in our lives can be very disruptive and expensive. If this new technology has caused other technologies to change and has become part of their composition, how do we separate them, or go back to what it was before the introduction of new technology? If everyone has changed to the new supervisory technologies, it would have cost money to do so, and to go back would require time, energy and more money. Some people find it easier to not oppose the majority, or to retain the status quo. However, Collingridge (1980: 20-21) states:

> The essence of controlling technology is not in forecasting its social consequences, but in retaining the ability to change a technology, even when it is fully developed and diffused, so that any unwanted social consequences it may prove to have can be eliminated or ameliorated. It is therefore, of the greatest importance to learn what obstacles exist to the maintenance of this freedom to control technology.

In summary, we need to look at the 'big picture', not at everyday experiences at work with regards to surveillance, but what this surveillance means for all workers and

society in the twenty first century. Deciding how we will use it and who will have access to the information created by it is essential. While it may meet the organization's immediate goals, how does it affect those being influenced by it and does it meet society's overall goal? This question is especially important for ascertaining the future use of information technology and its effects in the workplace. Ultimately, what is the driving force behind management's decision to use supervisory technologies?

CHAPTER 4: RESEARCH METHODOLOGY

This chapter, comprised of three sections, outlines the research methods employed in this study. The first section outlines the sample selection and sampling procedure. The second section gives a brief description of the questionnaire developed for this investigation. Lastly, the third section presents the methods of analysis employed in this research.

Data collection for this research investigated whether or not electronic monitoring is being used as a means of social control in the workplace, and was mainly completed in Guelph, Ontario during the fall and winter months of 1999-2000.

The research methodology used to collect information for analysis is survey research. "Survey research is probably the best method available to the social scientist interested in collecting original data for describing a population too large to be observed directly" (Babbie, 1983: 209). There are two unit of analysis, the organization as well as the individual. Data were collected from individuals by means of an interview, which included a questionnaire.

I carried out an interview/survey in financial institutions. Two kinds of financial institutions were investigated: banks and insurance companies that employ electronic monitoring. The interview process helped me to address some of the more unobservable qualities about these companies since I was there in person and was able to read the body language of employees as well as to note the environment. I secured more information from an interview than I would have from simply handing out surveys or conducting the survey over the phone because I was there in person and respondents were apt to feel more comfortable talking to me rather than filling out a survey or answering questions

over the phone. In addition, I investigated both sides of the firm: the managements' point of view as well as employees' point of view regarding electronic monitoring.

Face-to-face interviewing was chosen as the survey method for two reasons. First, data from the interviews tend to be more in-depth, and second, I had a better understanding of the sample population. Kidder (1981:149) outlines advantages and disadvantages in conducting face-to-face interviews. There are several advantages to this method. First the interviewer is more likely to establish rapport with the respondent. Second, complex questions may be asked at length and in depth and through clarification and probing, detailed answers to these questions are possible. Disadvantages include the interviewer's bias both in writing down answers and provoking socially desired answers from participants. Other disadvantages are the high cost and the amount of time required to complete the interviews.

A questionnaire was developed to measure all variables that were considered to be related to social control through technology. Questions were asked that targeted specific information about the electronic monitoring systems and how they are used. For example, regarding the electronic monitoring that occurs in the workplace, employees were asked to describe any drastic departures from conventional work routines. They were asked if they agreed of disagreed that this type of electronic monitoring simply expressed itself more as a progressive extension of more familiar business practices. The questionnaire also determined whether or not an electronic monitoring system was already in place to monitor immediate and technical problems and its use then expanded by management for other purposes. It was also important to determine if the organization had progressed from a rudimentary form of monitoring to a more advanced type of technology.

My target population, the population to which I would like to generalize my results, were several organizations in the surrounding Guelph area that manipulate electronic monitoring at present. The conception of the sampling was purposive. However, since I could not obtain a list that had all the companies I was interested in investigating, I used non-probability or convenience sampling. That is, I used whatever sampling units that were conveniently available as well as those organizations that I thought were representative of all the organizations that used electronic monitoring. I therefore tried to select companies that were large, small, had different monitoring techniques, and different philosophies. To this extent of not using random sampling, the external validity of my study is low. In other words, I am not able to generalize to the larger population without making some serious erroneous inferences. This type of non-probabilistic sampling is not useful when precise and accurate generalizations are required; however, I conducted more of a descriptive study. Although the inferences are much more dependent on the researcher's expert judgement, I tried to counter this weakness by gaining as much knowledge as possible about my population before I drew the sample. These two modes of data collection, survey research and ethnographic interviews, are complimentary and that improved my study considerably. The two industries investigated are quite similar. Both industries deal with financial aspects, both are based on serving the public, and both have a large customer service foundation.

Sample Selection

The populations that I was interested in studying were those organizations (banks and or insurance companies) that use electronic monitoring as a form of supervision. A sample of over 25 or more companies was randomly selected from a local business directory. Many calls were made and letters sent out during an exhaustive four month period. (See phone call log in Appendix A.) Although the desired number of participants in the study was somewhere between 50-100, only 13 interviews were conducted. I was able to enter only three banks and one insurance company. Twelve of the interviews were conducted over the span of the three different banks and only one interview was conducted at an insurance company. Four interviews were conducted at Bank AA, with two managers and two employees. At Bank BB a total of seven interviews were conducted. The total was comprised of two manager interviews (Bank BA and Bank BB) and five employee interviews. At Bank CC, I was able to obtain only one interview. The interview was with an employee who happened to be on leave from the bank at the time of the interview. This person was also my only contact at that particular bank. I conducted an interview with this participant first in the hopes of gaining access to the organization after getting contacts. I obtained contact names from the interview, however, when I contacted the organization, the manager there refused to participate. It is of interest to note here, that this was the only interview that I conducted where the participant had obvious negative feelings and opinions about electronic monitoring in the workplace.

The last interview I conducted for a grand total of thirteen was located outside of Guelph, at insurance company AA. The participant was an employer (manager) and would not allow me to interview employees after our interview. The participant did, however, give me another person within that particular organization to contact in regards to possible further interviewing processes. The reasons and explanations as well as the results of the interviews are presented in chapter six.

Procedure

Between late September and mid-October of 1999 I compiled a sample list. In late October I conducted three pretests of my survey with a manager of a bank and two bank employees. All three pretests conducted were successful and there were only minor changes to the style of the survey, such as the ordering of questions. As the questions were not changed significantly, I have included those three pretests in my final analysis. I then began going through my list and making phone calls to various organizations in regards to setting up meetings to explain my research: I had a variety of responses to my first contact with the organizations. Many refused to meet with me upon our phone conversation saying they did not employ the type of technology I was interested in. Some people were hesitant and so I provided them with a cover letter and an introduction to my research and then called them back at a later date to discuss meeting with them after they had reviewed the information package (see Appendix B). Other people I contacted immediately arranged to meet with me to discuss the possibility of conducting the research. The last 'category' of people I encountered were those who turned out to be the non-respondents. I talked to people, got transferred to someone else within the

organization, and then had to leave messages, upon messages, upon messages. Hence, in some organizations, I never got past an answering machine which was a frustrating part of my research.

For those people who did agree to meet with me (who were always the branch manager or the manager) our first meeting was simply to consult; I went over the research with them, explained my objectives, my goals, and why I was conducting the research. At that point I asked them if they had any questions and then if all went well, we arranged times for me to return to conduct an interview with them and other employees. At this point I also had them sign a consent form, outlining that they gave their consent for me to interview their employees with no repercussions (see Appendix C). There were nine interviews conducted during November and December; there was a break for Christmas and year-end, as well as directly after the New Year because of the Y2K computer circumstances. The remainder of interviews were conducted in January, 2000.

At the beginning of each interview/survey I introduced myself, explained my research objectives, and if agreeable, asked them to sign a consent form (Appendix D). I then asked them if they had any questions; upon answering them, we began to proceed with the survey/interview (Appendix E and F). Most questions were designed to encourage fixed responses, however, some open-ended questions were asked to obtain more in depth understanding.

The interview for managers lasted between sixty to ninety minutes. The employee survey, which took less time, usually lasted only thirty to forty-five minutes.

At the end of each interview, respondents were presented with a small token of my appreciation for participating, usually a gift-wrapped package of chocolate mints.

This portion of the chapter has provided a framework for the sampling procedure of my research. The following section describes my research instrument.

The Research Instrument

The survey research instrument included questions that were designed to obtain answers to my main research questions and statements (outlined below). There are essentially two surveys although they overlap in several areas. The first survey was designed for managers. The questions in this survey are directed more to what exactly the monitoring collects and what is done with the information collected. There were also more open-ended questions in this survey. The second survey questionnaire constructed for the employees was shorter and asked the respondents to reply more on their thoughts and feelings in regards to the monitoring being done. The surveys are provided in Appendix E and F.

The questionnaire was divided into several sections with reference to my main research questions and statements and titled accordingly. Section 1 included questions to obtain background information about the respondent's position, the organization in general, and the type of monitoring used within the organization. Section 2 on workplace monitoring asked about computer configurations, various kinds of data available from various configurations, and why a certain type of monitoring was used. Section 3 on invasiveness of new supervisory technology asked questions about how the respondent

felt and what the respondent thought about electronic monitoring. Section 4 on social control through technological supervision asked respondents how they felt and what they thought about using the monitoring techniques, and what the collected data were used for. Section 5 on social control asked respondents if technological supervision gave more control to managers, what type of supervision the respondents preferred the most, and covered legislation issues. Section 6 on why we use surveillance technology and social control assessed what brought the rise in electronic monitoring within the workplace. Section 7 on monitoring machines and productivity deciphered whether the monitoring done was aimed at productivity of the machines or of the employees; were companies monitoring machines, which might be acceptable, or were they monitoring employees, which might or might not be acceptable? Section 8 on privacy asked respondents to agree or disagree with certain statements that would reflect whether they felt they had less privacy within the workplace and in their lives in general because of technology. The final section dealt with demographic information; it was a separate part of the survey, which I asked respondents to fill out.

Elements of sections 5 and 7 were drawn from the study "Attitudes Towards Control and Evaluation Systems" conducted by Rebecca Grant and Christopher Higgins at the University of Western Ontario. The foundation for almost all of the remaining sections was developed from the literature on evaluation technology in the workplace.

The research instrument has been summarized thus far. The remainder of this chapter describes the method of analysis used in the research.

Method of Analysis

As noted previously, my sample size was relatively small, and thus, none of my major questions could be sufficiently answered, nor was I able to make any generalizations. I can, however, offer several perspectives on trends in keeping with common occurrences found within the literature, my major research questions, and the survey results.

My research, then, has a descriptive nature as opposed to a fact-finding nature. Accordingly, my data will be analyzed both qualitatively and quantitatively. Qualitative research is, according to Strauss and Corbin (1998:11), any type of research that produces findings that were not arrived at by statistical procedures or alternate means of quantification – that is, the majority of the analysis is interpretive. Strauss and Corbin have defined qualitative data analysis as "... nonmathematical process of interpretation, carried out for the purpose of discovering concepts and relationships in raw data and then organizing these into a theoretical explanatory scheme" (1998:11). Immy Holloway (1997: 1) gives the best definition or description of qualitative analysis that applies to my own research

> Qualitative research is a form of social inquiry that focuses on the way people interpret and make sense of their experiences and the world in which they live. A number of different approaches exist within the wider framework of this type of research, but most of these have the same aim: to understand the social reality of individuals, groups and cultures. Researchers use qualitative approaches to explore the behaviour, perspectives and experiences of the people they study. The basis of qualitative research lies in the interpretive approach to social reality.

One way I can analyze the data is by taking what is said and other factors that emerged from the interviews and integrate these with concepts and ideas that I have, or

that others have provided for me. For instance, I hope to come across something that integrally coincides with Weber's theory of bureaucracy and I could provide evidence about a link between bureaucracy and social control.

The majority of the findings are outlined consistently and completely in chapter six. However, because of the lack of data available for this study, the following chapter outlines the limitations that I encountered in this research.

CHAPTER 5: RESEARCH LIMITATIONS

Almost all researchers encounter problems while conducting research, however, my problem was so large it deserves noting in this chapter as it hampered my project and results significantly. I was encumbered with the problem of nonresponse.

This chapter is divided into two major areas: limitations in my research, which briefly outlines reasons for refusal and the topic of secrecy within organizations; and difficulties gaining entry into organizations. The last portion of the chapter, which is a discussion about nonresponse as a research limitation, offers some solutions to this problem.

A major limitation to my research is the fact that I was unable to obtain sufficient information about an appreciable proportion of potential respondents because of their refusals. Dunkelberg and Day (1973: 160) point out this can be a common problem,

> Experience with personal interview sample surveys indicates that the number of interviews successfully completed varies with the number of attempts to reach members of the sample. The first attempt to contact the respondents can be expected to yield only 25 or 30 % of the original sample, with roughly equivalent results on the second call (first callback). Beginning with the third attempt to reach respondents, the yield of completed interviews declines.

Whereas roughly 203 calls were made in my study to obtain the 13 interviews that were actually completed (for an average of approximately 6.4% support) approximately another 188 calls were unproductive. This means that 15 calls had to be made for each completed interview.

Carter (1971:118) explains that researchers are often met with resistance from their participants if the research objectives do not positively reinforce the expectations

and ideological value system of the participant. When participants refuse to participate based on the objectives of one's study, Carter suggests that the following two assertions may be made. First, "the greater the perceived threat to the client's or manager's positive self-concept, the greater will be his resistance to negative findings, and second, the greater the difference between the client's or manager's concept of the social reality being studied and the research findings, the greater will be his resistance to the results" (Carter, 1971: 119). In other words, if your research is going to portray the position or actions of a manager or organization in a negative way, it is more likely that he or she will refuse to acknowledge a researcher and the findings or refuse to let the researcher gain entry. While I do not know the reasons behind all my refusals, I do conclude that the topic of my research did indeed influence some participant's negative attitudes towards my own research.

I also sensed that many of the organizations that refused to participate did so on the basis of not wanting to expose, to their employees, or to me, their supervision techniques. For instance, when I approached one bank branch manager and discussed my research goals with her, she felt that it was an interesting topic and that her organization would take part in my research. However, upon discussing my topic with her other managers, she came back with a negative response. As well, I had a similar response with an insurance company. Additionally, I would often talk to various people on the phone at different insurance companies and financial institutions who would disclose to me the fact that electronic monitoring occurred within their organization, however, when they referred me to speak with their managers, they often denied this fact and refused to discuss my research goals any further. This leads me to conclude that some organizations

are not comfortable sharing with researchers information regarding their supervisory techniques for fear that others will judge their actions and techniques in a negative manner.

Reasons for Refusal

The focus for this chapter is on various aspects of refusal and non response among my two types of nonrespondents – financial institutions and insurance companies.

Many studies which explore refusals have been conducted and they are important for two reasons. The first is in helping to determine what biases exist if any, and the second is in discerning whether more complete knowledge of refusers might suggest appeals, procedures, and solutions to reduce the number of future nonrespondents (DeMaio, 1980:224). In addition, depending on the topic being investigated, the study may lead to an insight on the topic as well. For instance, why did I have so many people who refused? Was it dependent on the person, on their ability, motivation and authority as discussed by Tomaskovic-Devey, Jeffrey, and Thompson (1994) or simply because the subject is such a sensitive one that people refused to comment on aspects dealing with electronic monitoring in the workplace? These are all factors that I inquire about and comment on in this chapter.

Stinchcombe, Jones, and Sheatsley (1981: 359) estimate that in the sample surveys done by probability methods, 20 to 30 percent of the specified sample are usually never contacted or, once contacted, never interviewed. In my case unfortunately, the refusals were much higher, and hence the need to discuss the topic of refusals. When it was decided to terminate the phone calling, there were still several respondents with

whom I had not been able to contact. I would leave several messages and still get no response. As well, the majority of my small sample simply refused to participate.

One factor that DeMaio (1980:229) provides as a reason for refusal which is also manifested in my own research, is the fear or dislike of the unknown. This can emerge in two ways. The first is the fact that fear may translate into an aversion to outsiders wishing to conduct research in an organization. Many organizations do not trust those from external sources, and quite often, people have preconceived notions of students especially with regards to research. The second factor may have been fear or dislike of the topic itself, particularly since it may be deemed by some as sensitive. Some people may have had a bad experience in the past with this type of supervision (electronic monitoring and or surveillance). People may have a weird sense of paranoia of the unknown in terms of supervision; some may have an unnatural response to the words surveillance and electronic monitoring when associated with supervision. Others may not know what electronic monitoring meant and hence it was a foreign concept to them. Thus, fear and dislike of the unknown are plausible factors in refusing to participate in my research.

According to DeMaio (1980: 232) the extent to which refusals actually affect survey estimates and hence findings, depends on two things: the level of refusals in the sample, and the extent to which the respondent characteristics are related to the subject under study. In my own research, the level of refusals far outweighed the level of acceptances for interviews. As well, I would estimate that a great percentage of the refusals were because of the topic at hand, electronic monitoring in the workplace, and the issues surrounding it. The issues are moral, legal and ethical. They include privacy,

knowledge and secrecy. This topic can be a very sensitive one in some settings, which is why I wanted to research it. The major issue is whether or not employees know they are being electronically monitored while at work, which can involve secrecy and covert monitoring. Electronic monitoring, if it is covert, would involve secrecy on the part of an organization. The notion of secrecy within organizations is discussed further in the following section.

Secrecy

Sjoberg and Miller (1973) agree with Max Weber who characterized bureaucracies as an iron cage. Sjoberg, Miller and Weber outlined the fact that secrecy that takes place both within bureaucracy and in terms of a bureaucracy's relationship to its external environment. Sjoberg and Miller (1973: 131) note,

> Secrecy means control of information and precludes the use of surveys based upon probability sampling. For probability sampling, one is unable to take into account the different kinds and amounts of knowledge possessed by members of a system that is characterized by hierarchy and a complex division of labour. Also, in such a hierarchy many people will refuse to discuss sensitive matters.

Weber (1978:992) outlined secrecy as "the superiority of the professional insider every bureaucracy seeks further to increase through the means of *keeping secret* its knowledge and intentions. Bureaucratic administration always tends to exclude the public, to hide its knowledge and action from criticism as well as it can". If this is true, and is characteristic of the financial institutions that I was attempting to study, then the nature of their monitoring may have been a secret that they wanted to keep within the organization and hence refused my attempts to study it.

In turn, the nature of bureaucracy simply may not always lend itself to be studied, or thoroughly studied by probability sampling alone; I think the best way for me to have obtained the kind of information I was looking for would have been to conduct a triangulation method of research. This would have been best achieved by combining my survey and interviews with participant observation. I might have been able to obtain a better understanding of supervisory techniques within the workplace as well as obtained the data I needed to answer my main research questions and statements that related directly to social control and power within the workplace.

Sjoberg and Miller (1973: 137) maintain that in order for sociologists to obtain better data from bureaucracies, they have to take certain cues from investigative journalists. They list five assumptions that sociologists should undertake to help them attain the data they are searching for:

> 1) there is a structure of activities that many bureaucracies purposively strive to hide; 2) the official position reflects only one reality; 3) neither the viewpoint of the "generals" not of the "privates" by themselves provides an adequate picture of the organization; 4) in a Durkheimian vein, knowledge about violation of the norms informs us about the norms themselves; and 5) information from persons or publications will be available in some form.

Once a researcher understands what he or she may be up against, he or she may choose to change the methodology in order to gain entry, or once involved, adjust his or her techniques.

Sjoberg and Miller (1973: 141) conclude that: "Hierarchy and control and the attendant matter of secrecy are central features of a bureaucracy's normative order. These patterns give rise to the hidden side and are supportive of the development of a

dark side. Yet they also impose severe constraints upon the conduct of inquiry about these phenomena".

Stinchcombe et al. (1981:374) suggest that more research and effort should go into obtaining information on the reasons behind refusals. I agree and had I thought at the outset of my research that I was going to encounter difficulties in gaining entry, I would have adjusted some of my questions to help me find out why respondents refused. It is hoped that this research will alert others to avoid the difficulties that were encountered.

Two kinds of lessons can be drawn from the rejection against this research project. One has to do with the practical problems of doing research under such circumstances; the other has to with the more basic questions of what such rejections raise about social research, especially in regards to sensitive topics such as social control in the workplace. At the practical level, one obvious lesson is to use proper terminology and to rely on previous studies and strategies used to do research. Another lesson is that there are times and places where it is difficult, if not impossible to collect data on deviant behaviour. In my case, I should have had more networking done before entering the field, gained better rapport with a few participants, and received referrals from them. In turning to the broader significance of the rejection against my project, I want to make it clear that I do not regard such resistance as necessarily unhealthy. On the contrary, I feel that such episodes have something positive to teach myself and others. The remaining sections of this chapter provide an analysis of why I may have had such a difficult time gaining entry into organizations which subsequently resulted in my high nonresponse rate.

Difficulties Gaining Entry into Organizations

Field research, based on qualitative methods such as in depth/survey interviewing, was the method of choice for studying my sensitive topic – social control in the workplace through electronic monitoring.

This section looks at a particular aspect of the process of fieldwork, the reasons behind why I could not gain access to settings in order to carry out my research. The first and foremost obstacle that researchers such as myself often encountered while in the field is that of the gatekeeper. The gatekeeper is someone or a group of people, who are in a crucial position from which they control access to goods, services, or information. They often wield power far in excess of their formal authority. The remainder of this section outlines other reasons, why I may have had difficulty gaining entry into financial institutions and insurance companies, some which may be closely related to the gatekeeper's role.

Gatekeeping/Organizational Framework

In an article written by Robert Broadhead and Ray Rist (1976: 325) entitled "Gatekeepers and the Social Control of Social Research", the role of the gatekeeper and different organizational frameworks that can impede a researcher's access to the organization in question are outlined. The authors note that indeed, there is social control of research. That is, while I was attempting to gain an understanding of the social control that managers have over their employees, the organization itself may have been trying to

control my research by not allowing me entry. Broadhead and Rist (1976: 325) point out that:

> Actual manifestations of the social control of research can be studied through the analysis of the role of "gatekeeper". Gatekeeping influences the research endeavor in a number of ways: by limiting of entry, by defining the problem area of study, by limiting access to data and respondents, by restricting the scope of analysis, and by retaining prerogatives with respect to publication. Strategies are not well developed for managing pressures of gatekeeping. Furthermore, the location of researchers within university settings mitigates against confrontation with gatekeepers, particularly if the research effort is directed toward elites or powerful institutions.

Additionally, Broadhead and Rist (1976: 326), note that,

> The actual manifestations of social control over research can be shown as they appear within organizational frameworks. A key component of that control effort is the small group of managers and administrators within a formal organization who screen prospective researchers seeking funding, entry into the organization itself, or access to data already collected. This small group of "gatekeepers" has a central role in deciding the fate of those who desire to conduct social research with someone else's money, data or organization.

In other words, gatekeepers have many roles: they may keep a researcher from gaining entry all together; they may allow a researcher into an organization but restrict information, persons, or areas. As well, researchers can not do much to combat the gatekeeper's role or authority as it is sometimes a researchers only route into the organization. In my own research, I encountered gatekeepers, mostly managers, who refused to allow me entry into organizations, especially into insurance companies. I was turned down several times, with no explanation; or in some instances my calls and attempts for contact were just never reciprocated, and in this way they kept me out of the organization by simply never speaking to me.

Broadhead and Rist (1976:327) note that in controlling entry, the crucial concern for the gatekeeper is exchange as determined by what benefits the research can extend to the agency as a whole, to the specific careers of the gatekeeper, or to other managers. The authors note that the gatekeeper is concerned with either:

1) The agency or organization; e.g. its public image, size and /or changes of market or client population, competitors or advisaries, delivery and utilization of services.
2) The operational and management problems of the administration; e.g. allocation of resources and manpower, lines of authority and promotion, staff efficiency, personnel conflict and /or cooperation, staff morale, administrative reorganization.

