Working life is undergoing a transformation in the sense that new digital technologies are pervasively changing the nature of labor and its organizational forms, regardless of profession, and regardless of whether those affected are qualified professionals or laborers. The framework that previously regulated the content of work, as well as when, where and how it would be conducted, is being reconsidered. One aspect of new digital technologies concerns the manner in which the work process is being monitored and controlled.

Workplace monitoring has existed for a long time in different shapes and forms. Depending on the modes of production, workplace monitoring has assumed various forms, from counting and weighing output and payment by piece rate in pre-industrial society to clocking in and punching out in industrial society (Ball, 2010; Negrey, 2012). In other words: surveillance in the workplace is not a novelty (Lyon, 2013/1994). Seen from the logic of capitalism, it is not incongruous or unreasonable to expect that employers both have rights and reason to do so. However, in today's working life, many employees use company digital equipment privately as well as professionally (Table 12.2; cf Paulsen, 2014). Partly in response to this, there is an increasing availability of relatively inexpensive and easy to use technology, such as software monitoring programs, which enable employers to expand the range and scope of their control over their employees' activities (Fairweather, 1999).

This chapter aims to highlight workplace monitoring in the digital era, which in cludes, for example, internet and email monitoring, location tracking, biometrics, and covert surveillance. The increase in potential methods to
track and monitor employee behavior poses questions that concern where the borders for personal integrity are drawn. Who has the right to personal details, and at what point? How does this monitoring affect the social relations between employer and employee in terms of control, autonomy, and trust? We argue that issues of trust and integrity in a digital context are of such importance to our society that they must be afforded a distinct place in both public awareness and in political deliberations.

Workplace surveillance in the digital era

Throughout the historical process that has led to modern working life, different technological innovations have come to affect not only what is being produced but also how. Much as the steam engine released production from natural limitations and forever changed the world of work a couple of hundred years ago, the rapid development of digital information technologies has had a tremendous impact on working life, both in terms of the products and services being produced, but also on business processes and organizational structures (Raga-Nathan et al., 2008). Unlike the 1900s large-scale technology, digital technology has been flexible. One fundamental aspect of this new technology is that it can make employees more accessible to others and allow work to be more available to the employee. Employees can communicate with each other much more efficiently through email than the internet. Easy access to functions such as email, text, and voice messages also enable employees to continue work after leaving the workplace for the day (Porter and Kakabadse, 2006), thus challenging the traditional borders between working life and personal life. This is a development that holds much promise in terms of more interesting and challenging jobs, but there is also a potentially darker side to it.

On superficial observation, it is easy to conclude that the development in working life has moved from a situation where the employer monitored and controlled the alienated worker's every move in the dirty and noisy factory, to a knowledge economy, where the employer's need for personal growth to a knowledge economy, where the employee's need for personal growth to a knowledge economy, where the organization's need for control and efficiency, is driven by automation and surveillance. The factory floor is replaced by the office, and the kind of work is transformed from manual labor to intellectual work. This change has been facilitated by the rapid development of digital technology, which has enabled organizations to monitor and control the work process with unprecedented precision and efficiency. However, this new technology also raises important ethical and legal questions about the right of privacy, the right to freedom of association, and the right to collective bargaining.

According to a recent study conducted by the American Management Association (AMA), the number of companies that monitor their employees' phones and computer use is extensive. In 2007, as many as 43 percent of companies monitored their employees' email, and 73 percent of these companies did so with automatic equipment. Fully 45 percent of the companies monitored time spent and phone numbers called, and according to the survey, another 16 percent record phone conversations. The same frightening extent of surveillance applies to text messages. According to the same survey, it is not uncommon for companies to terminate their employees for abusing their internet access, email or smartphone policies (AMA, 2014). Neither this type of monitoring of employee communications activities nor the disciplinary measures are new. Monitoring is increasing, but the same pattern can be seen over a long period of years (Nord et al., 2006). The figures may vary between different studies, but are, beyond doubt, increasing. In line with the companies' increased interest in surveillance, the industry for employee monitoring software is growing rapidly. According to Gartner, one of the leading information technology research and advisory companies, the industry is growing, and the company expects that 60 percent of corporations have implemented formal programs for monitoring external social media for security breaches and incidents by 2015 (see Gartner, 2012; see also Tam et al., 2005).