With all of these concerns in mind, there is little for the administrator to gain by allowing academic research which might threaten his or her authority, position, control, or competitiveness. In the attempt to reduce the concerns of the gatekeeper and thus obtain permission for entry, the researcher must persuade the gatekeeper that there is some advantage either to them or to their organization by cooperating with external researchers.

The gatekeepers whom I encountered continued to refuse me entry no matter how much I pleaded and assured them that indeed they would gain something from my research. At one particular insurance company, I made several attempts to secure entry. First, I phoned the person and introduced myself and my research topic. Although this person was interested and wanted more information, when I tried to set up an appointment, it was denied. The gatekeeper's preference was to keep all contact impersonal, and thus, I had to correspond through letters and electronic mail. I sent an information package which included an introduction of the research and my brief curriculum vitae. Upon receiving this, and reading it over and discussing it with others, I

was asked for a sample of the kinds of questions that I would be inquiring. This last request was to assure me that the gatekeeper would be better able to make available the "right people" who had some knowledge about the issues related to my research for me to interview. I obliged this company's requests, and again appealed for a meeting, but it was denied. I sent in a copy of some of the questions and several weeks later, I contacted them again to try and set up an interview. At this time, I was informed that I would not be granted entry as the company was going through a "rough time – reorganization" and this would not be a good time to conduct my research as they did not want to "bother/alarm" any of their employees. I persisted and agreed to conduct the research at a later date, but they still refused and made up excuses saying that they did not know when their reorganization would be finished and would rather not participate at all.

The following quote from Broadhead and Rist (1976: 328) sums up many of the experiences I encountered while investigating my sensitive topic:

> Many researchers also want to understand particularly powerful bureaucracies and organizations in ways other than through commonsense or "official" perspectives. These researchers investigate the "dark side" of bureaucracies, or those activities that are secretly and strategically hidden from public view. However, in negotiating for entry, these interests of the researcher are more than likely to be at odds with the interests of the gatekeeper. The common result, therefore, is for the gatekeeper either to reject the investigator's bid to do research, or for the researcher to reformulate the research problem within boundaries that are acceptable.

Reasons For Not Allowing Entry

In addition to encountering gatekeepers who for various reasons, may or may not allow a researcher to gain entry to an organization, there may be particular organizations that simply refuse entry because they do not wish to participate in the research.

Stinchcombe et al. (1981:363) conducted research on farmers that yielded a high nonresponse rate. The authors outlined three reasons for high nonresponse that apply as well to my own research, namely the farmers' evaluations of the quality of information available, whether or not they personally made use of the information, and their judgements about the economic impact of the use of the information by market competitors. Following Stinchcombe et al., it is possible to discern four factors that may have affected participation in my research: a) individual or company evaluation of electronic monitoring as a supervisory technique; b) whether or not the potential participant personally made use of the supervisory techniques (electronic monitoring and or surveillance) as outlined in my research; c) whether or not the respondent is personally affected by the supervisory techniques outlined or has been in a previous job and; d) judgements about the topic in general and preconceived notions and opinions about electronic monitoring in the workplace environment. Had I asked specific questions with reference to the above factors when I received a hesitation or refusal, I may have been further along in terms of finding out the reason behind the nonresponse.

Another significant factor that may have affected participation in my research was the language that I used to describe supervisory technology. I often used the terms electronic monitoring and surveillance and many people who heard these words were frightened, suspicious, and even uncomfortable. Many people do not know exactly what those terms meant and several respondents asked for clarification. In retrospect, perhaps I should not have used words such as electronic monitoring or surveillance on my first contact. Although I always clarified what I meant by electronic monitoring and surveillance, many people continued to hold their own perspective on what these terms

meant to them. For example, as soon as I mentioned "surveillance", I was often transferred to the security department. When I said "monitoring" people thought that I was only interested in the monitoring done by camera, and or audio. I would correct them but sometimes it is difficult to change a person's understanding of a topic, concept, or term when they have only experienced it in one way and hence, they always think of it in that way, often until they experience it in another form.

In addition, often times firms that used electronic monitoring and or surveillance did not speak of it as such and did not encourage their employees to think of it in terms of evaluating them. Hence they had a different frame of mind when I asked them about it. For instance, I would often outline my definition of electronic monitoring and then when I asked questions about the monitoring, they would answer 'wrong' or would begin to answer and then ask me to clarify what I meant again. Subsequently, they would answer my questions in a different way.

An additional factor that may have had an effect on the respondent's participation was the time of year that the interviews commenced. Although the interviews began in November, they soon extended into December, which can be a very busy time of the year for most financial organizations. In addition, there was some fear surrounding the new millenium in terms of computer programs and thus many firms were busy with their own in-house projects. As a result, my requests for interviews were extended into the New Year, but many financial institutions were now busy with the RRSP season. These seasonal factors may have had some influence on the financial institutions to participate or not in my research.

Regarding the respondents' inaccessibility or refusal, Stinchcombe et al. (1981: 368) note some of the perceived consequences from surveys that participants discerned. These researchers argue that if the participants were to perceive that the main beneficiaries of the research would be someone other than themselves, they would of course not want to participate. Perhaps this could have been another reason for nonresponse in my situation although I had repeatedly assured the various organizations that no one except myself and themselves would ever benefit from the process. Everything we discussed was completely confidential and anonymous. The organizations would benefit in fact by learning distinct and varied factors about their process of using electronic monitoring. Organizations could potentially discover factors not known before in terms of how electronic monitoring affects their own accomplishments.

Another factor that could lead to refusal outlined by Stinchcombe et al. (1981:379) is the perception that external research does not have the same intrinsic character and reliability as does internal research. Some organizations would be more inclined to rely on internal and authoritative information and see this type of research as being more relevant to their own organization than an outsider's interpretation of activity, especially that of a student. Additionally, DeMaio (1980:231) suggests that past experience in surveys was typically cited as a reason for refusal in studies exploring reason for refusal. I also experienced this as a reason for refusal. For example, one insurance company person expressed to me that the reason for the company refusal was the fact that in the past they had allowed a student researcher access to conduct research, but as a result of a negative experience outsiders were no longer given access to their organization for the purpose of research.

In addition, a refusal might be a matter of maintaining the status quo, that is, organizations would not appreciate an outsider entering their organization and asking questions about monitoring technology especially when many employees may not even know that electronic monitoring exists.

Spencer (1973: 92-93) outlined five reasons why bureaucratic elites shun research by outsiders and attempt to control and delimit access for the purpose of conducting social research. These are as follows:

(1) bureaucratic rigidity and threat to personal career;
(2) the potential threat to the power of that institution;
(3) the threat of the subjective reality constructs of that institution;
(4) the problem of legitimacy of the researcher; and
(5) the problem of exchange

These reasons can be supported by examples from my own research on financial institutions and insurance companies illustrated below.

With reference to the first basic reason noted by Spencer above, a researcher may not be granted access because a researcher is able to observe activities of the management or bureaucrat which may not be obvious or visible to the rest of the organization. By recognizing these activities through data collection and subsequent reporting, the researcher is providing an opportunity for others within and outside the organization to evaluate the activities of the bureaucrat. If data are collected that are perceived as unfavorable to the organization, the position of the informant may be in jeopardy (Spencer, 1973:93).

The second reason suggested by Spencer (1973: 93) is the issue of power. Weber (1978: 962) differentiated between authority and power. Authority is seen as legitimate in that persons are entrusted to use the instruments of their positions properly and in the

best interest of society. In contrast, the employment of power over others is to have conduct that is illegitimate, or unbecoming. In terms of the second reason that was outlined above for shunning social research, if I were to uncover an organization's use of electronic monitoring that was practiced in an illegitimate way, by perhaps invading employee's privacy, then I would be considered a threat to the organization's power which they hold over others.

Spencer's third reason for refusal, subjective reality constructs, refers to the beliefs and identities that each person in an organization may have about that organization as well as about themselves in relation to that organization. A researcher can be viewed as a threat because perhaps that researcher does not understand why a person could be so dedicated to an organization who uses supervisory technology in a negative manner and thus perceives this person or organization in a negative way. The researcher may ask the participant questions that could make the participant begin to question the reality that they live with. The threat then is not to the existing power of the organization but threats to the participant's own identity and the identity of the organization (Spencer, 1973:93). If for instance I begin asking questions that do not follow the status quo, I may begin a whole line of questioning by people of themselves, their career, and the objectives and agenda of the organization itself.

Spencer's fourth reason for refusal is that many organizations do not believe at all in the legitimacy of research, and often times, of sociology and social research. Some people associate a negative connotation to social research. In Spencer's (1973:94) own words,

> Simply put, the bureaucrat concerned with the problem of legitimacy asks, "Just who is this fellow anyway who calls himself a sociologist and what right does he

> have to come barging into my organization?" While many sociologists view their professionalism as providing legitimacy for the dispassionate "debunking" of social myths, they have no legal sanction, normative appeal, or legal immunity to enter public bureaucracies for the purpose of conducting a "social audit".

Spencer's last reason for refusal is the problem of a fair exchange between the researcher and the organization. The pattern is usually normative and suitable for both parties. The organization receives information and professional advice that it may use for its own purposes in return for giving the researcher the right to undertake research, collect data and publish the report. There are of course several variations in exchange when doing research, but the ultimate result is that if the organization does not see the act of research as valuable for itself, then the exchange is inequitable (Spencer, 1973: 94). If the organizations in my study did not recognize the value that they were giving me with the opportunity of research experience, or if they did not feel that they would obtain any useful information from my research, then they would most likely choose not to participate, as they saw the exchange of their information for mine was not worth their time and effort.

It is true that most financial organizations and insurance companies are highly bureaucratized. Characteristically they operate with a highly complex system of formal rules in a hierarchical structure of authority and communication. Individuals in bureaucratic positions typically enter the system upon completion of some type of formal training. Their success within the organization is dependent on their productivity and completion of specific tasks within the organization (Spencer, 1973: 93). An outside researcher, such as myself, presents a dilemma for the bureaucracy in that the researcher does not belong in the organization. He or she does not fit into the formal chain of

command, but moves back and forth at all levels within the organization. The researcher can be similar to a free agent in that there are no "rules" about his or her presence and activities. That is, a researcher is not susceptible to the same regulations or constraints as the rest of the personnel in the organization. In other words, the researcher can be seen as a highly uncontrollable component in an otherwise, thoroughly controlled organization (Spencer, 1973:93).

Given the efforts by the bureaucracy to protect its public image and by the bureaucrat to safeguard his or her individual career prospects, it is easy to see why it is difficult to carry out independent research on questions which are contentious to any financial institution or insurance company (Spencer, 1973:95). There are many strategies that an organization may take to keep a researcher away from particular data or to control access to personnel or data. Spencer (1973:95) outlines several specific tactics:

- Concealment of information that is potentially available;
- Limited access to data or persons, making the research incomplete or misleading;
- Controlled access to data or persons, making it distorted and "managed";
- Lengthy bureaucratic delays to dissuade the impatient.

Accordingly, organizations may have had specific documents regarding the uses and implementations of monitoring systems that are in place, but the organizations that I had approached decided not to provide them to me although I had specifically requested them. Controlling access to data and people makes it hard to obtain full, reliable, and accurate data. If the organization controls whom I can interview, then they are acting in the best interests of the organization. For instance, I may be introduced to only employees who the organization deems "safe". These persons may give concise answers, refuse to answer probes, or specific questions or skew the information to put the

organization and its operations in a positive light. Lastly there remains the issue of bureaucratic 'red tape'. A small number of the financial organizations stalled me by asking for more and more clarification, more letters explaining what I wanted to research so that they could set up the appropriate people and clear it with upper management, etc., but in the end, denied me access to their organization.

Research Seen as a Threat

As discussed previously, certain research topics can be threatening to individuals – to their position, their power or their identities. Research that is seen as a threat is a major reason for nonresponse or non-entry. Lee (1993: 4) points out in the introduction of his work that there are three distinct ways that research can be seen as a threat. The first is as an intrusive threat, that is, having to deal with areas that are private, stressful or sacred. The second is the perception of deviance and social control that encompasses the idea that stigmatizing or condemnatory information may be exposed. The last way in which research may been seen as a threat is if it infringes on political arenas. Political may not mean in the traditional sense of government but also includes areas which may hold vested interests for powerful persons or institutions who exert practices related to coercion or domination. In one way or another my research may fit into all of these categories; it deals with divisions that may be private; it relates directly to social control and its effects, as well as to the fact that institutions may be using technology to coerce and dominate workers.

Lee (1993: 6) notes that the presence of a researcher is occasionally feared because it brings forward the possibility that deviant behaviour and activity will be

exposed. Fear may also come from the fact that the researcher may point out situations, such as electronic monitoring within the workplace and its effects, which may be deviant but were never thought of in that light before because they were accepted as long as no one was to draw attention to them (Lee, 1993:6). I am arguing that many managers were reluctant to allow me into their organizations for fear of me exposing to their employees the monitoring techniques used.

Lee (1993: 8) also points out that research which might threaten the interests of those being studied is frequently seen as sensitive, especially when research may touch on issues surrounding the exercise of power over others. Since I was trying to understand why today's organizations have resorted to such intrusive technological measures to supervise and perhaps control their employees, I would definitely be touching on a sensitive area which may explain some refusals.

In addition, as a researcher I may have been an uncontrollable element in an otherwise very controlled and subdued environment. Some of those potential participants may have refused to allow me entry because of what I may investigate or uncover about their organization. Furthermore, if the research experience turned out to be negative in terms of the organization's reputation, the employees themselves may fear the loss of their own job or some other repercussions by allowing me to penetrate their organization (Lee, 1993:9).

Likewise, where power, or electronic monitoring, can potentially be used in a corrupt or illegitimate way, I can see that I would have difficulty gaining access as I would then be a direct threat to the organization. Organizations may not have allowed me entry for fear of any negative criticism that they may have received (Lee, 1993:9).

One financial institution used that as its excuse for not participating although I had assured the respondent anonymity. Fear of a researcher discovering any negative aspect about an organization or its activities may lead respondents to deny access. Perhaps I should not have tried to study such a sensitive topic directly. It may have been in my best interest to approach institutions under the guise of studying management styles and then begin to ask questions regarding electronic monitoring. By not using electronic monitoring as my only research goal, I may have attained a higher response rate. For example, Punch (1989: 198) has noted:

> Observation [and survey interviews] often seems best-suited to diffuse projects of low visibility with lower-level participants in an organization. For, the higher you go up the hierarchy [and the more powerful an organization you try to study], the more likely it is that restrictions will be placed on the researcher. Deviance and sensitive issues in an organization can rarely be studied frontally and have to be approached obliquely while it may require pure good luck to make the breakthrough to the 'dark' regions.

Because I was investigating a highly sensitive and sometimes secretive topic, survey interviews may not have been the best method for me to study the effects of electronic monitoring as a tool for social control.

In summary, the hazardousness of nonresponse and its consequences to research in sociological surveys, such as my own, have been pointed out. Sources and outcomes have been discussed and suggestions provided for dealing with the problem of nonresponse. Reasons for refusal were described and included the fact that some organizations do not allow outside research; organizations may not see any merit in participating in research; they were fearful of consequences and outcomes of the research; and they could perceivably see research on the topic of electronic monitoring as a threat to themselves, their power and/or to the organization and its practices.

Discussion of Nonresponse

The investigation into supervisory technology and social control in the workplace has some very interesting results. Although I set out to examine as many financial institutions in the Guelph and surrounding area as possible, I was unable to do so for various reasons as discussed below.

There were two important outcomes of this research. First, supervisory technology is being used more and more throughout organizations in the industrialized world and we need to be aware of how much information is being collected about us, why the information is being collected, and what the information is being used for. Second, a researcher must be prepared for things to go wrong in the field, such as in my own case where I was unable to gain entry into many organizations.

The foremost problem encountered in my research was nonresponse. However, upon investigating this topic through reading, it became clear that nonresponse is quite common among many research projects.

The purpose of this present section is to bring together and discuss several of the reasons for nonresponse in my research on electronic monitoring in the workplace. These reasons that I encountered have also been encountered by many other social scientists and have been reported previously in a wide variety of journals.

Tomaskovic-Devey, Leiter and Thomspon (1994: 439) note that organizational surveys often have low response rates. Consequently, surveys with low response rates produce biased results, specifically if key organizational characteristics, as in my case the

practice of electronic monitoring, affect the pattern of survey response by participants. Results become biased when organizations do not wish to participate and do not wish to share information with a researcher. The results become skewed in that the difference between the two kinds of organizations may be a key factor or variable in the study. Therefore, the results can be misleading. As a result, DeMaio (1980: 223) points out that problems associated with nonresponse, including biases, are important to every researcher. Non response may result in biases that would affect survey estimates, and may even skew the whole research project. In my own research, nonresponse left me with a very small amount of data to work with. Accordingly, I was unable to do any comparisons, or make any generalizations from my data with regards to electronic monitoring in the workplace as a tool for social control.

Daniel (1975: 291) indicates that the most serious problem related to sociological surveys, in any form, is that of nonresponse. Daniel (1975: 292-293) proposes specific reasons for nonresponse and groups them into four categories: not at home, refusals, unable to respond, and unlocated. The majority of my problem, the reason for a high nonresponse, falls into Daniel's second category (refusals). Daniel (1975: 292) outlines refusals as potential participants being located at home, or in my case at work, but will not participate in an interview.

Dalenius, as cited in Daniel (1975:295), asserts that nonresponse is caused fundamentally by the interviewer's inability to make contact with respondents. This was a major obstacle I faced in my own research. Approximately 188 out of 203 phone calls to 34 organizations resulted in nonresponse. There were 6 persons that I failed to contact and 15 persons that refused on my first attempt to convince them to participate. Out of

those prospective organizations that I failed to contact, four of them actually employed the type of technology that I was interested in researching. I knew that they used monitoring technology because the first time I called, I listened to a recording that informed customers that the call might be monitored. I also talked with other personnel in the company who informed me they used the technology before passing me onto to someone who they thought would be of more help to me.

Of the refusals, 12 persons gave reasons why they decided not to participate. Eight refusals were because their organization did not use the type of monitoring I was investigating, 2 did not oblige outside researchers, another 2 thought it was not a good idea to participate, and 3 were simply not interested in participating and gave no reason. This last category is unusual in that organizations were either afraid of adverse publicity (although they were assured that the study was strictly confidential and anonymous) or they did not want me to speak to their employees about the type of monitoring in place.

An additional reason for nonresponse is the nature of the topic. Electronic monitoring in the workplace may involve secrecy on the part of many organizations and they may not have wanted to divulge such information. Another variable is the 'red tape' of bureaucracy: I had a difficult time gaining entry past certain persons if I did gain entry at all.

Several authors (Smith, 1983: 389, Stinchcombe et al. 1981:359, and Daniel, 1975: 295) indicted that there are various different reasons why people may refuse to participate. Therefore, refusals could be related to:

1) mistrust & fear
2) apathy toward social and political issues
3) negative psychological feelings (unhappiness, dissatisfaction high anomie)
4) deviant behaviour

5) attitudes towards science
6) attitudes towards academia
7) being too busy
8) uncooperativeness
9) place of work
10) conservatism
11) socio-economic status
12) standard demographics
13) previous secondary education (level).

Stinchcombe et al. (1981:359) note that there are several factors that contribute to high nonresponse rates. The first factor is the availability of people to be interviewed. In my case, this would include the availability of managers and employees willing to provide information on whether the monitoring occurs or not.

Stinchcombe et al. (1981:360) noted in their research that there were very few factors that were dissimilar in terms of the conditions affecting availability. This leads me to also note the similarities in factors between my two small sample groups that may have had an effect on nonresponse rates. The first similarity that is prominent is the large and complex nature of the two organizations that I approached. This factor made it difficult to find the right person with whom to discuss my research and I was often referred from one person to another. In addition, both organizations were very customer orientated and placed their customer's needs first which could also be a factor contributing to non-availability; perhaps many of the personnel I needed to speak with were too busy with customers. By participating in a project which would gain the organization minimal profit, and would likely result in losses (lost time, and hence money), it was in their best interest not to participate in my research.

The second factor noted by Stinchcombe et al. (1981:360) that contributes to high nonresponse rate was outright refusal to be interviewed. This was also experienced in my

research. In order to seek explanations for interview refusals, Stinchcombe et al. (1981:360) asked several questions. They inquired as to whether or not a person may or may not have had a certain preexisting disposition not to respond. This situation may have very well existed in my research. Perhaps it was not the nature of my research topic that resulted in refusal, but the fact that some people choose never to participate in any surveys at all. Conceivably, a person may have had a negative experience in the past in regards to survey or interviewing and they simply choose not to put him or herself in a situation that may turn out to be negative once again. For this reason, he or she simply refuses to participate in *any* survey or interview process.

A third factor to explain nonresponse noted by Stinchcombe et al. (1981: 366), is what they call a 'commonsense theory'. They argue that people who use research reports or who think that the research is useful are the people who will most likely supply the information needed to help researchers complete their survey or interview. I agree with the authors in this case. I found that those participants who were inclined to investigate this topic (electronic monitoring in the workplace) and its effect on themselves and employees were more willing to participate. For example, I would often call an organization and begin discussing my research with an individual and that individual would become really interested in the ideas behind the research. He or she inquired where I obtained the idea to explore supervisory technology, how my research was evolving, and how I felt about my research. In addition, I also conducted interviews where the person was genuinely interested in helping me by participating and learning more about the processes behind the supervisory techniques; that is, they were not simply participating because they felt they had to or their boss told them to, but they really

wanted to assist me in attaining important information. For instance, I conducted one interview at a financial institution where the respondent was very helpful. This respondent listened to the questions, thought carefully about her answers and afterwards was very inquisitive. The respondent asked me questions about my research, my schooling, and the survey interview in general; this individual also asked to see the results of my study when I was finished. This made me feel really good; I also knew that this respondent in particular had a need for the type of information I could provide and found my research useful to her in her daily tasks at her job as well as to her organization. Stinchcombe et al. (1981:366) note that the more information people use, the more they accept it as being valuable, and hence more likely that they are willing to participate.

A final factor that may contribute to high nonresponse rates discussed by Stinchcombe et al. (1981:370) was the fact that many large organizations may often be the target of several different types of research simply because they are so broad and encompassing. Thus, they are inundated by too many researchers requesting access in a short period of time, which may lead them to simply refuse to participate because it could be too distracting or too disruptive.

Related to survey research are worries of confidentiality as a factor in nonresponse. In my research, some participants were worried about confidentiality and anonymity although I had reassured them several times that they were protected. If they were worried about these two factors they may not have wanted to participate or even may have refused to answer certain questions. From my own experience, I found that those who were open and free with letting me know the details of their monitoring did not care how they answered my questions; they were very laissez faire. Yet, there were also

some participants who were concerned about the confidentiality and anonymity and they sometimes refused to answer certain questions or seemed at times to be guarded when considering how they were going to answer a question. I conclude these two opposing reactions (open and laissez- faire vs. concerned and guarded) rest on the fact that my research is investigating a sensitive and controversial topic.

I have come to the summation that nothing works in estimating nonresponse bias. It is difficult to ascertain which variable may or may have not had any influence on the respondents and nonrespondents for two reasons. First, I did not make enough attempts to collect data to be able to make that kind of conclusion I wanted. Second, I did not ask questions in anticipation of not having enough respondents. For example, location- urban vs. rural, why they did not want to respond, etc. In sum, my analysis of nonresponse on the research attempting to explore electronic monitoring within the workplace suggests that there is no simple, general, accurate way of measuring nonresponse bias as in the case of my own research.

Solutions

In terms of solutions to the problem of nonresponse, several suggestions have been put forth by several authors (DeMaio, 1980; Stinchcombe et al., 1981; and Benson, Booman and Clark, 1951). What follows are the solutions suggested by these various authors that I, upon hindsight, wish I had reviewed before entering the field.

DeMaio (1980:225) points out some excellent techniques that were undertaken in a study trying to gain information from participants that my study could have benefited from. The interviewers in the study described by DeMaio were instructed to complete a

form after each refusal that revealed information about the person who refused, the household composition, the interviewer's attempts to contact the household, as well as circumstances of the refusal. All of these factors would have been useful to me if I could have recorded more information, which would have left out much of the guesswork involved. I have retrieved some information with regards to my own refusals, however, it is not as complete as in the DeMaio study. It would have been rational to ask for more information from individuals who refused.

Another procedure I tried but did not have great success with was in calling back, with a different perspective about my research, many of those organizations that refused the first time. I would either try speaking to a different person, that is, to take another route into the organization, or I would not mention words such as electronic monitoring and surveillance in case these words and their meanings were having an influence on the number of positive responses I was obtaining. However, I usually encountered the same response: a refusal. In my phone call log, there are a few instances of this approach as documented in Appendix A.

Many of the articles I examined discussed various ways in which nonresponse rates can be assessed. This is typically accomplished by asking more questions about why the respondent does not want to participate. Researchers also obtain as much demographic characteristics as possible so that in later analysis they can determine if any of these characteristics may lead to high nonresponse rates. Similarly, Stinchcombe et al. (1981: 361) provide several excellent points that I should have probed further when a refusal occurred. However, since I did not anticipate a nonresponse problem, I did not think ahead to ask any further questions or to be more forceful with respondents on the

phone. Other researchers (DeMaio, 1980; Daniel, 1975; Smith, 1983; and Smith, 1997) asked questions regarding sex, age, geographic location, income, level of education. Although I also asked these questions in my survey, I did not ask these questions to people who refused to participate.

Benson, Booman & Clark (1951: 118) explain that with painstaking training and careful selection of interviewers for research, it was possible to achieve a 99.6 percent success rate for fixed address sample interviews. They suggest that appearance and manner of interviewers seemed to be a major factor in reducing refusals since the majority of the refusals occurred before any questions were asked. In relating to this, perhaps my manners on the phone needed some revisions, and perhaps, I should have undergone some training or read some more survey texts before going out into the field. Perhaps I just needed more work on my phone conduct. Perhaps had the respondents met me face to face it would have been harder for them to refuse.

Another shortcoming that I may have exhibited is that of frustration and I would agree that I was also succumbing to time constraints. That is – after several months of relentless phone calls and trying to make arrangements for meetings and interviews, I eventually gave up; there was not much motivation left in me. This may have stemmed from the fact that I was only gaining entry into banks and the answers were virtually all the same, that is, I was not getting too much differentiation in answers from respondents. Furthermore, Benson et al., (1951: 118), concur that the effort that a researcher puts forth is dependent on the particular type of questions asked and the accuracy desired. They suggest that it would be wise to keep being persistent and to make a concentrated effort to complete enough refusal interviews to establish variables to investigate whether it was

questionable that different answers would be obtained from refusals as compared with non-refusals. I agree, with Benson's observations.

One final suggestion for combating nonresponse was suggested to me by an experienced methodologist. He suggested instead of trying to gain entry into each separate institution, a researcher may have better luck gaining entry into an umbrella agency who can refer that researcher to the separate institutions. For example if there was an agency who worked with both financial institutions and insurance companies, I would have had a better chance of gaining entry there, gaining support for my research and then be sent on to each bank or insurance company with recommendations from the umbrella agency.

In sum, the problems of nonresponse and their consequences to research in sociological surveys, such as my own, have been pointed out. Solutions and outcomes have been discussed and suggestions made for dealing with the problems of nonresponse.

Nevertheless, my experience in carrying out this research pointed to several areas where there was room for improvements and I have indicated how those improvements could be brought about. Some suggestions were better use of words and language, having more time, making contacts first, using a different urban setting, and having more field experience before attempting sensitive research.

As well the research also pointed out that overall, nonresponse is a prevailing problem when conducting research with organizations as well as individuals. Researchers must simply take each obstacle as it comes and attempt to further explore the reasons behind nonresponse or perhaps increase the sample size.

I know that I made some errors in the field, as nearly every novice does in any endeavor. Nonetheless, I have decided that the experience was a good one for me and for those with whom I spoke, that the resulting data are credible and that the results have meaning for sociology and sociologists. The findings from this study are now presented in the following chapter.

CHAPTER 6: RESULTS

The research inquiry is based on the following ideas and questions to find out if electronic monitoring is acting as a tool for social control in the workplace today.

A statement of my research problem a second time would include the following: Management is asserting social control onto workers through means of electronic monitoring and or surveillance - that is, monitoring and supervision of populations for specific purposes. In this instance electronic monitoring can be defined as any type of workplace surveillance, including by camera, over the phone line, and through the computer. Social control in this instance will mean taking the information gathered from monitoring practices and using it in some way to change the behavior and actions of employees to more closely fit with managerial goals.

To review, my major research questions and subsequent statements are:

1) Do the employees know that they are being electronically monitored or that they are under surveillance?
1a) Those employees who agree that monitoring, as a measuring tool, is valid and acceptable will have positive attitudes towards monitoring.

2) How invasive are the forms of supervisory technology?
2a) Electronic monitoring encourages Weber's bureaucratization and rationality: efficiency, calculability, and objectiveness.

3) Do managers use monitoring technology as a form of social control?
3a) Companies use electronic monitoring to increase production.

4) What is social control?
4a) The more pervasive the supervisory technology, the more control management will have over the employees.

5) How is social control achieved through technological supervision?
5a) Electronic monitoring encourages obedience on the part of employees.
5b) Electronic monitoring uses uncertainty as a means of control.
5c) Electronic monitoring provides a means to direct attention to important aspects of organizational performance.

6) Do managers feel they cannot trust their employees?
6a) Workplace surveillance by computer is more often a by-product of computerization for other purposes than it is the original purpose of management planning.
6b) Electronic monitoring in the workplace is often put in place to deter any further loss to the company, after an initial loss has been suffered.
6c) Electronic monitoring reduces the possibilities for covert and insincere actions by employees.

7) Are managers crossing the privacy border?
7a) Electronic monitoring is panoptic and makes workers transparent under the watchful eyes of management.

What follows are some trends found in my research from the survey and interviews I conducted with twelve different employees of financial institutions and one employee of an insurance company. Since there was only one person interviewed from an insurance company, I cannot make any comparisons between the two institutions.

I interpret here, some major similarities and differences between what managers and employees of the various institutions said in regards to electronic monitoring in the workplace. The majority of the questions asked of the respondents required a yes, no, agree, or disagree answer: there were some open ended questions as well as scale questions which I have indicated accordingly below. In addition, I present the results in two categories: managers, who use the technology to supervise and employees who are being monitored. Additionally, the majority of questions asked concerned electronic monitoring *only* since many of the firms exclusively used surveillance devices at the entrances or instant teller machines in the lobby of their organization, not on employees themselves. Hence, there is no data on surveillance systems within the organizations that participated in my research.

To begin the analysis I examined the questionnaire and chose those questions which I considered to offer the most insight to my research questions as well as highlight

the main topic – does electronic monitoring indeed get used as a tool for social control in the workplace? After I selected the questions I thought to be most relevant for each questionnaire (manager and employee), I then produced two charts in accordance that outlined the answers to the chosen questions to make it easier to analyze the data at hand. I then had to separate it even further and group those questions together according to themes and ideas. The manager chart/questions were broken down into six categories or themes. The themes included:

- Managers' feelings regarding electronic monitoring,
- Facts regarding electronic monitoring,
- Manager perspectives regarding electronic monitoring,
- Electronic monitoring illustrated
- Why and how institutions are using electronic monitoring,
- Control regarding electronic monitoring.

The employee chart/questions were broken down into three themes or categories. The themes here included:

- Employees' feelings regarding electronic monitoring,
- Facts regarding electronic monitoring,
- Control regarding electronic monitoring.

What follows are the responses to those questions asked of managers and employees.

Results of Manager Interviews

The following analysis comes from managers at two financial institutions and one insurance company. From Bank AA there was one participant, a branch manager, Bank BB had two participants, an assistant manager of Personal Financial services (Bank BA) and a customer service officer/frontline manager (Bank BB), and only one participant from Insurance company AA who was a manager. It should be noted that although none

of my participants had any authority to make decisions on whether or not the monitoring can be implemented within their institutions however, once implemented, they did have some authority regarding the use of the monitoring and the outcome of the monitoring systems. There are a total of 34 questions included in this analysis.

Managers' Feelings Regarding Electronic Monitoring

This first theme examines how managers feel in general about electronic monitoring in the workplace. This category included questions 11, 15, 17 and 19. Between the 3 institutions that I conducted interviews with managers there was a range in years from 2.5- 8 years in terms of how long each firm had used electronic monitoring (question 11).

In terms of how managers in general felt about electronic monitoring, there were no negative answers, which coincides with the findings of the Ontario Ministry of Labour. When the Ontario Ministry of Labour (1979:iii) investigated electronic monitoring in the workplace they found that, "The response of employees to electronic monitoring has varied greatly, depending on the circumstances. The most prevalent reaction in Ontario appears to be passive acceptance". This "passive acceptance" was also illustrated by my own results.

When asked if any of the managers found the type of electronic monitoring that occurs within their workplaces a drastic departure from conventional work routines (question 15) they all answered "no". In addition, all of the respondents also agreed that the electronic monitoring expresses itself as more of a progressive extension of more familiar business practices (question 17). Finally, only one out of the four felt neutral

depending on the form of electronic monitoring, the rest of the respondents were not at all opposed to electronic monitoring (question 19).

Facts Regarding Electronic Monitoring

The next category I identified when examining respondents' answers were the facts or characteristics about electronic monitoring that occurred within their organizations. This category reflected answers to five questions: 32, 36, 86, 88, and 90. The first two questions were concerning the use of electronic monitoring and its evolution within the company. All participants answered negatively when asked if the technology was there for a technical reason and then used later for supervision when management saw its capabilities for this (question 32). However, all respondents in my study indicated that there has been a steady advancement in terms of utilizing the technology (question 36). Additionally, the Ontario Ministry of Labour (1979: 6) found that "Electronic monitoring may be used for more than one reason. Even when the primary purpose of electronic equipment in a work area is security, as an example, employees are never certain that the equipment is not also monitoring their productivity".

Similarly, in my research as an extension to question 36, one participant used the monitoring more and more for coaching their sales team, and another participant explained how technological monitoring made her job easier the more technology evolves because now she does not have to stop at the end of a day or session and manually enter sales since the computer monitoring system records all of the sales as they occur for employees. Respondent BB, the Customer Service Officer/Frontline Manager also responded positively to this question. She felt that the electronic monitoring system is allowing management to access more information regarding their employee's sales and

hence management becomes more knowledgeable and more efficient from the information gathered. The three respondent's answers outlined above are very similar in that they are all pointing to the fact that as more and more information can be obtained from *and* about their employees' sales and other productivity, the more and more efficient managers become.

The information gathered on employee's activities could also help managers detect 'lazy' or 'untruthful' employees, employees who are deviants. These results would suggest that the more pervasive the supervisory technology, the more control management will have over the employees. The more pervasive the technology, the more knowledgeable managers are about the organizations activities and the more control they have to make decisions, regarding employees and the work employees do, to facilitate managerial and organizational goals better.

These results illustrate that electronic monitoring is panoptic and makes workers transparent under the watchful eyes of management. In accordance, Foucault (1972: 51-52) notes that

> We should not be content to say that power has a need for such-and-such a discovery, such-and-such a form of knowledge, but we should ask that the exercise of power itself creates and causes to emerge new objects of knowledge and accumulates new bodies of information. The exercise of power perpetually creates knowledge and, conversely, knowledge constantly induces effects of power. Modern humanism is therefore mistaken in drawing this line between knowledge and power. Knowledge and power are integrated with one another, and there is no point in dreaming of a time when knowledge will cease to depend on power.

Power and knowledge is given to management in the form of technology. Power and knowledge are mutual as suggested by Foucault. Each reciprocates with the other; the more knowledge managers gain about their employees, the more power they have over

the employees to control the working environment; the more power they have through technology, the more knowledge they gain.

When asked if the institutions were using the techniques of electronic monitoring as a result of a past deviance or crime within the company (question 88), all four respondents answered "no". Therefore, there is no indication of a relationship between workplace deviance and crime with electronic monitoring. These results would suggest that the case of electronic monitoring in the workplace is often put in place to deter any further loss to the company, after an initial loss had been suffered, did not occur in my sample. However, two out of the four, Bank AA and Insurance AA answered positively when asked if they were using the system to prevent deviant behaviour (question 86), which was unanticipated. The previous question indicated that Bank BB was using electronic monitoring to keep a closer watch on their employees, therefore suggesting that Bank BB would be the ideal candidate for using electronic monitoring to prevent deviance, not Bank AA or insurance AA. These results illustrate that electronic monitoring reduces the possibilities for covert and insincere actions by employees.

The last question in this category, facts regarding electronic monitoring (question 90) asked respondents to explain in the form of an open-ended question, the reasons for their company's interest and use of electronic monitoring. Three respondents suggested that electronic monitoring was simply the easiest way to keep track or supervise employees because of the sheer size of each organization. In addition, both managers felt that it was important to have accurate information for their clients and themselves and electronic monitoring provides this type of information.

The last reason that each respondent had for using the technology was that it was a "natural" way to supervise in the financial industry. Every business around them is using supervisory technology and they felt they had to "keep up"; perhaps keeping up with the Jones' would be most accurate. Overall, respondents did not seem to mind using the technology; they felt it necessary to stay competitive with others, to make supervision easier as well as to be more efficient within their organization in terms of boosting productivity or employees' sales. These results could suggest that organizations use electronic monitoring to increase production. Increasing production in the financial industry would include higher sales, serving more customers, opening new accounts and loans, and reducing employee errors. Therefore, this exhibits that electronic monitoring encourages Weber's bureaucratization and rationality: efficiency, calculability, and objectiveness. Organizations in the financial industry are bureaucracies, and hold many of the characteristics of Weber's ideal bureaucracy: rationality, efficiency, calculability, and objectiveness. Electronic monitoring is helping managers attain and sustain these goals.

Manager Perspectives Regarding Electronic Monitoring

The third category or theme that was uncovered from the interviews I conducted was that of how managers think that their employees feel in regards to the electronic monitoring that occurs. This category encompassed three questions. Question 42 was a two part question; the first part was a simple yes or no and the second part asked the respondent to expound further if they answered yes to the above question which all respondents did. Accordingly, all of the employees who are subject to electronic

monitoring in these institutions have knowledge of this fact. When asked if managers thought this affected the way the employees conducted themselves at work, the most common answer was yes, in the way of performance. Employees are more aware of their performance with customers and with each other. The manager of Bank AA also indicated that their employees may even be more performance driven, or strive to perform better because of the monitoring. These results would suggest that electronic monitoring encourages obedience on the part of employees. Additionally, electronic monitoring is a rational form of social control, rational in the sense that managers feel that they are not doing anything they did not do before computers allowed this type of supervision. To managers, electronic monitoring is just a different way to supervise employees without having any drastic effects. However, I posit that if employees are altering their behaviour because of the electronic monitoring, they are indeed being controlled by the managers, which is represented to them by the monitoring system.

Along with the issue of obedience and control, question 47 asks managers whether or not they think that their employees feel a loss of personal control in regards to his or her job because of electronic monitoring. All respondents in the banks answered "no", however, the manager at Insurance AA answered "yes" and gave as a reason that employees feel they are being watched and therefore have less personal control in their jobs.

There are two definitions of control given by Gibbs (1989:49) that correspond with my research and findings. The first is control over human behaviour: internal control or self-control. The definition states that "attempted self-control is overt behaviour by a human in the belief that (1) the behaviour increases or decreases the

probability of some particular kind of subsequent behaviour by the individual and (2) the increase or decrease is desirable". The second definition is what Gibbs (1989:52) calls external control over human behaviour: proximate control. The definition states that "attempted proximate control is overt behaviour by a human in the belief that (1) the behaviour *directly* increases or decreases the probability of a change in the behaviour of one or more other humans and (2) the increase or decrease is desirable". In other words, employees behave in a manner they think appropriate while possibly being observed at work. If employees think that they may be electronically monitored, they will act according to how they think their employer would like them to. That could be providing the fastest customer service, making few mistakes, typing quickly, and having high sales. This is an act of self-control in a way that is desirable to an employer. Similarly, managers through electronic monitoring exert this kind of control over employees. By being supervised by a human or a machine, employees change their behaviour to perhaps increase productivity. Another example of external control over human behaviour is managers using more intense monitoring in order to get their employees to behave in a way that they desire. For instance, at a bank, management may let employees know that their sales records may be monitored more frequently to boost employee sales. By doing this, management is getting another human to alter their behaviour through direct control that is deemed desirable by management.

The next question in this category, manager perspectives regarding electronic monitoring, asked whether or not employees are aware of the possibility that they may or may not be monitored while at work. All respondents answered "yes" which corresponds with their answer to question 42. All managers and employees that I encountered in my

research believe that electronic monitoring should be out in the open – that is, persons should know whether or not there is even a remote chance of them being watched or accounted for by their managers.

In addition, the respondents were also asked to rate certain phrases or statements for question 103 on a scale from one being strongly disagree, to seven being strongly agree. Table 6.1 shows the respondents' answers:

Table 6.1. Manager Feelings Regarding Utilization of Monitoring Systems

103. Employers should be forced to tell workers exactly what systems are being used for and what the information is being used for						
Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7
		Bank AA				Bank BB: Bank BA: Insurance AA

NB: Bank AA= Branch Manager; Bank BA= Assistant Manager of Personal Financial Services; Bank BB= Customer Service Officer/Frontline Manager; Insurance AA= Manager

Managers indicated organizations should be forced to tell workers exactly what monitoring systems are being used for and what the information that is being collected about employees is being used for.

Electronic Monitoring Illustrated

The fourth category that emerged from the employer survey were those questions that described the level and frequency of electronic monitoring that occurs within the organizations. Questions 49 and 50 ask specifically the level and how often the

monitoring is done. All four respondents had the same answers for the two questions: a combination of all. Employees could be monitored daily, weekly, on an individual basis, or as a group. This makes it very difficult to speculate how invasive this type of technology is in these institutions.

Questions 67, 105, and 111 indicate more specifically the type of data that are collected by the monitoring systems because there are many variables. The easiest way to proceed in regards to these questions is to illustrate the results as shown below in Tables 6.2, 6.3, and 6.4.

Table 6.2. Manager Utilization of Electronic Monitoring Systems

67. For what purpose do you use the data collected by the electronic monitoring systems? (indicate all that apply)	Bank AA	Bank BB	Bank BA	Insurance AA
• Performance evaluation	✔	✔	✔	✔
• Training	✔	✔	✔	✔
• Security measures	✔	✔	✔	✔
• To gage productivity levels	✔	✔	✔	✔
• To gage service levels	✔	✔	✔	✔
• To physically locate workers in the organization				✔
• For Promotions	✔	✔		
• Reward & Recognition Programs				
• Other, please specify:_____	reward & Recognition Between Branches	Helps Employees Manage Their own Time/Goals		

NB: Bank AA= Branch Manager; Bank BA= Assistant Manager of Personal Financial Services; Bank BB= Customer Service Officer/Frontline Manager; Insurance AA= Manager

Bank AA uses the data collected to do everything but physically locate their employees within the organization. Therefore, management does not know where an

employee is located at all times, whether the employee is at their desk or away from their desk.

At Bank BB I interviewed two managers and they each gave me different answers. The first respondent was an Assistant Manager of Personal Financial Services (Bank BA), her answer indicated that she uses the data to do performance evaluations, training, gage productivity levels, gage service levels, and help employees manage their time and goals better. The second respondent, who was a Customer Service Officer/Frontline Manager (Bank BB), said she uses the data collected to do everything *but* physically locate her employees.

The manager at Insurance AA indicated that the data collected on employees are used for everything but reward, recognition programs, and promotions with the firm, which in one specific respect is different from the banks – the insurance company uses the data to physically locate workers. I found this interesting, but it also made sense in that an insurance company is typically much larger than a single branch of a bank and hence perhaps this physical location is necessary. This may also indicate that their monitoring is more invasive if they need to know the physical location of their employees, a factor that should be considered for further research.

In addition, question 105 asked managers to outline how their organization observes, measures, or directs work to employees. There were three categories to choose from: usually done by a computer, usually done by supervisor, or rarely or never done. Please refer to Table 6.3 for the results.

Table 6.3 How Specific Tasks are Observed Within Organizations

105. Some organizations use computers to observe, measure, or direct work. Other organizations rely on a human supervisor or workers to carry out these tasks. For each item below, please circle the answer which best describes how it is handled in your organization.

	Usually Done by Computer	**Usually Done by Supervisor**	**Rarely or never Done**
➢ Counting keystrokes	**Bank AA;**		**Bank BB* Insurance AA**
➢ Counting completed transactions	**Bank AA; Bank BB* Insurance AA**		
➢ Recording how long terminal is idle	**Bank BB*; Insurance AA**		**Bank AA**
➢ Counting how long it takes to complete a transaction	**Bank AA; Bank BA; Bank BB Insurance AA.**		
➢ Directing work to a work station		**Bank BA**	**Bank AA; Bank BB; Insurance AA**

NB: Bank BB* indicates both respondents. Bank AA= Branch Manager; Bank BA= Assistant Manager of Personal Financial Services; Bank BB= Customer Service Officer/Frontline Manager; Insurance AA= Manager

Bank AA indicated that counting keystrokes, counting completed transactions, and how long it takes to complete a transaction, are usually done by a computer. The only work done by a supervisor is directing work to a work station. Hence, client interaction/transactions are counted by the computer, which may be very accurate in terms of numbers, or in terms of production, however, this method of supervision does not take into account individual employee needs or characteristics. Perhaps an employee at this bank was working with a sprained hand or finger and took a little longer to finish a transaction, but the computer does not take this into consideration. I can only hope that the manager does when basing an employees' position for a promotion on this data. There needs to be a human element involved in supervision as well, unless we are all supposed to behave and perform with the likeness of robots, never making any mistakes, and performing at peek efficiency.

For Bank BB, both respondent's answers were the same except in terms of directing work to a station, the Assistant Manager of Personal Financial Services (Bank BA) said that this task was usually done by a human supervisor, while the Customer Service Officer/Frontline Manager (Bank BB), said this was rarely or never done. Both respondents answered that counting complete transactions, recording how long terminal is idle, and counting how long it takes to complete a transaction is usually done by a computer. In summary, all three institutions indicated a strong trend towards more and more supervisory tasks being completed by a computer than by a human supervisor.

Question 111 asked respondents to indicate further on what exactly the electronic monitoring system gathered. Table 6.4 illustrates the respondents' answers.