Not only the extent, but above all, the target, form, and shape of surveillance has undergone changes. According to Stanton (2000), electronic monitoring has moved from performance measuring of easily quantifiable clerical work in the 1980s and 1990s to monitoring a much broader range of work-related activities not directly linked to performance, such as monitoring websites visited. The change can be partly explained by the fact that work has changed and become more complex and thus more difficult to monitor. Aside from that, the reasons for monitoring are often discussed in relation to the work morale standards of the workforce and the fears of looting or immoral online behavior (Paulus, 2014). According to Appelbaum et al. (2005), concerns over workforce morale and the need for surveillance in relation to this is a historical continuity. In a historical perspective, wage labor has generally received a negative interpretation, and the laborer has usually been seen as a despised character (Ottosson and Rosenkranz, 2015a). Thompson, 1983). Work individualization and increased complexity, along
with increased access to the internet, has fueled this negative approach to workforce morale (Puchner, 2014). An example concerning a contemporary debate on this topic is to what extent, and at what cost, people spend their working day browsing the internet for porn instead of diligently performing their work. For example, there is a widespread quote traveling the internet that claims: “70 per cent of traffic on porn sites takes place during work hours” (Alder et al., 2006; Corbin, 2000; Goodzinsky and Gumbus, 2005). This is a number that easily evokes the image of horrid myriad office workers that discard their regular duties and instead, hankering beneath their tables, indulge in their depraved inclinations. Even though this figure is cited in numerous scientific studies, it is rather hard to sell where it comes from. The source used for reference is SexTracker, an online service whose slogan is “Whatever your taste, SexTracker satisfies.” It is possible, although not probable, that this company delivers reliable surveys. The problem is that there is no way to follow up and replicate this study, since SexTracker does not publish its criteria for inclusion or analysis. This does not, however, hinder Goodzinsky and Gumbus (2005: 253) from using the numbers to claim it as a proof of “the rampant abuse of Internet privileges.” This kind of attack on employee morale seems to be fueled by the providers of employee monitoring software.

According to the website of one of the largest suppliers of such software, this is a matter of productivity and high costs for businesses:

Almost every company in the world has employees who abuse the Internet, some of whom spend hours per day surfing news, shopping, sports, gambling and sex sites.... This abuse by employees is costing their companies huge amounts of money in lost productivity alone. For example, a company with just ten employees who each waste an hour a day on the Internet is losing $50,000 per year in lost productivity. (Spectrum, 2015)

The methods for monitoring employee online behavior are mainly email monitoring and/or internet monitoring and filtering. There are numerous suppliers in the market claiming that they can both improve productivity and help secure legal liability. According to the manufacturers, marketing employee monitoring software enables the mapping of websites visited, social media sites, system activities, search terms, chat conversations, keystrokes, microphone conversations etc. And so forth. Many of the features closely resemble software that is sold to parents to monitor their children’s internet use, which leads one to think that the same suppliers have found a new way to frame and market their products. Nevertheless, it would appear this business is both about marketing and dealing with mistrust.

Consequences of monitoring

How does increased monitoring affect the social relations between employer and employee in terms of control, autonomy, and trust? The social impacts of surveillance technology have been approached from several disciplines, such as psychology, organization theory, and legal studies. According to Stanton and Weiss (2000), employee monitoring and surveillance can basically affect employees in two ways: either their attitudes and feelings about work are impacted (for example, motivation, levels of trust), or their behavior is (for example, productive or unproductive behavior). However, it is not easy to assess whether monitoring always affects the employee’s perception of their work negatively. The social fabric of the organization has to be taken into consideration. As monitoring and surveillance becomes embedded in organizational life and practices, it is also subjected to different meanings based on previous procedures. For example, monitoring with a clear objective in a high trust culture may be perceived as fair and within the framework of the social contract. Tabak and Smith (2005) claim that it can be seen as a more objective form of productivity assessment than traditional direct supervision by a manager. Also, if you suspect that colleagues practice social loafing, a tighter control over workplace behavior might be welcomed and appreciated. In other words, increased surveillance may, under certain circumstances, be perceived as a positive development, not only by employees, but also by those subjected to surveillance (Ball, 2010). Further, the results in a study by Stanton and Weiss (2000) indicate that employee reactions to monitoring are dependent on how the organization intends to use the collected information. Additionally, their study indicates that employee monitoring may have certain effects on employee behavior, for example, leading to a reduction in the use of company email for personal messages, and surfing the internet for other purposes than company projects.