Table 6.4. What Information Monitoring Systems Gather

111.What exactly does your electronic monitoring system gather? (indicate all that apply)

	Bank AA	Bank BB		Insurance AA
		BB	BA	
• Statistics on keystrokes		✔		
• Error rates				
• Transaction counts	✔	✔	✔	✔
• Logging on & off		✔	✔	✔
• Time spent away from workstation		✔		
• Files & documents on computer		✔	✔	
• Phone log (location of incoming & outgoing calls, length)	✔			✔
• Speed	✔			✔
• Efficiency	✔			
• Products Sold	✔	✔	✔	
• Length of Customer Interaction	✔	✔	✔	✔
• Percent of Cross-Selling	✔	✔	✔	
• Other, please indicate _____	Additional Services Recommended By employees To customers	Client Contacts; Referrals, opportunity spotting		

NB: Bank AA= Branch Manager; Bank BA= Assistant Manager of Personal Financial Services; Bank BB= Customer Service Officer/Frontline Manager; Insurance AA= Manager

Bank AA indicated that its system gathered information on the following: transaction counts, phone log (location of incoming and outgoing calls), speed, efficiency, products sold, length of customer interaction, percent of cross sales, and finally, any additional services that employees recommended to customers.

When asked to describe specific tasks that their monitoring system gathered data Bank BB respondent's answers differed slightly again. The Assistant Manager of Personal Financial Services (Bank BA) indicated that the system gathered data on

transaction counts, logging on and off times, files and documents on an employee's computer, products sold, length of customer interaction, percent of cross-selling, and client contacts. The differences in the answers of Bank BA and Bank BB were that the Customer Service Officer/Frontline Manager (Bank BB) collected statistics on keystrokes, time spent away from workstation, referrals, and opportunity spotting.

Insurance AA collected transaction counts, logging on and off times, phone log, speed, and length of customer interaction for each employee under the monitoring system.

In sum, the results for this question, which indicated exactly what information is being collected, show that Bank BB does the most monitoring of the activities listed. Bank AA records information that is client based or service based such as how many sales are conducted in a day, or how many clients this institution is serving. This indicates to me that Bank AA is interested in how an employee performs at work with reference to clients and sales. However, Bank BB and Insurance AA collect data more on the actual activities of the individual, not necessarily related to sales and or clients, for example, how long a terminal is idle (from question 105), time spent away from the workstation, and logging on and off times. This indicates that these two institutions are monitoring what an employee is doing, not how well they are performing while at work.

Question 114 asked whether or not managers relied on the data *only* to assess employees' productivity and efficiency; both managers at Bank AA and Bank BB answered "no". That leads me to believe that they also assess employee activity through other human means, which is considered traditional supervision. Thus, in Question 111, Bank BB appears to monitor more than its employees' activities (sales and service) by

monitoring the employee ; they also use other supervisory techniques to monitor different facets of employee activities and performance within their job. This seems like a fair way to evaluate employees, to obtain a full picture of employee performance. While on the contrary, Insurance AA indicated to me that they rely on the data generated by electronic monitoring *only* to access employees' productivity and efficiency. In addition, Bank AA, Insurance AA and the Customer Service Officer/Frontline Manager (Bank BB) choose to use merit pay in connection with the monitoring techniques, which was question 115, while the Assistant Manager of Personal Financial Services (Bank BA) does not use merit pay in connection to the monitoring techniques used. Therefore, regardless of whether each organization is monitoring the actual employee or their performance on the job, merit pay is used, like a bribe, in conjunction with monitoring.

Why and How Institutions are Using Electronic Monitoring

The second last category is why and how institutions are using electronic monitoring. The first question in this category, question 53, was an open-ended question, which asked respondents to explain why they choose electronic monitoring as a form of management or supervision. Bank AA stated "simplicity" was the main reason for employing electronic monitoring. Bank BB for both respondents, as well as Insurance AA had similar answers, the most common word used was "accurate or accuracy". Additionally, respondents indicated that electronic monitoring is what all the other competitors and businesses in their respective industries are using. Finally, it was easier to keep track of employees and clients with electronic monitoring.

None of the respondents uses electronic monitoring supervision on its own; they also integrate traditional supervision; they all answered negatively to question 54. However, they all thought that by electronically monitoring employee's performance it makes their employees strive to perform more efficiently (question 63). Although managers do not use electronic monitoring as a sole way to evaluate employees, they do think it makes employees work harder knowing that there is a 'silent supervisor'.

I went on to ask managers to rate on a scale from one to seven how often direct supervision occurs, where a human supervisor actually watches or listens to employees, (question 106). Number one on the scale is "none" and seven on the scale is "almost constant". Bank AA rated their direct supervision at five, Bank BA seven and Bank BB five, and Insurance AA, five. In terms of how much indirect supervision employees receive, where a supervisor looks at the results of employees' work, (question 107) Bank AA rated themselves at a six, Bank BB a seven for both managers, and finally Insurance AA a six. According to these numbers the managers do a large amount of supervision both ways, by humans and by computer, with computer being slightly higher.

In terms of which type of supervision each manager prefers, there was a large range. I arranged the variables on a scale that ranged from one, being prefer to do most, and seven prefer this method least. I asked each respondent three questions: human supervision alone, electronic monitoring alone, and a combination of human and electronic supervision mixed. The results are as follows:

Table 6.5. Type of Supervision Managers Prefer

81. Which type of supervision do you prefer? (please circle the appropriate number on a scale ranging from 1 being prefer most to 7 prefer least)

- Human Supervision

Prefer Most						Prefer Least
1	2	3	4	5	6	7
Insur AA	Bank AA		Bank BA			Bank BB

- Electronic Monitoring

Prefer Most						Prefer Least
1	2	3	4	5	6	7
Bank AA		Insur AA				Bank BA: Bank BB

- Combination of Human Supervision and Electronic Monitoring

Prefer Most						Prefer Least
1	2	3	4	5	6	7
Bank BA: Bank AA: Insur AA: Bank BB						

NB: Bank AA= Branch Manager; Bank BA= Assistant Manager of Personal Financial Services; Bank BB= Customer Service Officer/Frontline Manager; Insurance AA= Manager

The answers to question 81 above, sums up the results accurately; all respondents said they prefer a combination of human supervision along with electronic monitoring. The main reason for this was that while electronic monitoring gives accurate numbers, you may or may not know how an employee interacts with clients and other employees, so the human element is an important factor as well. Therefore, numbers and sales are valued, but it seems not anymore so than humans are valued.

Overall, when asked if managers think that electronic monitoring improves their decision making (question 92), they all agreed. Bank BB and Insurance AA had very similar answers in that they both felt that electronic monitoring gives better quantitative

data, and that electronic monitoring enhances their perceptions about employee activity. Electronic monitoring gives more accurate information than if they were to stand over an employee's shoulder all day long. Bank AA's answer came from a different approach. This respondent saw electronic monitoring as not only benefiting them in terms of assisting with job evaluations, but also benefiting employees. Employees at this organization were given opportunities to review their records generated by the electronic monitoring system. This way, the employees can consider their own performance levels and decide whether or not they need to make adjustments in their activities and tasks. Employees conceivably find it easier to take constructive criticism in the form of a computer read-out than from another human.

Control Regarding Electronic Monitoring

The last category that emerged from the research and the interviews I conducted with the four managers were issues surrounding control and electronic monitoring. Issues included concepts of betrayal, trust, intrusiveness of the technology, management's rights to implement the technology, abuse of the technology, and limits for the use of the technology. There are six questions that related to this theme, 71, 72, 75, 77, 102, and the first three parts of 117. All four respondents felt that electronic monitoring allows management to attend to matters previously ignored within the workplace, (question 71) and three out of the four felt that this also gave management more control over employees and the workplace, question 72. The respondent from Bank AA felt that it was not managers that gained more control, but employees themselves.

And the respondent for Insurance AA said that management did not gain more control specifically, but instead gained more of an "understanding" of the workplace.

I then asked the managers four more questions that hinge on attitudes surrounding electronic monitoring. Question 75 asked the respondents if they believe it is management's right to introduce whatever practices they think necessary into their workplace. I asked the respondents to reply on a scale that had four options:

Table 6.6. Management's Rights Regarding Electronic Monitoring

75. Do you believe that it is management's right to introduce whatever practices they think necessary into their workplace?			
• Agree	Somewhat Agree	Somewhat Disagree	Disagree
Bank AA; Bank BB	Insur AA		Bank BA

NB: Bank AA= Branch Manager; Bank BA= Assistant Manager of Personal Financial Services; Bank BB= Customer Service Officer/Frontline Manager; Insurance AA= Manager

Although the results are not based on a representative sample and I am not able to generalize, I can say that for the small sample I questioned, managers felt that it was acceptable to have any type of supervisory practice admitted within their respective institutions. But how far are managers and technology willing to go, should managers be allowed to know every move of every employee from nine to five?

Question 102 asked respondents what limits if any should be placed on the perfection of monitoring systems. Three of the respondents said that the monitoring that is in place today is acceptable, monitoring should only be used for work purposes, and managers should not be allowed to pry or spy into the private lives of employees. The

fourth respondent, in contrast, from Bank AA, had no problem with any practice being introduced into his or her workplace. This same respondent also said that there should be no limits on monitoring because of the ever-changing work environment that we are in. Yet when managers were asked if they believed that electronic monitoring has the potential to be abused (question 77) all four answered "yes".

The last question, 117, that I asked managers in regards to control through electronic monitoring was whether they "agreed", "disagreed", or "didn't know" in terms of how they felt when I read them the statements noted below. There are only three respondents for this particular question as the respondent from Bank AA was part of my pre-test for the survey and this question was not included in the pre-test; hence I do not have a response from the person at that institution.

The statements were as follows:

Table 6.7. Employer's Perspectives Regarding Privacy

117. Please tell me if you agree, disagree or don't know with reference to the following statements:

- Computers are reducing the level of privacy in Canada today A_Bank BA; Bank BB_
  D___
  DK_Insur AA___
- I don't think the average Canadian worker suffers any serious negative consequences because of so called invasion of privacy A_ All Respondents___
  D____
  DK____
- There is no real privacy because business can learn anything they want about you
  A__Insur AA__
  D_Bank BA; Bank BB__
  DK____

NB: Bank BA= Assistant Manager of Personal Financial Services; Bank BB= Customer Service Officer/Frontline Manager; Insurance AA= Manager

Overall, it is evident that there was clearly some uncertainty as to whether or not computers are indeed infringing on our privacy as Canadian citizens and workers. This might be attributed to Canadians' more laid-back attitude towards issues when compared to the United States, or the fact that electronic monitoring in its most empowered forms does not exist in Canada as much as in the United States, which is where the literature for the majority of this research came from.

In sum, although my sample was very small and I did not obtain as much information as I would have liked from the insurance industry, I can see a clear trend emerging with regard to electronic monitoring and social control within the workplace. While the industries that I reported on do not have pervasive forms of monitoring and use it more *with* employees instead of *on* employees, there is definitely the technology there that managers can, and I foresee, will use to control employees more so than they have in the past. The potential is there, but perhaps, just not realized at this time.

Results of Employee Interviews

The following analyses come from interviews conducted with employees at three separate financial institutions. From Bank AA there were three participants, Bank BB had five participants and only one participant from Bank CC. There were a total of 21 questions included in these analyses. As noted previously the questions were divided into three distinct themes and are discussed below.

Employee Feelings Regarding Electronic Monitoring

This section includes questions 10, 12, 14, 19, 30, 66 (statements vii, ix, and x), and 78 (statements i, iv, and v). When asked if the electronic monitoring that occurs in

the workplace is a drastic departure from conventional work routines (question 10), all nine respondents answered negatively. Additionally, they all agreed that the type of monitoring done is an extension of more familiar business practices (question 12). However, when asked if opposed to electronic monitoring overall (question 14) there was a variation in the answers. Five out of the nine were "not at all opposed" to electronic monitoring while the other four answered "neutral depending on the form" of electronic monitoring.

When asked if electronic monitoring presented an increase in the extent or closeness of management supervision (question 19), there was a reversal from the previous answer. Five stated "yes" they felt there was a rise in supervision, while three said "no" there was not and one respondent answered with a "don't know". Out of the five who answered yes, there was a further difference in their answers as to why. Three felt that the supervision is closer because everything that they do is counted and monitored. For instance, all their sales figures are tracked. The other two respondents answered slightly differently. One felt that there is more supervision because there is now more coaching being conducted by management. The other respondent felt that there is more supervision because management can now "pin down problems" within the organization.

In contrast, those who answered "no" to this question had slightly different answers, however, all indicated the same idea that the supervision may be closer but it is "less personal". For instance, one respondent said "No the supervision is not closer, it is different; managers are not looking over your shoulder anymore because all they are concerned about are the results at the end of the day, and then they know how much has

been done". Another respondent felt that the supervision is not closer "because it was less personal but more convenient for management". This same respondent also added that "the supervision is not necessarily making work more efficient though".

The next three questions (30, 66, and 78) asked respondents in different ways how they felt about being monitored at work. The first asked, "Do you think that you have the right to know that there is the potential for you to be monitored or that you may be under surveillance while at work?" All nine respondents answered "yes". The next question was a series of statements and the respondents were asked to base their answers on a scale from 1 being strongly disagree to 7 being strongly agree. Their answers are as follows:

Table 6.8. Employee Feelings Regarding Applicability of Monitoring Systems Percent of People who Agree or Disagree with the Following N=9

66. At the present time, there are few laws dealing with the computer systems which monitor, observe, or measure performance. For each of the following statements, please circle how much you agree or disagree with it. (A scale that ranges from 1 being strongly disagree to 7 being strongly agree)

	Strongly Disagree 1	2	3	4	5	6	Strongly Agree 7
➢ Workers should be able to refuse to be electronically monitored	22%	22%	11%	11%		22%	11%
➢ Workers should be able to see and correct information gathered about them		11%					89%
➢ Employers should be forced to tell workers exactly what systems are being used & what the information is used for					11%		89%

NB: Percentages do not always sum to 100% due to rounding.

While there was some disagreement on whether or not respondents felt that they should be able to refuse to be electronically monitored, it was clear that workers should know they are being monitored. In addition, workers should have the opportunity to see and correct information about themselves and know what the information is being used for.

Similarly, when respondents were asked supplementary questions concerning monitoring and their privacy they answered in a related way. The following question (78) asked the respondents to rank each statement read to them. Was it very important, somewhat important, somewhat unimportant or not important to each respondent. The results were as follows:

Table 6.9. Employee Opinions Regarding Monitoring at Work and Privacy Percent of People who Rate Level of Importance with the Following N=9

78. The next set of questions helps me determine your general opinion about privacy. Privacy means different things to different people. I am going to read you a classification of different aspects of privacy. Please tell me how important each aspect is to you by selecting the category that best reflects your opinion.

	Very Important	Somewhat Important	Somewhat Unimportant	Not Important
➢ Not being electronically monitored at work		11%	33%	55%
➢ Not having someone watch or listen to you without your permission	55%	33%	11%	
➢ Controlling what information is collected about you	66%	22%	11%	

NB: Percentages do not always sum to 100% due to rounding.

As a whole, respondents are very concerned about their privacy while at work. It is very important to employees to know whether or not they are being monitored and who is in control of the information being collected. Not being electronically monitored at work is not a large concern which coincides with the previous results when asked whether or not they perceived the type of monitoring as a major change from normal business practices.

Facts Regarding Electronic Monitoring

The first two questions in this section (22 and 24) ask whether or not there was a guideline in place between management and labour surrounding the issue of monitoring and whether or not employees had involvement in the process of implementing the electronic monitoring system. The last question in this section (50) asked the respondents to rate on a scale, indicating which type of supervision they preferred: human supervision, electronic monitoring, or a combination of human supervision with electronic monitoring. The respondents were asked to rate their answers on a scale from 1 meaning prefer most to 7 meaning prefer least.

The literature indicated that when worker's had knowledge of the monitoring and were able to be a part of the implementation of the monitoring system, or the development process within their organization of the technology, they were much more in favor of electronic monitoring and showed little to no resistance to electronic monitoring (Deetz, 1998, and Simpson, 1999). Table 6.10 provides answers from each respondent in terms of if there was a guideline arranged between management and labour (question 22), whether there was involvement in implementing the electronic monitoring system, (question 24), and their answers to which form of supervision they prefer. The

results were arranged in this manner to see if my results coincide with the findings in the literature.

Table 6.10. Worker Knowledge, Level of Involvement in Implementation of Monitoring Systems, and Preferences of Type of Supervision.

	Guideline Between Mgmt & Labour	Level of Involvement in Implementation	Human * Supervision	Elec* Mon.	Combination*
Bank AA					
Resp 1	Yes	No Involvement	2	3	1
Resp 2	Yes	Don't Know	3	2	1
Resp 3	No	No Involvement	4	1	7
Bank BB					
Resp1	Don't Know	Complete Involvement	4	2	1
Resp 2	Yes	Complete Involvement	2	1	2
Resp 3	No	No Involvement	1	4	3
Resp 4	No	No Involvement	1	6	1
Resp 5	Yes	Management Selective Involvement	5	5	2
Bank CC					
Resp 1	No	No Involvement	1	4	3

NB: * Respondent's Response where 1= Prefer Most to 7= Prefer Least.

My results are inconclusive with regards to what was reported in the literature. The answers from respondent 3 and 4 from Bank BB and the respondent from Bank CC would correspond to the literature, however, the rest of the respondents are either too

neutral or the answers do not correspond at all. For instance, respondent 3 from Bank AA indicated that there is no guideline between labour and management surrounding the issue of electronic monitoring, that she had no involvement in setting up the electronic monitoring, and yet, she preferred this type of supervision the most.

Control Regarding Electronic Monitoring

This final section of questions asked respondents their opinions about technology and control. It included questions 33, 36, 37, 41, 42, 43, 44, 45, 48, 64, and 75. The first question asked if they felt a loss of personal control in regards to their job as a result of electronic monitoring, (question 33). All nine respondents answered "no" when asked. Many felt that it did not matter if the electronic monitoring was in place or not in terms of control. Some respondents felt they had *more* control over their jobs because they could see their results. Additionally, a computer and not a human measured the results of their efforts, therefore the employee still felt they were in control. As well, three respondents felt that if a person was doing his or her job properly it would not matter what kind of supervision there was, and the worker would not mind additional supervision.

When asked if they felt more distanced from their employer as result of electronic monitoring (question 36), all answered "no" except one. The one respondent who answered "yes" was also the same respondent who felt, in response to question 19, that electronic monitoring is less personal. Finally, in terms of supervision, none of the respondents felt that other employees try to avoid being monitored (question 37).

When asked if they perform more efficiently knowing that a supervisor has taken a special interest in their work using electronic monitoring (question 41) four employees

responded "yes" and five responded "no". Likewise, all nine respondents' felt that the measures taken to monitor their performance are acceptable (question 42). Consequently, all nine respondents answered "no" when asked if they felt more threatened by a computer collecting data on their performance than when a human supervisor collects data on their performance (question 43).

When I asked respondents specific questions on whether or not electronic monitoring gave management more control, or a clearer picture of what was occurring throughout the organization, the results were remarkably similar in that almost all said "yes". Only one respondent thought that electronic monitoring did not allow management to attend to matters previously ignored (question 44). And only four respondents thought that management was not gaining more control through having more knowledge as a result of electronic monitoring (question 45). Five agreed that management was gaining more control through electronic monitoring.

Corresponding with the fact that management may be gaining more control over the organization and employees through electronic monitoring, seven of the nine respondents believed that electronic monitoring has the potential to be abused, (question 48). When asked what limits if any should be placed on the perfection of electronic monitoring, (question 64), the answers were varied, however, the paramount response was that the monitoring should stay focused on work, not on workers. One respondent felt that electronic monitoring should not progress in the direction of surveillance in that all actions and communications can be monitored through cameras and phone lines. Furthermore, two respondents felt that supervision should not be all technologically based. Computer programs as well as humans should supervise workers. In contrast,

three respondents felt that overall, there should be no limits placed on the perfection of supervisory technology. These results suggest that this group of respondents did not have any negative experiences with supervisory technology and hence feels that supervisory technology should have few, if any, limits on its perfection. This brings us to the issue of privacy, that if there are no limits or very few, how much of a worker's life at work remains private?

I asked respondents questions regarding privacy and their jobs (question 75). They were asked to agree, disagree or answer don't know to each statement I gave them. The results are as follows:

Table 6.11. Employee's Perspectives Regarding Monitoring and Privacy

75. Please tell me if you agree, disagree or don't know with reference to the following statements:

- I don't think the average Canadian worker suffers any serious negative consequences because of so-called invasion of privacy.
  A 55%
  D 33%
  DK 11%

- I don't mind companies using information about me as long as I know about it and can stop it.
  A 89%
  D 11%
  DK

- I'd rather work at home than have to go out in the hustle and bustle of the workplace.
  A 11%
  D 89%
  DK

- I think I should be notified in advance when information about me is being collected.
  A 89%
  D
  DK 11%

N=9

NB: Percentages do not always sum to 100% due to rounding.

From the above answers it is clear that the respondents I interviewed do not see electronic monitoring as a threat to their privacy at work. They would also still rather go to work and accept the fact that they may be monitored while at work than stay at home. Finally, the respondents clearly do not mind if information is being gathered about them by organizations as long as they know what it is for and have the ability to stop it.

CHAPTER 7: DISCUSSION AND CONCLUSION

Opponents to electronic monitoring in the workplace have been primarily concerned with the abuses of employees and the consequent effects on employees' privacy, performance, and health. In many ways it is business interests that understand the issues that are at stake - their ability to control the work process. With the advent of networked computers, close monitoring, done electronically, of employees by their managers is now easily implementable. To the employer, being able to monitor ensures that employees are doing their job and doing it well. But at the same time, such monitoring is decried by many employees as an invasion of employee privacy. Just how much monitoring represents an invasion of privacy? Is monitoring really beneficial as a means of increasing efficiency or quality in a company, as many managers boast? Monitoring may be considered to intrude on workers' privacy rights in a number of ways. Doubtlessly, notifying workers that monitoring is taking place is considered required. But how may this information be used? The information may be used to track sales, observe levels of customer service, or to trace an employee's whereabouts within the organization. Such information may also be used by managers to determine an employee's pace of work, an employee's type of work or an employee's fate within the organization.

Not only should privacy rights be examined, but also how electronic monitoring affects the company as a whole. While the employer certainly has the right to make sure that employees are doing their work, there is evidence in the literature that certain kinds of monitoring can hurt company morale and can increase worker stress levels and job dissatisfaction. Perhaps when workers feel that they no longer have control over their

jobs, they do not perform optimally. If performance statistics are posted publicly, how would this influence workplace moral? Would it serve as a motivational tool or a destroyer of moral?

Moreover, exactly what kind of monitoring is most effective? For instance, it may be better to focus upon quality rather than quantity. When workers produce widgets or answer phone calls, would it be better for managers to measure productivity based on customer satisfaction with the service or the ability of the widgets to meet specifications instead of the actual number of calls answered or widgets produced? Might it be better to use large-scale measurements of worker performance instead of monitoring keystroke rates of individual employees?

The goal of maximum productivity cannot be achieved without considering the human impacts of computer monitoring. Care must be taken to avoid infringement on employees' rights to privacy and well being, while maintaining managers' rights to benefit from the labour they have hired. As this topic is further explored in the future, perhaps a happy medium can be found that will take into account the rights and needs of both the worker and the employer.

Computer Performance Monitoring (CPM) is a contentious technology that involves us in debates concerning management rights, employee rights, good management practices, technological progress, and the social good. Many researchers reject the idea that CPM is harmful in itself, and they argue that it is bad management and poor implementation which lead to negative consequences. The challenge for human resources management then is to recognize the dangers of CPM and to manage its implementation so as to capture its benefits while minimizing its human costs.

The future holds the prospect of yet more sophisticated forms of monitoring. The decrease in costs and the increase in technical refinement will act as an incentive for business to introduce and upgrade its monitoring techniques. Taken in concert with the declining rates of unionization, and the consequent effect on the power of organized labor, the potential barriers to more monitoring appear weak. Marx and Sherizen (1986: 72) strongly believe that there must be solid and clear guidelines in place with regards to monitoring or misuses are bound to occur.

There is one reason that stands out among the rest to make certain that technological monitoring does not get out of hand, and that is, that this type of monitoring could become much more extensive and may spill over into society at large (Marx and Sherizen, 1986:70). Marx and Sherizen feel that the more widespread this type of practice becomes in the workplace, the easier it will be to introduce a mandatory national ID system. Then, not only we will be socially controlled within the workplace, but within society at large as well.

Results Discussed - Main Research Questions and Statements Addressed

My research as well as the literature suggests that there is a need for monitoring technology in the workplace today. My goals were to find out why and to find out if the technology was being used as a tool for social control.

In concert with my first research question, the employees in my research all had some knowledge that their managers were electronically monitoring them. My employee respondents answered negatively when asked if electronic monitoring that occurs within

their workplace was a drastic departure from conventional routines. In addition, they all agreed that the type of monitoring done is an extension of more familiar business practices. This leads me to conclude that the monitoring that is done within these three organizations has been accepted positively with workers and they have had little or no resistance to it. The literature, however, notes that not all organizations emphasize to their employees that they may be monitored or under surveillance; some organizations actually hide the cameras, or use monitoring systems on employees' computers that cannot be detected by employees.

The reasons why organizations today use monitoring technology are the same as in the past when there were more managers on the floor to monitor employees. Managers need their employees to account for time while at work. Monitoring helps managers gauge the level of production or sales. Employees expect to be monitored while at work. My own research suggests that as long as employees know why they are being monitored they do not oppose it.

Managers expressed to me that they use the technology because other organizations in their respective industries do so as well. More directly, the manager from Bank AA saw electronic monitoring as not only benefiting management in terms of assisting with job evaluations, but also benefiting employees. Employees at this particular institution were given opportunities to review their records generated by the electronic monitoring system. This way, the employees could consider their own performance levels and decide whether or not they needed to make adjustments in their activities and tasks. Employees conceivably find it easier to take constructive criticism in the form of a computer read-out than from another human. These results illustrate that

those employees, who agree that monitoring, as a measuring tool is valid and acceptable, will have positive attitudes towards monitoring, consistent with my 1a research statement.

While being electronically monitored at work is not a large concern, which coincides with the previous results (question 75), when asked whether or not respondents perceived the type of monitoring as a major change from normal business practices respondents indicated no. However, as a whole, respondents are very concerned about their privacy, in terms of whether or not they know they are being monitored while at work. Respondents indicated that it is very important for them to know whether or not they are being monitored and who is in control of the information being collected. As per 1a research statement, I can determine from these answers that overall, my respondents did not have major concerns about being monitored at work as long as they knew that the monitoring was occurring, were able to see the results of the monitoring, and knew how the information being collected about them was used.

Additionally, results from question 15,17, and 19 from the manager questionnaire indicate that managers feel that electronic monitoring in the workplace is not a "big deal"; many find it more of an extension of everyday business practices. Therefore, I speculate that these results mean that all of the respondents, and I would suggest all workers in general, know and have come to expect that there will be supervision of some sort in the workplace whether or not a human is supervising you directly or through a computer.

My second research question asked how invasive the forms of supervisory technology were within financial institutions. While I found within my sample

institutions using different forms of computer monitoring programs and for different reasons, it was very hard for me to answer this question because employees could be monitored daily, weekly, on their own, and as a group within all institutions. This makes it very difficult to speculate how invasive this type of technology is within these institutions.

In terms of whether managers use the technology to exert social control over their employees, my second overall goal of this research, I suggest that yes they are. Managers are using the information gained from the technology to change the behaviour of their employees. Therefore, managers are exerting social control over employees. In support of this statement, results from question 36 indicate that the more information a computer monitoring system gives managers the more they know about what each employee is doing and have more control over how they will direct that employee in the future.

In accordance, all four managers felt that electronic monitoring allows them to attend to matters previously ignored within the workplace, (question 71) and three out of the four respondents felt that this also gives management more control over employees and the workplace, (question 72). The respondent for Insurance AA said that management did not gain more control specifically, but instead gained more of an "understanding" of the workplace. If management has more of an "understanding" regarding the workplace and its undertakings, then it also has more control. If management has more knowledge and more of an understanding of what occurs within the workplace then they can make decisions regarding employees and the workplace with more confidence, thus giving managers more control over the workplace. Therefore,

supporting my research statement 5c which states that electronic monitoring provides a means to direct attention to important aspects of organizational performance.

My literature review illustrated that social control can be achieved through a panoptic situation which induces uncertainty in employees as to when they are being watched. My research shows an additional way management gains social control over employees through technology by having more knowledge of the actions within an organization. Research question 3 asked if monitoring technology was used as a form of control, and question five asked how social control is achieved through technological supervision. Yes, technology is used as a form of social control, and it is achieved through management's 'constant gaze' and employee actions to conform to management 'rules'. Major research question four asked what is social control? Social control was defined in Chapter 1 as taking information gathered from monitoring practices and using it in some way to change the behavior and actions of employees to more closely fit with managerial goals. Social control in the workplace is achieved through a two-step process. First, an employer gains knowledge of employee activity, and productivity via electronic monitoring. Second, the employer makes changes to the work environment based on the new information, controlling the work and or workers.

Furthermore, in my research all of the employees who are subject to electronic monitoring in these institutions have knowledge of this fact. When asked if managers thought this affected the way the employees conducted themselves at work, the most common answer was yes, in the way of performance. Employees are more aware of their performance with customers, and with each other. The manager from Bank AA indicated that their employees may even be more performance driven, or strive to perform better

because of the monitoring. These results would suggest that electronic monitoring encourages obedience on the part of employees. This statement 5a notes that electronic monitoring encourages obedience on the part of employees. Because employees perform in a certain way when they know they are being monitored (being obedient), management is thus controlling their behaviors. This also answers my fifth main research statement, on how social control is achieved through technological supervision; employees behave in a particular manner because they feel they are being constantly watched. Moreover, the financial institutions in my sample did not use electronic monitoring as the *only* way to evaluate employees, but managers did think the monitoring makes employees work harder knowing that there is a 'silent supervisor'. Since employees know that they may be monitored in several different ways, but they do not know which type of monitoring occurs and when, they are striving to be on their best behaviour at all times. Therefore, statement 5b that states electronic monitoring uses uncertainty as a means of control, can be supported.

Additionally, the information gathered on employees' activities could also help managers to detect 'lazy' or 'untruthful' employees, employees who are deviants. These results would suggest that the more pervasive the supervisory technology, the more control management will have over the employees, in concert with research statement 4a.

When asked if electronic monitoring presented an increase in the extent or closeness of management supervision, my respondents had varying answers. However, all in all, respondents felt it was closer in some way or another. Overall, I think that this shows an increase in supervision not so much of the individual themselves but of their actions, their results at the end of the day, how many clients were served, how many new

accounts were opened, and how many sales were made. Additionally, in one way or another, all respondents agreed that supervision is closer but in different ways. Supervision is not as visible as in the past; computer programs now acknowledge a worker's productivity instead of management.

Although it was very hard for me to detect how invasive the forms of supervisory technology were in my sample, it would be fair to suggest that the more pervasive the technology, the more knowledgeable managers are about the organizations activities and the more control they have to make decisions regarding employees and the work employees do, as well as to facilitate managerial and organizational goals better. These results indicate that electronic monitoring is panoptic and makes workers transparent under the watchful eyes of management. Therefore, these results support my major research statement number 7a.

The forms of supervisory technology available to organizations are widespread and far-reaching. They range from simple computer programs that count statistics on keystrokes to audio and video devices that leave the employees' actions "naked" to managers. In my own research there were no video cameras, however, employees could be monitored while on the phone; their sales and other activities while on their computer could be monitored and in some cases their physical location within the organization could be known by managers. In my research, respondents had no objections to using electronic monitoring as a supervisory technology; they felt it necessary to stay competitive with other financial institutions. Additionally, the managers' thought the technology made supervision easier as well as aided them in being more efficient within their organization in terms of boosting productivity or employees' sales. Therefore,

organizations use electronic monitoring to increase production. These results support research statement 3a. Increasing production in the financial industry would include higher sales, serving more customers, opening new accounts and loans, and reducing employee errors. Therefore, by increasing production with electronic monitoring, the technology encourages Weber's bureaucratization and rationality: efficiency, calculability, and objectiveness supporting my research statement 2a. Organizations in the financial industry are bureaucracies, and hold many of the characteristics of Weber's ideal bureaucracy: rationality, efficiency, calculability, and objectiveness. Electronic monitoring is helping managers attain and sustain these characteristics.

My literature review suggested that managers *did not* trust their employees and that is why they chose electronic monitoring as a supervisory technique, however, my own research indicated that managers *do* trust their employees, which answers my main research question number 6.

With reference to question 32 (manager questionnaire), the results do not support my major research statement 6a. Question 32 asked was this electronic monitoring system already in place to monitor immediate and technical problems and then management saw that they could use it for other purposes? My results indicate no; electronic monitoring is in place because there was a demand for this type of technology in the workplace, not because of some other reason such as security. In conjunction, when asked if the institutions were using the techniques of electronic monitoring as a result of a past deviance or crime within the company, (question 88 manager questionnaire), all four respondents answered "no". Therefore, there is no indication of a

relationship between workplace deviance and crime with electronic monitoring as my 6b statement in my major research questions section indicated.

When employees were asked if they perform more efficiently knowing that a supervisor has taken a special interest in their work using electronic monitoring (question 41) four employees responded "yes". Likewise, all nine respondents felt that the measures taken to monitor their performance are acceptable (question 42). Consequently, all nine respondents answered "no" when asked if they felt more threatened by a computer collecting data on their performance than when a human supervisor collects data on their performance (question 43). A definite trend is evident, when electronic monitoring is introduced in its entirety to workers and they are given explanations about why and how it will be used, workers will be more accommodating of the monitoring technology.

In sum, one of my objectives was to discover whether electronic monitoring was used as a tool for social control. This involved an examination of the information gathered from the monitoring systems as well as how managers used the information. The results are positive; electronic monitoring does provide a means to direct attention to important aspects of organizational performance giving management optimum control. Additionally, the more pervasive the supervisory technology, the more control management will have over employees. The respondents in my study felt that management had more knowledge of the organization and hence more control. Finally, the results also indicate that power and the will to control rests on the information gathered from electronic monitoring. If respondents feel that management is gaining

more knowledge, then management must also be gaining more power and control. This relates directly back to Foucault discussed in Chapter 3.

Many authors and sociologists as cited in my literature review felt that indeed we are crossing the privacy border with electronic monitoring at work, however, many of the participants in my research did not feel the same way. I suspect that these two opposing views hinge on whether workers feel threatened in any way by the monitoring, such as feeling self-conscious or by being watched by 'big brother'. All the participants in my research had positive attitudes with regards to the monitoring done within their organizations, yet, they also thought that there should be limits on how much information an employee can gather about them as an individual and their activities while at work. As long as the organization was collecting information about worker's skills and production, employees did not feel threatened. When the monitoring becomes more focused on an individual, for reasons other than sales direction, then employees object and feel that their privacy is being infringed upon. In relation to my main research question, (number 7), which asks if managers are crossing the privacy border, these respondents' answers would indicate that we are not, yet.

Suggestions for Further Research

While my study was successful in regards to attaining a better understanding of supervisory technologies within financial institutions, it was also lacking in several areas. My sample was very limited. I did not obtain the amount, nor richness, of information that I wanted. There were several reasons for this as discussed in Chapter 5, Research Limitations. I have obtained an abundance of information from this project about doing

primary research with organizations; and there are several steps that I would do differently if I have the opportunity to do so. I outline below several suggestions that should be undertaken by others when conducting research.

First, before entering the field, one should review all literature concerning survey and interview methodology. Make certain that proper procedures are followed and obtain advice from other researchers who have been in the field and learn from their experiences. Talk to any sociological methodologist and ask for advice regarding the procedures surrounding interviews and surveys.

Second, before entering the field, review the literature on non response issues and how to gain access to organizations and bureaucracies. Talk to other researchers who have done extensive research with organizations and bureaucracies. Ask them if they had difficulty gaining entry. Did they have non response problems? And how they dealt with these obstacles?

Third, before entering the field, review the literature about conducting research on sensitive topics. The literature will give you ideas and methods to deal with this issue.

Fourth, spend time before entering the field to obtain a sense of who your sample might include, for example, the types of organizations, bureaucracies and contacts with whom you would be willing to conduct research. Determine if there is a specific time that would be best to approach an organization. For example, do not approach a bank during RRSP season if possible, unless your are interested in studying their RRSP season. Are there characteristics that you should know about the organizations that you wish to study, before approaching them? For example, do these organizations conduct research

on their own? Do they have a preference to who may or may not enter their organization as a researcher?

Fifth, before entering the field, make contacts within and outside of the organization that you wish to study. Within, make contacts with people you know, or a friend of a friend. Perhaps you have a family member working there, a neighbor, or an academic acquaintance. Knowing someone within an organization, even if it is not directly, can make entry much easier. Make contacts outside of the organization: does the organization belong to a larger organization? Does a particular person you want to speak with belong to another organization that you may have contacts in?

Related to making contacts is discovering if the organization that you are interested in studying belongs to an umbrella organization. Can you gain access through the umbrella organization who in turn, can recommend you to your target organization? By obtaining the respect and trust of the umbrella organization, you may be able to gain access much more easily to the organization that you want to study.

Finally, allow yourself sufficient time to conduct research in the field when at all possible; be prepared for setbacks, delays, and problems. By reviewing the literature, talking to other researchers, and making possible contacts, you should be able to handle yourself and your research while in the field quite successfully.

Additionally, within my own research, there are many aspects of supervisory technology that were not even considered which were beyond the scope of this study and hence may be better addressed with further research. The Ontario Ministry of Labour (1979:1) has pointed out that:

> Electronic surveillance [and monitoring] is a subject of growing concern in technological societies. The use of such devices offers benefits and exacts costs

> in ways that are not yet clearly understood. The applications of such equipment have raised concerns about fundamental human values. On the one hand there is an employer's right to introduce electronic surveillance [monitoring] in the workplace and on the other, the right of privacy and the human dignity of employees in that workplace. At issue is how highly each right is valued and how the conflict of interests can be resolved in particular circumstances.

It should be noted that this concern was acknowledged in 1979. Have we come to understand, in the year 2000, the costs and benefits of such monitoring technologies? I am arguing that we have not, and therefore, we should attempt to. While my study barely entered the workforce and learned the effects of electronic monitoring concerning issues of social control, it is a research issue that deserves more attention. I was able to contact only one insurance company, and yet the results differed slightly from the results I received from banks. Further research should be done in this area to see if insurance companies are more invasive in their monitoring techniques as my own research hinted at. It is hoped that this study will stimulate further investigation in this field.

Another area that I think needs further investigation is electronic monitoring done in *any* type of workplace setting. This type of supervisory technology affects all facets of almost every work sector. Sales representatives, cashiers, administrative employees, factory workers and even truck drivers are subject to electronic monitoring. The research should determine why the monitoring is being done, and what the information being collected by the monitoring is being used for. With electronic monitoring becoming an active and integrated part of everyday business management, I suggest that there be a body of government or workforce established to regulate those who monitor employees. Since workers have a right to know about their working environment and conditions of work, the use of monitoring and surveillance practices should be clearly stated, preferably through jointly created policies between labour and management.

Additionally, in the future, more concern should be given to electronic mail and the monitoring of it. Monitoring of electronic mail is occurring as we speak and since so many people choose to communicate in this way we may, be approaching some uncharted territory delineating what is acceptable monitoring practices and non acceptable monitoring practices. It is a federal offence to tamper with anyone's personal paper sourced mail, but will it be the same in the electronic world? What kind of implications does this have in the workplace?

Max Weber's insights about modern day bureaucracies helped me to see the characteristics that are true of many organizations today, especially financial institutions. I used an ideal type to compare and contrast my sample of financial institutions to understand their characteristics and how these characteristics fit with supervisory technology. Weber outlined bureaucracy's goals as predictability, calculability, and efficiency as well as powerfulness, all of which can be aided by technology.

My work on electronic monitoring within the workplace as a tool of social control provides an extension of Foucault's work on social control in society. Foucault's work moves to broader theoretical speculations about the organization of knowledge and power in the modern world, including the workplace, and the implications of particular discursive formations for social control. Supervisory technology could be viewed as a discursive formation which forms a configuration that gives management more knowledge and more control over the work process and workers overall.

I agree with Foucault and Giddens, and my research provides evidence, that highly bureaucratized organizations such as financial institutions and insurance companies do indeed have more control over their employees by following the outline of

an ideal typical bureaucracy. With the introduction of today's technologies, managers are gaining more and more control over the workforce.

Townley (1993: 521) goes on to suggest that "Knowledge is the operation of discipline. It delineates an analytical space and in constituting an arena of knowledge, provides the basis for action and intervention-the operation of power". I am suggesting through my own research that electronic monitoring give knowledge to managers and hence it can be seen as an operation for action and of discipline.

In conclusion, considerable controversy surrounds the use of electronic monitoring in the workplace. The systems have triggered vocal opposition from trade unions and newspaper articles have likened them to "Big Brother" in the workplace, reflective of "electronic sweatshop" work environments. The systems have been linked to increased stress, health risks, and job dissatisfaction among monitored employees. Overall, opponents to the systems argue that electronic monitoring undermine customer service, teamwork and the quality of work life. Yet, the use of these systems is increasing. Despite the growing adoption of electronic monitoring in the workplace, few institutions can really anticipate their potential effects or effectiveness. From my own research the results indicated that managers thought that there should be limits on monitoring, and all four agreed that there is a potential for electronic monitoring to be abused within the workplace. This should be a good indicator to us that all technologies should be adopted and utilized and monitored with caution.

Electronic monitoring, unlike human monitoring, is nearly complete. Monitoring and supervision are no longer encased in a supervisory level performed by staff, but are now implemented by computer programs that direct and keep track of virtually

everything workers do or fail to do. Therefore, we are potentially producing "electronic sweatshops" as suggested by Attewell (1987, 1991) and Garson (1988).

Like all technologies, we need to explore it before we use it and examine its possible ramifications, both positive and negative. Where will supervisory monitoring technology take us to next - monitoring in our own homes, by the government? If we accept monitoring in the work setting, then what would it take for us to accept it in our homes? How far will we let this technology and its implications go?

As was the case in my own research, many of the respondents said that they implement the kind of monitoring techniques that they do because everybody else in their business arena does, but does management actually evaluate the technology and not just their workers? Many managers felt, in my sample, that indeed the techniques they used were providing evidence that employees were being more efficient. Garson (1988) asks us to gage not only whether employees are being more efficient, but also whether the technology we are implementing is actually efficient itself. Are the supervisory technologies in use today capable of measuring efficiency? This is a topic unto itself to be investigated further, whether or not the technology that we use to monitor employees is actually capable of monitoring employee's efficientness. Therefore, we need to monitor the monitoring devices. The process that is used to monitor employees and the devices used is what needs to be investigated. Are the monitoring devices and techniques questionable? Do the monitoring devices and techniques contribute to a manager's job as a supervisor in a positive or negative way? Do the monitoring devices or techniques invade the privacy of employees? Do the monitoring devices or techniques make

employees change their behaviour? If so, this is a form of social control within the workplace as a product of supervisory technology.

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APPENDIX A

Phone Call Log

Banks

Bank 1

Nov 17 - Left Message on voice mail with Branch Manager introducing myself and my research and asked him to contact me

Nov 18 - Talked to manager introduced myself, and my research said that electronic monitoring & or surveillance was not really practiced in his organization and hence was not interested in participating

Bank 2

Nov 17 – Left Message on voice mail for Branch Manager introducing myself, my research etc. and asked her to contact me

Nov 18 – Talked to manager and explained further the purpose of my research and my objectives. She said flat out she wished not to participate. She was kind of rude and hence I was taken aback and left it at that. I tried to reassure her this was only research for my thesis and was strictly confidential anonymous etc. but she was adamant about not participating.

Bank CC

** Pre-test with X (Nov 16)

Nov 16 – Had pre-test interview with X who previously worked at Bank CC for several years. She gave me a contact name -Y

Nov 17 – Left message with Y's voice mail – explained who I was where I got her name, what I was interested in doing etc.

Nov 25 – Talked to Y she said I would need to talk to Branch Manager but she wasn't in so she would get her to call me back.

Nov 25 – Branch Manager called me back, I explained who I was what I was doing etc. Asked if I could arrange a time to meet with her and explain my topic more fully, she asked for a briefing over the phone as she wasn't busy at this exact moment. I explained further what my topic was, what my objectives were etc. She said she didn't think they would be of any help to me as they did everything manually. I tried to pry further, without giving away my source, because I knew they didn't do everything manually, and she said that at one time they did a lot by computer but had since reverted and chosen to do a lot of it (monitoring) by hand, or manually. I tried to pry/probe further, knowing full well from my experience with Lisa, that they would indeed be excellent candidates for my research but she said she wished not to participate and they would not qualify, I asked if I could just meet with her and show her some of my questions and my introductions etc., but she refused.

Bank 3

Nov 17 – Talked to Branch Manager introduced myself, my research etc.
Made an appointment to meet and go farther in depth for Nov 22 @ 10am

Nov 22 – Met with manager, he liked my research and the ideas behind it. Said he had no reason why I couldn't perform some interviews within his organization, he had a look at the questions etc. He said the best person to talk to would be X the Teller Supervisor since I would be conducting interviews with her and her staff. She was not in that day so he took my research objectives down, my goals, a brief introduction and a copy of some of my questions that I would be asking. He said he would give this info to X and she would contact me with a definite answer.

Nov 25 – X called me after supper and felt that the questions did not apply to anyone she worked with or to herself because they do not really do any electronic monitoring. They have a log of what their employees do e.g. transactions etc, but it is not something they look at all the time, only periodically I guess for problems etc. *At this point I did not know then what I know now and hence I did not pressure her any further nor did I ask if I could infiltrate their sales section because I'm sure it would have occurred in that area. However since this was the first contact I had made I didn't know exactly what I was asking for and I didn't want to push because, to be honest, I thought I would have no problem getting other banks to participate, so one lost in the beginning didn't seem that big a deal.*

Bank 4

Nov 17 – Left Message on voice mail with Branch Manager introducing myself and my research and asked her to contact me

Nov 17 – manager called back and said she would like to help with my research give her a call 1st of December

Dec 2 – Left Message on voice mail

Dec 7 - Left Message on voice mail

Dec 13 – Met manager at branch @ 3pm. Meeting went well, she said she was interested in helping me out in any way she could; I went over my plans regarding my goals, outlined my research objectives and my timeline. She said seeing as U of G was a pillar in the community and they considered themselves to be also she didn't understand why they would not be able to participate, in fact, she was pretty sure based on the fact that I was a university student, they would be glad to participate. She needed first to contact her supervisors and explain to them the nature of my research and then she would get back to me. I left with her an outline of my objectives, an introduction to my research and some goals. She said she would contact me within a week or so.

Jan 4 – Talked with manager she said she still had no answer as they were trying to do year end, there was a robbery the week before and they were dealing with all that, she hoped to have more information soon.

Jan 10 - Told me she was sorry still no answer from supervisors and to call on the 14th

Jan 17 – Called and was told she was on holidays for the week, would be back on the 24th

Jan 24 – Manager said no they would not participate in my research because it was being

done by an external as opposed to internal as well it would really gain them no information that they were after. She said if it was for the gov't or something to see if they were keeping up to par, for example, it would be something that they would consider. I said that they may well be interested in using the information gathered in regards to this matter and they are welcome to the results of my study etc., it would be a comparison of banks so they would have some idea of what their competition was doing etc. She still declined and said that banks get enough bad press as it is and they would be worried about security. I reassured her that everything is confidential; this would not be in the press etc., however, she said she was sorry and they would have to decline to participate. I thanked her for all her time and effort and told her I appreciated her work in trying to communicate for me my research efforts etc.

BankBB

Nov 16 - Spoke to a friend of a friend who worked at Bank BB and told her what I was interested in doing, in turn this person gave me the name of a person in the regular banking branch to discuss my research with; X.

Nov 18 – Called X and left a message on her voice mail explaining who I was where I had got her name, what my intent was etc.

Nov 19 – X called me back and left a message for me to call her, she was interested in my research and would like to see if they could be of any help to me

Nov 22 – Left another message on voice mail

Nov 25 – Left another message on voice mail

Dec 2 – Finally got to talk with X and we set up an appointment for Dec. 9

Dec 9 – met with X @ 2pm; meeting went well. I went through everything with her; discussed why I was doing research, what exactly the research entailed, objectives, goals etc. She was very nice and offered to help, I explained to her everything I wished to do, how many participants I needed etc, she was good with everything. We set a date to start interviews on the 17th.

Dec 17 – Conducted 4 interviews in total, 3 interviews in the sales dept, 1 employer (X) and 2 employees. Then I conducted an interview with the manager of customer relations/tellers. All interviews went well. X and I talked afterwards and she said I could come back and do more if I wished in the New Year. The next couple of weeks for her were crazy. I told her how much I appreciated it and said I would contact her in the New Year.

Jan 4 – Left message on voice mail to see when we could set up more interviews

Jan 11 – X called back and left message saying to phone her back and let me know what days next week would be good for me and she would arrange everything.

Jan 12 – I phoned back and left message on her voice mail telling her which days would be the best: Monday Wed and or Fri

Jan 18 – called her back and asked what day is best for her, she said Friday the 21st around 9 and she would set up at least three more interviews for me with employees

Jan 21 – did 3 more interviews 2 with tellers and 1 more with sales. They went well. At this point I did not ask X to do any more with me because I did not see what would be the point I was not getting anywhere with any other banks and the data

was so small at this point there would not be much of a comparison, besides they have gone way out of their way to help me out. I did a total of 7 interviews there. The people were all great, the atmosphere was relaxed and things went well there. I thanked Xy very much when leaving she gave me another name to call in Mississauga, she was there the week before in their calling center and she said they do some heavy duty monitoring; she wasn't sure if I would have access, however, I could try it if I thought it would be useful. They were great; she was interested in my topic as were many of the others I interviewed there and she wished me luck and success with my research as I was leaving.

Bank AA

Nov 17 – Left Message on X's voice mail – she is a contact that I obtained through a friend who previously worked at this branch. I explained who I was, what my research was, etc. Asked her to call me.

Nov 18 – X called me back and we set up an appointment for Nov 25th to do an interview with her as part of my pretest for the employer survey.

Nov 25 – Went to bank for interview (10am) and X had to run home because one of her sons was sick. I would have to call her and reschedule.

Nov 29 - called X and rescheduled interview for Dec 2 @ 10:30 am

Dec 2 - Met and did interview that went well. I asked her if she would mind if I also met some others within the branch and did interviews with them as well. She said that would be okay, but no one was available that day. I asked her to let me do a least one more manager and 3-5 employees. She said sure. She would set something up and get back to me.

Dec 6 – Called X and set up an interview with one of her employees for Dec 8 @ 10:30am and possibly with one other manager that day.

Dec 8 – Interview with one employee and no one else. Went well. Tried to locate X after interview to set up another appointment but she wasn't around.

Dec 14 – Left message regarding more interviews on voice mail

Dec 20 – Left message regarding more interviews on voice mail

Jan 4- Spoke to X and she gave another manager my name and told that person to call me regarding an interview time

Jan 10 – Called and left message as to when I could get in touch with this other person to do an interview

Jan 17 – Called and asked for this specific manager and got X and she set up an interview for the 19th @ 10am

Jan 19 – Met to do interview with front line Supervisor; it didn't go very well in the fact that the employees and her are not really subjected to any kind of electronic monitoring. I couldn't see me going on and asking her a whole bunch of q's that didn't apply to her. She said everything (transactions) is recorded however they never look at the log unless there is some sort of problem, an error, wrong posting etc. I found Xand asked her if I could meet with anybody else as this person was not of too much help, she sent me to one of her employees who wasn't particularly busy at that particular moment. I did an interview with her it went well. After that interview I tried to find X to thank her and possibly set up another 1 or 2 interviews, but she was nowhere to be found.

** Pre-test with Y as well (Nov 13)

Insurance Companies

** Prior to calling any insurance companies I spent a great deal of time on the phone with insurance brokers around the Guelph area who are in fact responsible for passing the names of the much larger insurance companies onto me. I was in touch with the following:

Insurance A
Insurance B
Insurance C
Insurance D
Insurance E (3 locations)
Insurance F
Insurance G
Insurance H
Insurance I
Insurance J

Insurance 1

Nov 17 – Spoke to human resources manager, didn't seem too interested however asked me to go ahead and instead of driving down there to meet with somebody just send an information package first explaining my research etc.

Nov 23 – Sent info package

Dec 8 – Left message in X's voice mail asking if he got my package and what he thought if I would be able to come to introduce myself and my research in person, or did he have any questions, etc.

Dec 20 – Left Message in X's voice mail

Jan 17 - Spoke to X who said yes he received my package and although my research sounds interesting his organization would not be willing to participate in my research because of previous experiences they have had with external studies done by students that were negative

Insurance 2

Nov 18 – Spoke to X in Human Resources who transferred my call to Y with whom I left a message for him in his voice mail indicating who I was why I was calling etc.

Nov 29 - Spoke to Z and then XX in Information services whom in turn transferred me to YY in charge of phones, who ended up telling me they don't use the kind of monitoring I was indicating to her when describing my research objectives and goals.

Insurance 3

Nov 18 – Spoke to X in Human Resources introduced myself, my research and asked her if they used this type of monitoring and or surveillance in which she promptly answered no and got off the phone

Insurance 4

Nov 17 – Spoke to X in Human Resources I introduced myself to her my research. my goals my objectives etc., after we talked for awhile she concluded that they did not have the type of supervisory technology or electric monitoring that I was inquiring about.

Insurance 5

Nov 17 – Spoke to Human Resources Manager, introduced myself, my research, my objectives etc., asked about the type of technology they have, type of monitoring done if any and I was told that they did not do the type of monitoring that I was looking to investigate.

Insurance 6

Nov 17 – Left message for X whose name I received from one of the brokers that I had called earlier in the day. They informed me that in fact, which I found out for myself, that none of the brokers had this type of technology, but the large insurance firms themselves might. He in turn , gave me X's name and number and told me to try there.

Nov 17 - Left Message for X

Nov 25 - Spoke to X and he relayed to me after I done my whole introduction spiel that they do not employ this type of employee monitoring.

Insurance 7

Nov 17 – Spoke to X in claims and she said yes they use this type of monitoring and she thought it would be best for me to call Y in the claims department to find out more information. I was transferred there and got his voice mail. I left a message explaining who I was, what my intent was why I was calling etc.

Nov 22 – Left another message in Y's voice mail

Dec 2 – Talked to Y who was very short on the phone, said he was busy he received my earlier messages and no they don't do this type of monitoring. When I mentioned I was under the impression that some form of this monitoring was being done as I was told earlier it was he said that information was wrong and they don't do it and hence would not be a good candidate for my research.

Insurance 8

Nov 22 – Called and got voice message saying press extension etc and it also noted that some calls may be recorded. I asked for Human Resources manager when I got to the operator. I was transferred to X, I got her voice mail, I left a message saying who I was, why I was calling etc.

Dec 2 – Received voice mail that said she was on holidays until the 8th

Dec 8 – Talked to X and she said yes they do do some of this type of monitoring and she had received my earlier messages however they like to keep this type of information internal and hence was not willing to participate in my research.

Insurance 9

Nov 22 – Spoke to a person in the local office who said yes they monitor calls in the sales office and they may monitor other things as well. I should call the head office in Montreal.

Nov 25 – Called head office and asked for Human Resources Manager. Was transferred to X's voice mail in the Montreal Claims office, where I left a message indicating who I was, why I was calling, the objectives of my research, what I was interested in discussing and observing etc.

Dec 2 – Spoke to X who said she received my message and her company was not interested in participating in my research

Insurance 10

Nov 18 – Spoke to X in Human Resources she thought I should speak to security so I talked to Y there a couple of times that day. He suggested that I send an info package to Z (Operations Director) explaining my research. He was very short with me and didn't understand that I was not interested in outside surveillance or security he was worried about breaching any security codes etc.

Nov 18 – Phone Z instead of sending her a package and left a message with her explaining who I was what I was after etc.

Nov 19 - XX called me, the message I left for Z was transferred to her. She left a message here and then I called her back and ended up leaving a message there.

Nov 29 - called XX back and she asked me to drop off a package explaining the nature of my research and my goals and objectives etc. I did that within the next couple of days.

Dec 7 – Left a message asking her what she thought of my package and if she had any further questions, etc.

Dec 9 – I received an email form her asking me to send along further information, such as the q's I would be asking so they would have an idea as to who would be qualified to answer them. I did that within the next week.

Jan 4 - Left message in voice mail concerning research and whether or not they would like to participate or meet with me now that they had a broader understanding of what I was looking for.

Jan 13 - Left message in voice mail

Jan 17 – Left message in voice mail

Jan 17 – She called me back and said that she had passed it on to the human resources manager and she would have an answer for me on Wednesday the 19th. She said they usually only participate in external studies if it would be to their benefit. I reassured her I would not be wasting their time and that indeed they would receive a copy of my findings etc., and I am sure it would be of their benefit to see how this type of monitoring is being used, why and how employees perceive it etc.

Jan 21 – Called and left me a message saying that unfortunately the other members of

her organization thought this would not be a good thing to participate in. They feel that they are going through a sensitive time in their organization right now and that this research could indeed be sensitive in some ways and may upset some employees; overall they thought it was just not a good time for them to participate. She said she would keep the info I sent them and I could pick it up so I could save money on photocopying etc.

Jan 24 - I called XX back and left her a message saying thank you so much for communicating with me over the last couple of months, and trying so hard to help me gain access to her organization. I indeed would appreciate it if I could pick up the material I left for her.

Insurance 11

Nov 17 – Spoke to a person at a brokerage here in Guelph, Steele and Ferraro; he gave me the name of this insurance company because he was quite sure they used this type of technology.

Nov 17 – Called this company and got a recording saying indeed calls are monitored periodically or randomly whatever. I asked to speak with the human resources manager. I was transferred to X's voice mail. I left a message stating who I was what I was interested in doing, asked if this technology sounded familiar, was I talking to the right person, I heard the message saying they monitor calls and I would be very interested in discussing that as well.

Nov 29 – Left another message on voice mail

Dec 6 – Left another message on voice mail

Dec 20 - Left another message on voice mail

Jan 4 – Left another message asked please could this person contact me back just to verify that indeed I was speaking to the right person, etc.

Jan 10 – Left another message on voice mail. Still Waiting

Insurance 12

Nov 17 - Talked to X in the Cambridge broker office he gave me the head office phone number and told me to talk to someone in human resources. I phone Y in human resources, and left a message on her voice mail explaining who I was, what I was interested in speaking to her about etc. Left my number for her to call me.

Nov 25 – Spoke to Y and she said she would give my name and number to Z in Telephone communications as she thought he would be better to talk to.

Nov 29 - Called and left message for Z in his voice mail explaining who I was, what I was after etc

Dec 6 – Left message on voice mail

Dec 15 – Left message on voice mail

Jan 4- Phoned and left message in voice mail asked him to please call me back just to let me know he was getting my messages and did or did not have this type of technology in the organization or if I was leaving messages for the right person

Jan 17 – Left message in voice mail

Jan 24 – Left message in voice mail. Still Waiting

Insurance 13

Nov 17 – Left Message on voice mail for X in Human Resources introduced myself, my research, etc.

Nov 24 – Called and Left another message with X. Then I called back and asked to speak to someone else, they transferred me to Y in special investigations. Y in turn told me to try Z. Tried to reach him but ended up getting his voice mail so I left a message giving him all the pertinent facts, who I was, why I was calling etc.

Nov 30 – Left another message on voice mail for Z

Dec 2 – Talked to Z and he told me that the monitoring I was asking about may indeed occur within his organization but he was not sure of it and to try their webpage to get a corporate contact.

Dec 2 – Talked to Y in HR again, and she said yes they monitor calls in the cal center. She gave me a name and number to try - XX

Dec 7 – Talked to XX in the call center, explained to her about my research etc. she said she would be happy to meet with me and describe how they use electronic monitoring etc. I offered to send her down an information package, so she could get an idea of what to expect. We set up an appointment for Dec 21 @ 2pm.

Dec 21 – XX called and cancelled said she would call me back to reschedule.

Jan 4 – I called XX back and talked to her about re-scheduling, she said she was in the middle of a meeting could she call me right back. I said yes and I am still waiting.

Jan 17 – Left another message for XX to get back to me in her voice mail.

Jan 17 – Thought I would try another route, since the call center wasn't what I was after anyway. I called back to head office and asked to speak to an Information Systems Representative (a name to try when looking for people in a department that might be what I want - I got this from a different interview). I was given to YY in Information Systems. Who in turn transferred me to ZZ in Information Security. Who in turn transferred me to XXX in Management Information. Who in turn transferred me to YYY in Production Analysis Strategic Business Solutions. At that point I couldn't reach YYY so I left a message on his voice mail indicating who I was and why I was calling him etc.

Jan 18 – YYY called me back and left me a message.

Jan 24 – I called YYY back and we talked for a while, and he said I might have better luck with ZZZ who is the leader in Administration in the Ontario Region for Royal and Sunalliance. He said where he (YYY)was located the kind of monitoring and surveillance I was referring to did not apply.

Jan 24 – Left message for ZZZ indicating who I was, where I got his name, about my research etc. Still waiting

Insurance 14

Nov 17 – Spoke to X, I think in human resources, he transferred me to Y in another department who in turn transferred me to Z in another department. At each one of these contacts I introduced myself and my research etc. When I

finally got to Z she said yes this type of monitoring occurs, she would talk to some others there and see how far she could get, see if it would be possible to speak to someone in charge, and she would call me back.

Nov 24 - Left message in Z's voice mail

Dec 2 – Left message in Z's voice mail

Dec 15 – Left message in Z's voice mail, this time I was a little more persistent, seeing as how she told me at the very beginning that they used this type of monitoring.

Jan 4 – Left another message in voice mail. Still Waiting

Insurance AA

Nov 22 – Called head office, spoke to someone there in human resources that transferred me directly to X who is the manager of their call center. We spoke for quite some time I explained everything to her and she agreed for me to come to London and interview her. I told her I would send an information package so that she could get acquainted with my research and me before I got there. We set an interview date for Dec 16 @ 2pm

Dec 16 – Drove to London, met X did an interview with her which went okay, not a great one, she was very standoffish, very concerned about how she was answering because in the info package I sent I mentioned social control as a variable I was looking at and she was continually focused on that, and nothing else. We discussed it before we began and I told her that was not the sole reason I was doing research, but I also was not going to lie to her because that would be unethical, and it was a variable that I was trying to establish. After the interview was over we talked for a while and she asked some more q's regarding my research and she noted that it was likely not her that I wanted to be talking to. I said no in fact I wanted to be in the heart of the organization, of course they monitor at a call center, that did not interest me but she was the first one to grant me an interview and hence I took what I could get at that time, beside the info might be just a useful in the long run. She in turn gave me a name of someone else to try who might be of further help – Y.

Dec 20 - Left Message for Y in her voice mail, explained where I got her name, what I was interested in talking to her about etc. She would be on holidays until the 10th.

Jan 10 – Left message in voice mail again.

Jan 17 – Spoke to Y and she relayed to me that she didn't think she would be of any help as they do use electronic monitoring however it is on a case basis only and definitely not on a regular basis. She gave me another name to try - Z

Jan 17 - I spoke for quite some time on the phone to Z, she was really helpful, was interested in my research, and indicated that they do use electronic monitoring especially in the claims department and on telephone and cash registers in the cafeteria even. They also use surveillance only on the doors but can target a certain area internally if the need would arise. In addition, they use electronic monitoring in their production areas. I agreed to send her an information package and she said she would read it over and get back to me on whether or not I would be permitted into her organization to conduct interviews.

Jan 20 – Mailed info package. Still Waiting

Insurance 15

Nov 22 - Left message in voice mail of human resources manager X. I explained everything, who I was, why I was calling the nature of my research etc.

Nov 24 – X called me back and we talked, she said yes they monitor in the call center she agreed to discuss my project and the prospect of me entering their organization with her supervisors and call me back within a couple of days.

Dec 2 – Left message for her in her voice mail

Dec 15 – Left message in her voice mail

Jan 4 – Left another message in her voice mail, asked her to please call me back to indicate what was going on, should I be speaking to someone else or what?

Jan 17 – Left message in her voice mail

Jan 24 – Left message in her voice mail. Still Waiting

Insurance 16

Nov 17 – Left a message for X in Human Resources in her voice mail, explaining who I was, why I was calling etc.

Nov 22 – Left another message in voice mail

Nov 22 – X had passed the message on to Y in the call center and she called me. We spoke for a bit, I described the nature of my research etc. She said yes indeed they do monitor calls and she would have to talk to her manager's to get their permission for me to come and do interviews and then she would call me back.

Dec 2 – Talked to Y and she said she sent her supervisor an email and she hasn't heard anything back yet she will follow up on that and be back in touch with me.

Dec 14 – Left message in Y's voice mail

Jan 4 – Left message in voice mail

Jan 10 - Talked to Y and she said she still has no response form her supervisor so she gave me his name and said I should try calling him myself. He is the vice president of the call center.

Jan 10 – Called back and tried another route, talked to Z in Info Systems dept and in turn she only ended up telling me to talk to someone in the call center, which of course I was already in the process of doing. So that was not very helpful.

Jan 12 - Called this gentleman XX and left message on his voice mail saying who I was that possibly Y had been in contact with him as I have been communicating with her for the last little while, etc. explained everything to him.

Jan 17 – Called and left another message for XX on his voice mail. Still Waiting

Grand Total of Interviews Conducted:

4 Managers

9 Employees

13 in all – 12 @ banks 1@ insurance

APPENDIX B

Mailing Information Package

November 29, 1999

Dear X,

I spoke to someone in your company approximately two weeks ago about possibly doing some research within your organization. I was asked to send along an information package with the assurance that it would get to the right person eventually and they would make the decision as to whether you would allow me entry into your organization.

I would like to take this opportunity to introduce myself and my research to you; I will begin by introducing myself and my research objectives. My name is Carla Cowtan, and I am a graduate student from the University of Guelph. I am currently enrolled there in the Masters program in the Department of Sociology and Anthropology. As a requirement for my Masters degree I am conducting a study on electronic monitoring and surveillance in the workplace. I am interested in asking you a number of questions about monitoring within your place of employment, how it works, and what you think about it. I hope this research will help develop a better understanding of electronic monitoring and surveillance and its effects within the workplace for the future. My goal is to analyze the impact surveillance and monitoring technologies have on supervisor techniques and on the workplace in general.

My ultimate goal in the end would be to visit your organization and conduct interviews from a survey that I have constructed. I would like to be able to speak to one or more persons in a supervisory position, and three to five employees who have experience with this type of supervisory technology. I realize that you are very busy and your time and your employees' time are very valuable and I would gladly stay after regular business hours to conduct interviews with those who would like to participate. I would like to observe as many sections of your organization as possible, which use the type of electronic monitoring and surveillance techniques that I outline below; but, perhaps your calling centre may the best place to start as I noticed that when I placed a

call to your organization, I was given a recorded voice message that indicated incoming calls may be monitored.

The documents that follow will give you an outline and some more insight about my topic. Included is an introduction to my survey, two consent forms, one which I would have you the employer sign and as well a consent form that I would have the participant sign. In addition I have given a definition of what electronic monitoring and surveillance mean in terms of this research project. The questions that I would be asking are very straightforward and general.

In terms of time, the interviews would take only a minimum of thirty minutes to a maximum of an hour to conduct. I am currently aiming for the completion of all my interviews for the end of December or I may extend it to mid-January to account for time conflicts with participants. The objective of my thesis is to analyze workplaces and explain why and how they use electronic monitoring and surveillance.

I look forward to hearing from you or someone else in your organization that could hopefully assist me in terms of my requests for conducting research. I could make the time to come to your organization to further discuss my goals and your potential involvement or we could discuss things further over the phone or through e-mail. I can be reached at (519) 827-1401 and through e-mail at ccowtan@uoguelph.ca. If there are any questions or comments please do not hesitate to contact me. The name of my faculty advisor is also included on the consent forms if you or anybody else would like to get in touch with him.

I appreciate your time and effort in reading this letter and hopefully getting it to the right person who can make a decision as to whether or not your organization will be a part of my research.

Sincerely,

Carla Cowtan

Survey/Interview Introduction

We have progressed, as a society, from the industrial revolution to the information revolution. In organizations/workplaces around the industrialized world, we have progressed from labor-intensive jobs with heavy lifting to machines and tools that do it for us. We have switched from pencil and paper to keyboard and monitor. Along with the changes in the areas of production, there have been changes within management as well. Over the years, management styles have ranged from authoritarianism, to scientific management to Fordism. The purpose of this research is to explain and attempt to understand why management has changed its supervisory techniques. Many have gone from walking around the shop floor and supervising while interacting with workers to sitting in their offices and looking at video or computer screens to observe the workings on the shop floor. This has impacted worker and management in several ways.

Nearly everyone, it would seem, has some emotional associations to workplace supervision-perhaps because nearly everyone has experienced it, in one form or another. Moreover, most people seem convinced that computing and other technologies are changing the character of workplace monitoring, in ways that they clearly discern.

Traditionally, employers assume some degree of control over employees related to productivity, safety and security, and the confidentiality of proprietary information. However, the monitoring and surveillance techniques available as a result of advances in technology make methods of control more pervasive than ever and raise serious questions of human rights.

Since controlling the work performance and movements of employees is not new, the question is why electronic monitoring raises problems that differ from more conventional forms of monitoring. Much of the concern involves the radical changes in the nature of the monitoring, which can involve secrecy, continuous monitoring of every act and movement, and a variety of consequences on working conditions and health of workers.

This survey/interview is being conducted by Carla Cowtan a Masters student at the university of Guelph as a qualification for graduation, to analyze the impact surveillance and monitoring technologies have on supervisor techniques and on the workplace in general.

The objective of my research is to observe the practice of social control via electronic monitoring and or surveillance in the workplace. This research will allow me to answer some fundamental questions about social control and technology in the workplace.

Additional questions are asked about your career and socio-demographic background. The purpose of these questions is to allow me to determine the representativeness of the sample, as well as to allow for generalizations to be made about supervision in the workplace at the end of the 20th century.

APPENDIX C

EXTRA CONSENT FORM FOR MANAGERS

I am a graduate student from the University of Guelph. As a requirement for my masters degree I am conducting a study on electronic monitoring in the workplace. I am interested in asking your employees a number of questions about monitoring within your organization, how it works, and what they think about it. I hope this research will help develop a better understanding of electronic monitoring and its effects within the workplace for the future.

By reading this form and signing it you are giving your consent for three things. The first is that I am able to interview a number of your employees. Secondly, your organization and or yourself will not use the results of the study to make personnel decisions. And Lastly, the topic I am discussing (the practice of social control via electronic monitoring and or surveillance in the workplace), with you and your employees can be a sensitive one, and I am asking you that every effort be made to insure that employees are not sanctioned in any way for their participation in the study.

Your participation in this project is completely voluntary and there will be no consequences whatsoever if you decide not to participate, or have your employees not participate. If you wish, you may withdraw at any time, or ask me to withdraw at anytime from your organization and I will not ask you why. At any time, you may decide to stop the interview process.

What I discuss with you and your employees is completely confidential. That means that no one other than myself will be able to identify or link your name, or any employee's name to the things that are divulged to me. I will never use your name, your organization's name, or any employee's names or any other identifying information when I discuss the findings of this study. Consequently, I also cannot discuss with you any information given to me by any employees.

If you have questions or want information from me during or after the interview, I will do my best to answer your questions or give you the name of someone who can help. If you have questions after the interview you can contact me at:
Carla Cowtan, University of Guelph, 827-1401 or ccowtan@uoguelph.ca, or my faculty advisor Dr. Victor Ujimoto, University of Guelph, 824-4120 ext. 3912 or vujimoto@uoguelph.ca.

Again, I would like to stress that your participation is completely voluntary, and what you say will be protected with the strictest confidentiality. Thank you very much for your assistance in this project.

Volunteer _____

Interviewer _____

Date _____

APPENDIX D

Survey/Interview Introduction

We have progressed, as a society, from the industrial revolution to the information revolution. In organizations/workplaces around the industrialized world, we have progressed from labor-intensive jobs with heavy lifting to machines and tools that do it for us. We have switched from pencil and paper to keyboard and monitor. Along with the changes in the areas of production, there have been changes within management as well. Over the years, management styles have ranged from authoritarianism, to scientific management to Fordism. The purpose of this research is to explain and attempt to understand why management has changed its supervisory techniques. Many have gone from walking around the shop floor and supervising while interacting with workers to sitting in their offices and looking at video or computer screens to observe the workings on the shop floor. This has impacted worker and management in several ways.

Nearly everyone, it would seem, has some emotional associations to workplace supervision-perhaps because nearly everyone has experienced it, in one form or another. Moreover, most people seem convinced that computing and other technologies are changing the character of workplace monitoring, in ways that they clearly discern.

Traditionally, employers assume some degree of control over employees related to productivity, safety and security, and the confidentiality of proprietary information. However, the monitoring and surveillance techniques available as a result of advances in technology make methods of control more pervasive than ever and raise serious questions of human rights.

Since controlling the work performance and movements of employees is not new, the question is why electronic monitoring raises problems that differ from more conventional forms of monitoring. Much of the concern involves the radical changes in the nature of the monitoring, which can involve secrecy, continuous monitoring of every act and movement, and a variety of consequences on working conditions and health of workers.

This survey/interview is being conducted by Carla Cowtan a Masters student at the university of Guelph as a qualification for graduation, to analyze the impact surveillance and monitoring technologies have on supervisor techniques and on the workplace in general.

The objective of my research is to observe the practice of social control via electronic monitoring and or surveillance in the workplace. This research will allow me to answer some fundamental questions about social control and technology in the workplace.

Additional questions are asked about your career and socio-demographic background. The purpose of these questions is to allow me to determine the representativeness of the sample, as well as to allow for generalizations to be made about supervision in the workplace at the end of the 20th century.

CONSENT FORM

I am a graduate student from the University of Guelph. As a requirement for my masters degree I am conducting a study on electronic monitoring and surveillance in the workplace. I am interested in asking you a number of questions about monitoring within your place of employment, how it works, and what you think about it. I hope this research will help develop a better understanding of electronic monitoring and surveillance and its effects within the workplace for the future.

Your participation in this project is completely voluntary and there will be no consequences whatsoever if you decide not to participate. The interview will last about one hour. If you wish, you may withdraw at any time and I will not ask you why. At any time, you may decide to stop the interview. Whenever you are uncomfortable with a question, you can tell me you do not wish to answer.

What we talk about is completely confidential. That means that no one other than myself will be able to identify or link your name to the things you tell me. I will never use your name, your organization's name, or any other identifying information when I discuss the findings of this study.

If you have questions or want information from me during or after the interview, I will do my best to answer your questions or give you the name of someone who can help. If you have questions after the interview you can contact me at:

Carla Cowtan, University of Guelph, 827-1401 or ccowtan@uoguelph.ca, or my faculty advisor Dr. Victor Ujimoto, University of Guelph, 824-4120 ext. 3912 or vujimoto@uoguelph.ca.

Again, I would like to stress that your participation is completely voluntary, and what you say will be protected with the strictest confidentiality. Thank you very much for your assistance in this project.

Volunteer _____

Interviewer _____

Date _____

For the purpose of this survey electronic monitoring will refer to all monitoring done by computers. E.G. keystroke counting, error rates, transaction counts, claims registered, number of customers served, sales rates, cross-selling rates, referral rates, logging on and off times, computer utilization time, productivity and or efficiency counts/rates, phone usage, number of calls handled, length of calls, etc. It will also include the fact that managers can log onto your computer while you are working or not working and see what you are working on and or have access to all your files.

For the purpose of this survey surveillance will mean the use of video and or audio technologies directed at employees, with or without their knowledge. It will also include actions taken on the part of supervisors to monitor phone calls incoming and outgoing, recording conversations or listening in on conversations, such as for customer service evaluation.

APPENDIX E

Manager Questionnaire
Interview Facesheet

- ID # _____
- Interview # _____
- Date of Interview _____
- Place of Interview _____
- Setting _____
- Description of participant _____
- Sex _____
- Age _____
- Education _____
- Ethnicity _____
- Occupation or other position _____
- Emotional tone _____
- Other Notes _____

Main Research Questions & Survey Questions for Managers

ID # _____

- **Background Information**

1. Industry of Organization _____

2. Type of firm (single firm, headquarters, or division) _____

3. Number of employees _____

4. Age of establishment _____

5. Length of time person has been at firm _____

6. Position _____

7. Part time or full time _____

8. Do you have a union?
   Yes
   No

9. Are you a member?
   Yes
   No

10. Does your firm use electronic monitoring?
    Yes
    No
    Don't Know

11. Length of time firm has used electronic monitoring? _____

12. Does your firm use surveillance?
    Yes
    No
    Don't Know

- If yes, where are the cameras directed? (please check all that apply)
  - At entrances
  - At customers
  - At employees
  - Other (please specify) _____
    _____

13. Length of time firm has used surveillance? _____

*14. Covert or non-covert?*_____

15. Regarding the electronic monitoring that occurs in your workplace, would you describe this as a drastic departure from conventional work routines?
Yes
No

16. Regarding the surveillance supervision that occurs in your workplace, would you describe this as a drastic departure from conventional work routines?
Yes
No

17. Perhaps this type of electronic monitoring simply expresses itself more as a progressive extension of more familiar business practices. Would you agree or disagree? **A D**

18. *Perhaps this type of surveillance simply expresses itself more as a progressive extension of more familiar business practices. Would you agree or disagree?* ***A D***

❑ **Workplace surveillance**

19. Are you opposed to electronic monitoring?
Absolutely in all forms Neutral depending on form Not at all

20. *Are you opposed to surveillance?*
Absolutely in all forms *Neutral depending on form* *Not at all*

21. Does your company/firm have computer facilities
Yes
No
If yes, What types of computer facilities does your company/firm have? (Please indicate as many categories as apply)
- ❑ Microcomputer (stand-alone)
- ❑ Microcomputer Network
- ❑ Microcomputers (tied to mainframe)
- ❑ Terminals tied to mainframe
- ❑ Mainframe (access limited to specialists)
- ❑ Other (please specify) _____

22. The applications software for your company/firm's computer(s) was (please indicate as many categories that apply):
    - ❑ Fully custom-designed
    - ❑ Packaged software with major modifications
    - ❑ Packaged software with few or no modifications
    - ❑ Other (please specify) _____

23. How many jobs involve consistent use of computers? _____

24. How many jobs do not involve consistent use of computers? _____

25. Are any of the terminals occupied by more than one person in a day?
    Yes
    No
    Don't know

26. Do all the terminals in the firms require employees to log on and off?
    Yes
    No
    Don't know

27. Does this give management an idea, then, of how long an employee was logged on?
    Yes
    No
    Don't know

28. Can you also track what the employee's activities on the computer while logged on?
    Yes
    No
    Don't know

29. Can you only do this while the employee is logged on?
    Yes
    No
    Don't know

30. Are you familiar with Remote Audio Visual systems as a tool for supervision?
    Yes
    No

31. Is it used in your organization?
Yes
No
Don't Know

- *If yes, why is it used?* _____
- *If yes, do the people being monitored know they are being monitored when the supervisor is away from the organization?* _____
- *If yes, is it done on a regular basis?* _____
- *If yes, is there something in particular that is being monitored that can't be monitored while on the premises?*

_____
_____

32. Was this electronic monitoring system already in place to monitor immediate and technical problems and then management saw that they could use it for other purposes?
Yes
No

- If yes, how did this come about and what kind of process did the organizations go through to get where it is today? _____
_____

33. Was this surveillance system already in place to monitor immediate and technical problems and then management saw that they could use it for other purposes?
Yes
No

- *If yes, how did this come about and what kind of process did the organizations go through to get where it is today?* _____
_____

34. Has the need for surveillance changed since its inception within your organization?
Yes
No
Don't Know

35. For instance, did it begin as a way to stop theft and then turn into a way to monitor employees who were performing personal activities on company time?
Yes
No

- *If yes, please be specific in what it has changed from, indicate the stages that your organization has been through in regards to this matter* _____
_____
_____
_____

36. Has the organization perhaps gone from a rudimentary form of surveillance or monitoring and has progressed with the advancements made in this type of technology?
    Yes
    No
    Don't Know
- If yes, how has it progressed? *Into a more pervasive from of surveillance? For instance, 1 camera that turned into 5 cameras, or more and more frequent monitoring* (please be specific)

    _____

    _____

37. Was there any documentation written up to go along with the new uses of the existing technology?
    Yes
    No

❑ **Invasiveness of new supervisory technology**

38. Was your building designed in order to better supervise people?
    Yes
    No
    Don't Know

39. Was your building changed in any way for better surveillance of people?
    Yes
    No
    Don't Know

40. Is the practice of monitoring documented anywhere? (in some form of philosophy, purpose statement, organizational objectives, anything?)
    Yes
    No

41. Is the practice of surveillance documented anywhere? (in some form of philosophy, purpose statement, organizational objectives, anything?)
    Yes
    No

42. Are your employee's aware of the possibilities that they may or may not be monitored or under surveillance?
    Yes
    No
- If Yes, do you think that this affects the way they conduct themselves while at work?(briefly explain) _____

    _____
- If no, why don't they know?_____

43. Are the surveillance techniques there for: (indicate all that apply)

- ❑ *theft*
- ❑ *fraud*
- ❑ *employee safety*
- ❑ *controlled entry*
- ❑ *to detect employees who are not being productive*
- ❑ *to detect employees doing drugs or using other illegal substances*
- ❑ *to detect employees engaging in inappropriate behaviour*
- ❑ *to guard against sexual harassment*
- ❑ *other (please indicate)* _____

44. Do you think that your employees have the right to know that there is the potential for them to be monitored or that they may be under surveillance while at work? ·
Yes
No

45. Do you think that electronic monitoring alters basic job dimensions? (e.g. how an employee performs his/her job)
Yes
No

- If so how? _____
- If not why? _____

46. Do you think that surveillance alters basic job dimensions? (e.g. how an employee performs his/her job)
Yes
No

- *If so how?* _____
- *If not why?* _____

47. Do you think that an employee may feel a loss of personal control in regards to his or her job as a result of electronic monitoring?
Yes
No
Why? _____

48. Do you think that an employee may feel a loss of personal control in regards to his or her job as a result of surveillance?
Yes
No
Why? _____

49. Is your monitoring done on an: (indicate all that apply)
   - ❑ Individual basis
   - ❑ Unit or departmental basis
   - ❑ Branch basis
   - ❑ A combination of the above

50. How often are employees monitored? (indicate all that apply)
   - ❑ By the Minute
   - ❑ Hourly
   - ❑ Daily
   - ❑ Weekly
   - ❑ Monthly
   - ❑ Yearly
   - ❑ Other _____

51. Is your surveillance done on an: (indicate all that apply)
   - ❑ *Individual basis*
   - ❑ *Unit or departmental basis*
   - ❑ *Branch basis*
   - ❑ *A combination of the above*

52. How often are employees under surveillance? (indicate all that apply)
   - ❑ *By the Minute*
   - ❑ *Hourly*
   - ❑ *Daily*
   - ❑ *Weekly*
   - ❑ *Monthly*
   - ❑ *Yearly*
   - ❑ *Other* _____

❑ **Social control through technological supervision**

53. Why did you choose electronic monitoring as a method of management/supervision?

_____

_____

_____

54. Is this the only method of management/supervision you use?

Yes

No

55. What else do you integrate this type of management/supervision with?

_____

_____

56. *Why did you choose surveillance as a method of management/supervision?*

_____

_____

_____

57. *Is this the only method of management/supervision you use?*
Yes
No

58. *What else do you integrate this type of management/supervision with?*

_____

_____

59. Do you feel more objective with regard to your employees and their environment because of electronic monitoring?
Yes
No
- If yes, do you like this? _____

60. Do you feel more distanced from your employees and their environment because of electronic monitoring?
Yes
No
- If yes, do you like this? _____

61. Do you feel more objective with regard to your employees and their environment because of surveillance?
Yes
No
- *If yes, do you like this?* _____

62. Do you feel more distanced from your employees and their environment because of surveillance?
Yes
No
- *If yes, do you like this?* _____

63. Do you think that by electronically monitoring employee's performance makes them strive to perform more efficiently?
Yes
No
Don't Know

64. Do you think that by using surveillance to monitor employee's performance, it makes them strive to perform more efficiently?
Yes
No
Don't Know

65. Do you think there are ways that employees try to avoid being electronically monitored?
Yes
No
If yes, what might some of the ways be? _____
_____

66. Do you think there are ways that employees try to avoid being under the watchful eye of the camera?
Yes
No
If yes, what might some of the ways be? _____
_____

67. For what purpose do you use the data collected by the electronic monitoring systems? (indicate all that apply)
- ❑ Performance evaluation
- ❑ Training
- ❑ Security measures
- ❑ To gage productivity levels
- ❑ To gage service levels
- ❑ To physically locate workers in the organization
- ❑ For Promotions
- ❑ Reward & Recognition Programs
- ❑ Other, please specify:_____

68. For what purpose do you use the data collected by the surveillance systems? (indicate all that apply)
- ❑ *Performance evaluation*
- ❑ *Training*
- ❑ *Security measures*
- ❑ *To gage productivity levels*
- ❑ *To gage service levels*
- ❑ *To physically locate workers in the organization*
- ❑ *Other, please specify:*_____

69. Do you think that any of your employee's feel betrayed and or not trusted because of the monitoring?
    Yes
    No

70. *Do you think that any of your employees feel betrayed and or not trusted because of the surveillance?*
    Yes
    No

- **Social control**

71. Do you think that computerization enables management to attend to matters previously ignored?
    Yes
    No
    Don't know

72. For instance, management can now look at a particular stage or area of the firm for more detail. This gives the possibility to change policies often and to understand the 'big picture'. Is this giving management more control?
    Yes
    No
    Don't Know

73. *How much information about employee performance is sufficient to meet the goals of your surveillance supervision?*

    _____
    _____

74. *When does it become more than legitimate surveillance for this company?*

    _____
    _____

75. Do you believe that it is management's right to introduce whatever practices they think necessary into their workplace?
    Agree Somewhat agree Somewhat disagree Disagree

76. The next set of questions is simply to obtain an understanding about your opinions of supervision and workplace monitoring. Please circle the category that best reflects what you think.

	Agree	Somewhat Agree	Somewhat Disagree	Disagree
➢ Do you think that legislation to restrict electronic monitoring practices would appear to be 'anti-business'?	1	2	3	4
➢ *Do you think that legislation to restrict surveillance practices would appear to be 'anti-business'?*	*1*	*2*	*3*	*4*
➢ Electronic monitoring should be illegal in the workplace	1	2	3	4
➢ *Electronic surveillance (using audio and video equipment to examine employee behaviors and personal characteristics) should be illegal in the workplace*	*1*	*2*	*3*	*4*
➢ It's okay to electronically monitor individuals in the workplace	1	2	3	4
➢ *It's okay to use surveillance cameras on individuals in the workplace*	*1*	*2*	*3*	*4*
➢ It's okay to electronically monitor groups within the workplace	1	2	3	4
➢ *It's okay to use surveillance cameras on groups within the workplace*	*1*	*2*	*3*	*4*

77. Do you believe that electronic monitoring has the potential to be abused?
Yes
No
Don't know

78. *Do you believe that surveillance has the potential to be abused?*
    Yes
    No
    Don't know

79. Do you look for 'positive' as well as 'negative' aspects of employee performance from electronic monitoring?
    Yes
    No
    Don't know

80. *Do you look for 'positive' as well as 'negative' aspects of employee performance from surveillance?*
    Yes
    No
    Don't know

81. Which type of supervision do you prefer? (Please circle the appropriate number on a scale ranging from 1 being prefer most to 7 prefer least)

- Human supervision

Prefer Most					Prefer Least	
1	2	3	4	5	6	7

- Electronic Monitoring

Prefer Most					Prefer Least	
1	2	3	4	5	6	7

- *Surveillance*

Prefer Most					*Prefer Least*	
1	*2*	*3*	*4*	*5*	*6*	*7*

- Combination of Human Supervision & Electronic Monitoring

Prefer Most					Prefer Least	
1	2	3	4	5	6	7

- *Combination of Human Supervision & Surveillance*

Prefer Most					*Prefer Least*	
1	*2*	*3*	*4*	*5*	*6*	*7*

Company trust

82. *In terms of surveillance, do you have rules about what can be watched and what can not be watched?*
    Yes
    No

83. Do you think that electronic monitoring is the only way an employee should be evaluated?
Yes
No
Don't know

84. Do you think that surveillance is the only way an employee should be evaluated?
Yes
No
Don't know

85. Do you believe that an employee's evaluation should be a balance of the kind of quantitative data that can be collected by electronic monitoring systems combined with the qualitative data that is gathered by a human supervisor?
Yes & why _____
No & Why _____
Don't Know

❑ **Why we use surveillance technology and social control**

86. Are you using the technique of electronic monitoring to prevent deviant behaviour?
Yes
No

87. *Are you using the technique of surveillance to prevent deviant behaviour?*
Yes
No

88. Are you using the technique of electronic monitoring as a result of some past deviance within your company?
Yes
No
Don't Know

89. *Are you using the technique of surveillance as a result of some past deviance within your company?*
Yes
No
Don't Know

90. What were the reasons within your company that made it necessary for electronic monitoring?
(e.g. could have been increase in size, previous deviance etc)_____
_____

91. *What were the reasons within your company that made it necessary for surveillance? (e.g. could have been increase in size, previous deviance etc)*_____

_____

92. Do you think that electronic monitoring improves decision-making?
    Yes
    No
    Don't Know
- If yes, in what respect? _____

93. Do you think that surveillance improves decision-making?
    Yes
    No
    Don't Know
- *If yes, in what respect?* _____

94. Do you think that electronic monitoring provides better performance feedback to employees?
    Yes
    No
    Don't Know
- If yes, how does it do this? _____

95. *Do you think that surveillance provides better performance feedback to employees?*
    Yes
    No
    Don't Know
- *If yes, how does it do this?* _____

96. Do you think that electronic monitoring data gives a complete picture of an employee's job performance?
    Yes
    No
- If so, why? _____
- If not, why? _____

97. *Do you think that surveillance data gives a complete picture of an employees job performance?*
    Yes
    No
- *If so, why?* _____
- *If not, why?* _____

98. Do you see that a monitoring technique such as yours (surveillance, electronic monitoring etc) is better at providing negative feedback in a non-threatening manner to your employees?
Yes
No
Don't Know

99. This next set of questions helps me to gauge your feelings about supervision in regards to electronic monitoring. Please circle the category that best reflects your opinion.

	Definitely	Somewhat	Not Really	Not At all
➢ Do you think that this type of supervision improves consistency?	1	2	3	4
➢ Do you think that this type of supervision improves clarity?	1	2	3	4
➢ Do you think that this type of supervision improves the objectivity of performance measurement?	1	2	3	4

100. This next set of questions helps me to gauge your feelings about supervision in regards to surveillance. Please circle the category that best reflects your opinion.

	Definitely	*Somewhat*	*Not Really*	*Not At all*
➢ *Do you think that this type of supervision improves consistency?*	*1*	*2*	*3*	*4*
➢ *Do you think that this type of supervision improves clarity?*	*1*	*2*	*3*	*4*
➢ *Do you think that this type of supervision improves the objectivity of performance measurement?*	*1*	*2*	*3*	*4*

101. Do you think that monitoring is a fair way to evaluate employee's job performance?
Yes
No
Don't Know

102. What limits, if any, should be placed on the perfection of monitoring systems?

_____

_____

103. At the present time, there are few laws dealing with the computer systems which Monitor, observe, or measure performance. For each of the following statements Please circle how much you agree or disagree with it. (A scale that ranges from 1 being strongly disagree to 7 being strongly agree)

	Strongly Disagree						Strongly Agree
➢ All electronic monitoring systems should be illegal	1	2	3	4	5	6	7
➢ *All electronic surveillance of workers (cameras, tape recorders, etc.) should be illegal*	*1*	*2*	*3*	*4*	*5*	*6*	*7*
➢ It is acceptable to measure or monitor individual workers with computers	1	2	3	4	5	6	7
➢ The design and use of computer monitors should be part of contract negotiations	1	2	3	4	5	6	7
➢ Management has the right to use computer monitors as they see fit	1	2	3	4	5	6	7
➢ *Management has the right to use electronic surveillance as they see fit*	*1*	*2*	*3*	*4*	*5*	*6*	*7*
➢ Workers should be able to refuse to be electronically monitored	1	2	3	4	5	6	7
➢ *Workers should be able to refuse to be electronically surveillanced*	*1*	*2*	*3*	*4*	*5*	*6*	*7*
➢ Workers should be able to see and correct information gathered about them	1	2	3	4	5	6	7
➢ Employers should be forced to tell workers exactly what systems are being used and what the information is used for	1	2	3	4	5	6	7

104. Who do you think should be responsible for enforcing any rules, laws or restrictions dealing with work monitoring systems? (please indicate all groups that you think should be responsible)

- ❑ Federal Government
- ❑ Provincial Government
- ❑ Labour Unions
- ❑ Management
- ❑ Employees
- ❑ Others (please specify) _____

❑ **Monitoring machines and productivity**

105. Some organizations use computers to observe, measure, or direct work. Other organizations rely on a human supervisors or workers to carry out these tasks. For each item below, please circle the answer which best describes how each task is handled in your organization.

	Usually Done by Computer	Usually Done by Supervisor	Rarely or never Done
➢ Counting keystrokes	1	2	3
➢ Counting completed Transactions	1	2	3
➢ Recording how long Terminal is idle	1	2	3
➢ Counting how long it Takes to complete a Transaction	1	2	3
➢ Directing work to a Work station	1	2	3

106. "Direct supervision" occurs when a supervisor actually watches or listens to employees while they do their job. How much direct supervision takes place? (Please circle the appropriate number on a scale ranging from 1 being none to 7 being almost constant)

None Almost Constant

1 2 3 4 5 6 7

107."Indirect Supervision" occurs when a supervisor looks at the results of employees work (such as production counts, completed documents, or customer files) to judge how well a person is doing their job. How much indirect supervision takes place? (Please circle the appropriate number on a scale ranging from 1 being none to 7 being almost constant)

None Almost Constant

1 2 3 4 5 6 7

108.How effective do you think this indirect supervision is on judging how an Employee's job is done? (Please circle the appropriate number on a scale ranging from 1 being extremely ineffective to 7 being extremely effective)

Extremely Ineffective Extremely Effective

1 2 3 4 5 6 7

109.Do you think that the electronic monitoring system is more objective than a human supervisor is in that it may be more accurate in measuring production?

Strongly Agree Agree Disagree Strongly Disagree

110.Do you think that the electronic monitoring system is objective but not 'fair' in that it may or may not accurately measure the interaction aspects of a job?

Strongly Agree Agree Disagree Strongly Disagree

111.What exactly does your electronic monitoring system gather? (Indicate all that apply)

- ❑ Statistics on keystrokes
- ❑ Error rates
- ❑ Transaction counts
- ❑ Logging on & off
- ❑ Time spent away from workstation
- ❑ Files & documents on computer
- ❑ Phone log (location of incoming & outgoing calls, length)
- ❑ Speed
- ❑ Efficiency
- ❑ Products Sold
- ❑ Length of Customer Interaction
- ❑ Percent of Cross-Selling
- ❑ Other, please indicate _____

112.How is that measured? _____

113.What exactly does the surveillance system record? (indicate all that apply)

- ❑ *All activity in a given area*
- ❑ *Activity only during specified times (please specify)* _____
- ❑ *Only when activated by movement or some activity within the area or at the terminal*
- ❑ *Phone conversation*
- ❑ *Time spent away from workstation*
- ❑ *Overall location of employees (e.g. surveillance cameras dispersed throughout work area)*
- ❑ *Bathroom Breaks*
- ❑ *Lunchroom Activities*
- ❑ *A combination of the above circumstances*
- ❑ *Other (please specify)* _____

114. Do you rely on the data only to assess employees' productivity and efficiency?

Yes
No

115. Do you use merit pay in connection with your monitoring techniques?

Yes
No

116.Do you use merit pay in connection with your surveillance techniques?

Yes
No

❑ **Crossing Privacy Border**

117.Please tell me if you agree, disagree or don't know with reference to the following statements:

- ➢ Computers are reducing the level of privacy in Canada today **A D DK**
- ➢ I don't think the average Canadian worker suffers any serious negative consequences because of so called invasions of privacy **A D DK**
- ➢ There is no real privacy because business can learn anything they want about you **A D DK**
- ➢ I feel that I have less personal privacy in my daily life than I did 10 years ago **A D DK**
- ➢ I have no problem giving information about myself to anybody who wants it **A D DK**
- ➢ I feel confident that I have enough information to know how new technologies might affect my personal privacy **A D DK**
- ➢ I don't mind companies using information about me as long as I know about it and can stop it **A D DK**
- ➢ I'd rather work at home than have to go out in the hustle and bustle of the workplace **A D DK**

- I think I should be notified in advance when information about me is being collected
  A D DK
- When information about me is collected, I should be told what it will be used for
  A D DK

118.Which of the following statements comes closer to your own point of view? (please check one)

- I think it's okay for employers to do background checks into the personal lives of prospective employees in order to assess their reliability and character

OR

- I don't think employers should be entitled to pry into the private lives of prospective employees

119.The next set of questions helps me determine your general opinion about privacy.

- Privacy means different things to different people. I am going to read you a classification of different aspects of privacy. Please tell me how important each aspect is to you by selecting the category that best reflects your opinion.

	Very Important	Somewhat Important	Somewhat Unimportant	Not Important
Not being electronically monitored at work	1	2	3	4
Not being electronically surveillance at work	*1*	*2*	*3*	*4*
Being in control of who can obtain information about you	1	2	3	4
Not having someone watch or listen to you without your permission	1	2	3	4
Controlling what information is collected about you	1	2	3	4

❑ **Demographic Information**

120.What is your age? (please check one)

- ❑ Less than 25
- ❑ 25-34
- ❑ 35-44
- ❑ 45-54
- ❑ 55-64
- ❑ Over 64

121.What is your Sex? (please circle one)

Male
Female

122.What was the last grade you completed in school? (please check one)

- ❑ 8th grade or lower
- ❑ 9th or 10th grade: high school graduate? ___ yes ____ no
- ❑ 1 to 2 years of college
- ❑ 3 to 4 years of college: college graduate? ____ yes ____ no
- ❑ 5 or more years of college
- ❑ 1 to 2 years of university
- ❑ 3 to 4 years of university: university graduate? ____ yes ____ no
- ❑ 5 or more years of university

123. Annual Income

- ❑ Less than $5,000
- ❑ $5,000-9,999
- ❑ $10,000-14,999
- ❑ $15,000-19,999
- ❑ $20,000-24,999
- ❑ $25,000-29,999
- ❑ $30,000-34,999
- ❑ $35,000-39,999
- ❑ $40,000-44,999
- ❑ $45,000-49,999
- ❑ $50,000-54,999
- ❑ $55,000-59,999
- ❑ $60,000+

124.What is your marital status? (please check one)

- ❑ Married
- ❑ common-law
- ❑ Single
- ❑ Divorced
- ❑ Widowed

Thank you again for taking part in this study

Please feel free to add any comments you would like about the survey or the topics discussed in it in the space provided here.

APPENDIX F

Employee Questionnaire
Interview Facesheet

- ID # _____
- Interview # _____
- Date of Interview _____
- Place of Interview _____
- Setting _____
- Description of participant _____
- Sex _____
- Age _____
- Education _____
- Ethnicity _____
- Occupation or other position _____
- Emotional tone _____
- Other Notes _____

Main Research Questions & Survey Questions for Employees

ID # _____

❑ **Background Information**

1. Industry of Organization _____

2. Type of firm (single firm, headquarters, or division) _____

3. Length of time person has been at firm _____

4. Position _____

5. Part time or full time _____

6. Do you have a union?
   Yes
   No

7. Are you a member of the union?
   Yes
   No

8. Does your firm use electronic monitoring?
   Yes
   No
   Don't Know

9. Does your firm use surveillance?
   Yes
   No
   Don't Know

- If yes, where are the cameras directed? (please check all that apply)
  - ❑ At entrances
  - ❑ At customers
  - ❑ At employees
  - ❑ Other (please specify) _____
    _____

10. Regarding the electronic monitoring that occurs in your workplace, would you describe this as a drastic departure from conventional work routines?
    Yes
    No

11. Regarding the surveillance supervision that occurs in your workplace, would you describe this as a drastic departure from conventional work routines?
Yes
No

12. Perhaps this type of electronic monitoring simply expresses itself more as a progressive extension of more familiar business practices. Would you agree or disagree? **A D**

13. *Perhaps this type of surveillance simply expresses itself more as a progressive extension of more familiar business practices. Would you agree or disagree?* ***A D***

❑ **Workplace surveillance**

14. Are you opposed to electronic monitoring?
Absolutely in all forms Neutral depending on form Not at all

15. Are you opposed to surveillance?
Absolutely in all forms *Neutral depending on form* *Not at all*

16. Does your company/firm have computer facilities
Yes
No
If yes, What types of computer facilities does your company/firm have? (Please indicate as many categories as apply)
❑ Microcomputer (stand-alone)
❑ Microcomputer Network
❑ Microcomputers (tied to mainframe)
❑ Terminals tied to mainframe
❑ Mainframe (access limited to specialists)
❑ Other (please specify) _____

17. Are any of the terminals occupied by more than one person in a day?
Yes
No
Don't know

18. Do all the terminals in the firms require employees to log on and off?
Yes
No
Don't know

19. Do you feel that new monitoring technologies represent an increase in the extent or closeness of management supervision of work?
    Yes
    No
    Don't know
- If yes, how? _____
- If no, how? _____

❑ **Invasiveness of new supervisory technology**

20. Is practice of monitoring documented anywhere? (in some form of philosophy, purpose statement, organizational objectives, anything?)
    Yes
    No

21. Is the practice of surveillance documented anywhere? (in some form of philosophy, purpose statement, organizational objectives, anything?)
    Yes
    No

22. Is there a guideline set up between labour and management surrounding the issue of electronic monitoring?
    Yes
    No
    Don't Know

23. Is there a guideline set up between labour and management surrounding the issue of surveillance?
    Yes
    No
    Don't Know

24. What level of employee involvement occurred when implementing the electronic monitoring system?

Complete Involvement	**Minimal Involvement**	**Management Selective Involvement**	**No Involvement**

25. What level of employee involvement occurred when implementing the surveillance system?

Complete Involvement	***Minimal Involvement***	***Management Selective Involvement***	***No Involvement***

26. Do you think the level of involvement was satisfactory?
    Yes
    No
- Why? _____

27. Did the level of employee involvement benefit the process any?
    Yes
    No
- In what way? _____

28. Did the level of employee involvement hinder the process any?
    Yes
    No
- In what way? _____

29. If the organization were to implement this kind of supervisory technology all over again, would you suggest they do it any differently?
    Yes
    No
- If yes, in what way? _____

30. Do you think that you have the right to know that there is the potential for you to be monitored or that you may be under surveillance while at work?
    Yes
    No

31. Do you think that electronic monitoring alters basic job dimensions? (e.g. how an employee performs his/her job)
    Yes
    No
- If so how? _____
- If not why? _____

32. Do you think that surveillance alters basic job dimensions? (e.g. how an employee performs his/her job)
    Yes
    No
- *If so how?* _____
- *If not why?* _____

33. Do you feel a loss of personal control in regards to your job as a result of electronic monitoring?
    Yes
    No
    Why? _____

34. Do you feel a loss of personal control in regards to your job as a result of surveillance?
    Yes
    No
    Why? _____

35. Do you know if the monitoring is done on an: (indicate all that apply)
- ❑ Individual basis
- ❑ Unit or departmental basis
- ❑ Branch basis
- ❑ A combination of the above

❑ **Social control through technological supervision**

36. Do you feel more distanced. from your employer as a result of electronic surveillance/monitoring?
    Yes
    No
- If yes, do you like this? _____

37. Do you think there are ways that employees try to avoid being monitored or under the watchful eye of the camera?
    Yes
    No
    If yes, what might some of the ways be? _____
    _____

38. For what purpose do you think employers use the data collected by the monitoring systems? (indicate all that apply)
- ❑ Performance evaluation
- ❑ Training
- ❑ Security measures
- ❑ To gage productivity levels
- ❑ To gage service levels
- ❑ To physically locate workers in the organization
- ❑ Other, please specify:_____

39. Do you feel betrayed and or not trusted because of the monitoring?
    Yes
    No

40. Do you feel betrayed and or not trusted because of the surveillance?
    Yes
    No

41. Do you perform more efficiently knowing that a supervisor has taken a special interest in your work and is monitoring you?
    Yes
    No
    Don't Know

42. Do you find the measures taken to monitor your performance acceptable?
    Yes
    No
    Don't Know

43. Do you feel more threatened by a computer collecting data on your performance than when a human supervisor collects data on your performance?
    Yes
    No
    Don't Know

- **Social control**

44. Do you think that computerization, and hence electronic surveillance/monitoring enables management to attend to matters previously ignored?
    Yes
    No
    Don't know

45. For instance, management can now look at a particular stage or area of the firm in greater detail. This gives management the possibility to change policies and often understand the 'big picture'. Is this giving management more control?
    Yes
    No
    Don't Know

46. Do you believe that it is management's right to introduce whatever practices they think necessary into their workplace?
    Agree Somewhat agree Somewhat disagree Disagree

47. The next set of questions is simply to obtain an understanding about your opinions of supervision and workplace monitoring. Please circle the category that best reflects what you think.

	Agree	Somewhat Agree	Somewhat Disagree	Disagree
➢ Do you think that legislation to restrict electronic monitoring practices would appear to be 'anti-business'?	1	2	3	4
➢ *Do you think that legislation to restrict surveillance practices would appear to be 'anti-business'?*	*1*	*2*	*3*	*4*

	Agree	Somewhat Agree	Somewhat Disagree	Disagree
➢ Electronic monitoring should be illegal in the workplace	1	2	3	4
➢ *Electronic surveillance (using audio and video equipment to examine employee behaviors and personal characteristics) should be illegal in the workplace*	*1*	*2*	*3*	*4*
➢ It's okay to electronically monitor individuals in the workplace	1	2	3	4
➢ *It's okay to use surveillance cameras on individuals in the workplace*	*1*	*2*	*3*	*4*
➢ It's okay to electronically monitor groups within the workplace	1	2	3	4
➢ *It's okay to use surveillance cameras on groups within the workplace*	*1*	*2*	*3*	*4*

48. Do you believe that electronic monitoring has the potential to be abused?
    Yes
    No
    Don't know

49. Do you believe that surveillance has the potential to be abused?
    Yes
    No
    Don't know

50. Which type of supervision do you prefer? (Please circle the appropriate number on a scale ranging from 1 being prefer most to 7 prefer least)

- Human supervision

Prefer Most — Prefer Least

1 2 3 4 5 6 7

- Electronic Monitoring

Prefer Most						Prefer Least
1	2	3	4	5	6	7

- *Surveillance*

Prefer Most						*Prefer Least*
1	*2*	*3*	*4*	*5*	*6*	*7*

- Combination of Human Supervision & Electronic Monitoring

Prefer Most						Prefer Least
1	2	3	4	5	6	7

- *Combination of Human Supervision & Surveillance*

Prefer Most						*Prefer Least*
1	*2*	*3*	*4*	*5*	*6*	*7*

❑ **Company trust**

51. Do you think that electronic monitoring is the only way an employee should be evaluated?
    Yes
    No
    Don't know

52. Do you believe that an employee's evaluation should be a balance of the kind of quantitative data that can be collected by electronic monitoring systems combined with the qualitative data that is gathered by a human supervisor?
    Yes (explain why) _____
    No (explain why)_____
    Don't Know

❑ **Why we use surveillance technology and social control**

53. Do you think that electronic monitoring improves decision-making for employers?
    Yes
    No
    Don't Know
- If yes, in what respect? _____

54. Do you think that surveillance improves decision-making for employers?
Yes
No
Don't Know
- *If yes, in what respect?* _____

55. Do you think that electronic monitoring provides better performance feedback to employees?
    Yes
    No
    Don't Know
- If yes, how does it do this? _____

56. Do you think that surveillance provides better performance feedback to employees?
    Yes
    No
    Don't Know
- *If yes, how does it do this?* _____

57. Do you think that the objective data provided by a computer is more valuable than a subjective performance evaluation usually done by a human supervisor?
    Yes
    No
    Don't Know

58. Do you think that electronic monitoring data gives a complete picture of your job performance?
    Yes
    No
- If so, why? _____
- If not, why? _____
- Type of work being monitored? _____

59. Do you think that surveillance data gives a complete picture of your job performance?
    Yes
    No
- *If so, why?* _____
- *If not, why?* _____
- *Type of work under surveillance?* _____

60. Do you see that a monitoring technique such as your employers (surveillance, electronic monitoring etc) is better at providing negative feedback in a non-threatening manner to you and other employees?
    Yes
    No
    Don't Know

61. This next set of questions helps me to gauge your feelings about supervision in regards to electronic monitoring. Please circle the category that best reflects your opinion.

	Definitely	Somewhat	Not Really	Not At all
➢ Do you think that this type of supervision improves consistency?	1	2	3	4
➢ Do you think that this type of supervision improves clarity?	1	2	3	4
➢ Do you think that this type of supervision improves the objectivity of performance measurement?	1	2	3	4

62. *This next set of questions helps me to gauge your feelings about supervision in regards to surveillance. Please circle the category that best reflects your opinion.*

	Definitely	*Somewhat*	*Not Really*	*Not At all*
➢ *Do you think that this type of supervision improves consistency?*	*1*	*2*	*3*	*4*
➢ *Do you think that this type of supervision improves clarity?*	*1*	*2*	*3*	*4*
➢ *Do you think that this type of supervision improves the objectivity of performance measurement?*	*1*	*2*	*3*	*4*

63. Do you think that monitoring is a fair way to evaluate your job performance?
Yes
No
Don't Know

64. What limits, if any, should be placed on the perfection of monitoring systems?

_____

_____

65. Do you think that monitoring done by a computer or a surveillance system is as capable as a human supervisor to evaluate all the aspects of your job?
Yes
No
Don't Know

66. At the present time, there are few laws dealing with the computer systems which monitor, observe, or measure performance. For each of the following statements please circle how much you agree or disagree with it. (A scale that ranges from 1 being strongly disagree to 7 being strongly agree)

	Strongly Disagree						Strongly Agree
i. All electronic monitoring systems should be illegal	1	2	3	4	5	6	7
ii. *All electronic surveillance of workers (cameras, tape recorders, etc.) should be illegal*	*1*	*2*	*3*	*4*	*5*	*6*	*7*
iii. It is acceptable to measure or monitor individual workers with computers	1	2	3	4	5	6	7
iv. The design and use of computer monitors should be part of contract negotiations	1	2	3	4	5	6	7
v. Management has the right to use computer monitors as they see fit	1	2	3	4	5	6	7
vi. *Management has the right to use electronic surveillance as they see fit*	*1*	*2*	*3*	*4*	*5*	*6*	*7*
vii. Workers should be able to refuse to be electronically monitored	1	2	3	4	5	6	7
viii. *Workers should be able to refuse to be electronically surveillanced*	*1*	*2*	*3*	*4*	*5*	*6*	*7*
ix. Workers should be able to see and correct information gathered about them	1	2	3	4	5	6	7
x. Employers should be forced to tell workers exactly what systems are being used & what the information is used for	1	2	3	4	5	6	7

67. Who do you think should be responsible for enforcing any rules, laws or restrictions dealing with work monitoring systems? (please indicate all groups that you think should be responsible)

- ❑ Federal Government
- ❑ Provincial Government
- ❑ Labour Unions
- ❑ Management
- ❑ Employees
- ❑ Others (please specify) _____

68. Have you ever been monitored or under surveillance at a previous job?

Yes
No
May have been/ Had my suspicions

- If yes or may have been, can you indicate the type of job? (indicate all that apply)

- ❑ Factory/manufacturer
- ❑ Professional
- ❑ Administrative
- ❑ Customer Service
- ❑ Other (please specify) _____

- If yes, or may have been, how did this make you feel? (indicate all that apply)

- ❑ Angry
- ❑ Not trusted
- ❑ Betrayed
- ❑ Happy
- ❑ Efficient
- ❑ Like you always had to look over your shoulder
- ❑ Like you always had to perform your best
- ❑ Stressed
- ❑ Helpful – in that you were improving your own job skills & at the same time improving productivity/customer service/ the overall company profile
- ❑ Other (please specify) _____

❑ **Monitoring machines and productivity**

69. "Direct supervision" occurs when your supervisor actually watches or listens to you while you do your job. How much direct supervision do you receive? (Please circle the appropriate number on a scale ranging from 1 being none to 7 being almost constant)

None Almost Constant

1 2 3 4 5 6 7

70. "Indirect Supervision" occurs when your supervisor looks at the results of your work (such as production counts, completed documents, or customer files) to judge how well you do your job. How much indirect supervision do you receive? (Please circle the appropriate number on a scale ranging from 1 being none to 7 being almost constant)

None Almost Constant

1 2 3 4 5 6 7

71. How effective do you think this indirect supervision is in judging how you do your job? (Please circle the appropriate number on a scale ranging from 1 being extremely ineffective to 7 being extremely effective)

Extremely Ineffective Extremely Effective

1 2 3 4 5 6 7

72. Do you think that the electronic monitoring system is more objective than a human supervisor is in that it may be more accurate in measuring production?

Strongly Agree Agree Disagree Strongly Disagree

73. Do you think that the electronic monitoring system is objective but not 'fair' in that it may or may not accurately measure the interaction aspects of a job?

Strongly Agree Agree Disagree Strongly Disagree

74. Do you think that the tasks and performances, which are monitored by the electronic monitoring systems, are the most important to the company?

Yes
No
Don't Know

❑ **Crossing Privacy Border**

75. Please tell me if you agree, disagree or don't know with reference to the following statements:

- Computers are reducing the level of privacy in Canada today **A D DK**
- I don't think the average Canadian worker suffers any serious negative consequences because of so called invasions of privacy **A D DK**
- There is no real privacy because business can learn anything they want about you **A D DK**
- I feel that I have less personal privacy in my daily life than I did 10 years ago **A D DK**
- I have no problem giving information about myself to anybody who wants it **A D DK**
- I feel confident that I have enough information to know how new technologies might affect my personal privacy **A D DK**
- I don't mind companies using information about me as long as I know about it and can stop it **A D DK**
- I'd rather work at home than have to go out in the hustle and bustle of the workplace **A D DK**

- I think I should be notified in advance when information about me is being collected **A D DK**
- When information about me is collected I should be told what it will be used for **A D DK**

76. Which of the following statements comes closer to your own point of view? (please check one)

❑ I think it's okay for employers to do background checks into the personal lives of prospective employees in order to assess their reliability and character

OR

❑ I don't think employers should be entitled to pry into the private lives of prospective employees

77. Please tell me if you agree or disagree with the following statements

- I am confident that my personal privacy will not be threatened if business and industry are responsible for regulating themselves **A D**
- The government should pass legislation to ensure that my personal privacy is protected **A D**
- Privacy rules should apply to both government and business **A D**
- It's up to individuals to protect their own personal privacy **A D**
- Government should be working with business to come up with guidelines on privacy protection for the private sector **A D**

78. The next set of questions helps me determine your general opinion about privacy.

- Privacy means different things to different people. I am going to read you a classification of different aspects of privacy. Please tell me how important each aspect is to you by selecting the category that best reflects your opinion.

	Very Important	Somewhat Important	Somewhat Unimportant	Not Important
i. Not being electronically monitored at work	1	2	3	4
ii. *Not being electronically surveillance at work*	*1*	*2*	*3*	*4*
iii. Being in control of who can obtain information about you	1	2	3	4
iv. Not having someone watch or listen to you without your permission	1	2	3	4

	Very Important	Somewhat Important	Somewhat Unimportant	Not Important
v. Controlling what information is collected about you	1	2	3	4

79. Have you ever requested to see personal information about yourself that is kept by government, business or institutions such as schools or hospitals?
Yes
No

80. Have you ever requested to see personal information about yourself that is kept by work?
Yes
No

- If yes have you ever attempted to correct any information kept about you?
Yes
No

❑ **Demographic Information**

81. What is your age? (please check one)

❑ Less than 25
❑ 25-34
❑ 35-44
❑ 45-54
❑ 55-64
❑ Over 64

82. What is your Sex? (please circle one)

Male
Female

83. What was the last grade you completed in school? (please check one)

❑ 8th grade or lower
❑ 9th or 10th grade: high school graduate? ___ yes ____ no
❑ 1 to 2 years of college
❑ 3 to 4 years of college: college graduate? ____ yes ____ no
❑ 5 or more years of college
❑ 1 to 2 years of university
❑ 3 to 4 years of university: university graduate? ____ yes ____ no
❑ 5 or more years of university

84. Annual Income

❑ Less than $5,000
❑ $5,000-9,999
❑ $10,000-14,999
❑ $15,000-19,999
❑ $20,000-24,999
❑ $25,000-29,999
❑ $30,000-34,999
❑ $35,000-39,999
❑ $40,000-44,999
❑ $45,000-49,999
❑ $50,000-54,999
❑ $55,000-59,999
❑ $60,000+

85. What is your marital status? (please check one)

❑ Married
❑ common-law
❑ Single
❑ Divorced
❑ Widowed

Thank you again for taking part in this study

Please feel free to add any comments you would like about the survey or the topics discussed in it in the space provided here.