Monitoring and surveillance is to be viewed as the opposite of management by trust and positive expectations of the employees. On the one hand, monitoring is based on mistrust, and on the other hand, trust is based in an implicit psychological contract between employer and employee (Rousseau, 1989, 1990; Ottoson and Rosen, 2015b). Monitoring employees indicates that the employer does not trust them to behave in the appropriate manner. Frey (1993) formulates this relationship in terms of a misattribution effect, and argues that monitoring crowds out morale. More intensive monitoring and regulation does not always result in destroying excess morale. In particular, the agents do not feel that they have excess morale if monitoring and regulating clearly and exclusively serves to prevent others from "shirking" (Alihan and Demsetz, 1972; 781). Gouldner (1960) formulates this phenomenon in terms of "norms of reciprocity," which describes the equilibrium of recognition and work morale. In other words, the employees perform in accordance to moral standards as long they are entrusted with
discretion and autonomy. An obvious effect of monitoring is that you only do what is monitored, and that you do not put your heart into your work, but rather "man your station" and only perform as little as possible (d'Urso, 2006). Thus the relation between trust and surveillance is a two-way street, since a lack of trust can both encourage the use of surveillance and reinforce the behavior that causes the desire to monitor. As indicated by Alder et al (2006), a lack of trust can also be the result of monitoring that is perceived as unjust or too far-reaching.

**Anticipatory conformity — and self-surveillance**

As mentioned above, surveillance in working life is not a unique novelty. We have probably all seen Charlie Chaplin's classic, yet even in our age, spot-on interpretation of surveillance in Peckham production in the 1936 film Modern Times. When the laborer (Chaplin) tries to sneak a smoking break in the bathroom, he is watched by the CEO of the factory — and the smoking break is interrupted when the TV monitor on the wall lights up: "Hey! Quit salling! — Get back to work! Go on!" What Chaplin had noted was that industrial organization, through its far-reaching division of labor, was creating beneficial conditions for the type of surveillance that Jeremy Bentham had etched out in his panopticon surveillance system. Division of labor separated a complex situation into smaller, demarcated, and more manageable objects. To monitor something, of course, entails that there is something, some object to monitor. From that perspective, it seems logical not only to monitor production, but also the bathroom. When human existence has been divided into measurable units, even visits to the bathroom became units to be monitored. The CEO's all-seeing eyes did not leave any blank fields!

Based in capitalist production logic, it is reasonable to argue that the purpose of surveillance and control is to generate value for money when purchasing labor. The laborer not only sells his or her labor, but also his or her capacity to work during a certain, prearranged time span (Braverman, 1975; Thompson, 1983). As far as motives are concerned, surveillance is therefore not of particular research interest. Michel Foucault (in Foucault and Sheridan, 1995/1977) argued that the object of interest was, instead, the disciplinary effect that surveillance has on the laborer. What makes the panopticon especially interesting is not primarily its design, or the lack of confidence that is implicitly embedded in the purchase of labor, but that the panopticon creates the experience and consciousness of being constantly visible. In modern society and in the panopticon, power becomes invisible while the individual becomes visible (Foucault and Sheridan, 1995/1977). When our awareness of being watched increases, our behavior changes — and we become disciplined. According to a Foucauldian perspective, modernity results in a shift from external and visible constraints to internal and invisible constraints, the latter

**Employee Monitoring in a Digital Context**

constraints being administered by the individuals themselves (Campbell and Carlson, 2010). In describing this process, Foucault expressed that "[...] it is this inversion of visibility in the functioning of the disciplines that was assured the exercise of power even in its lowest manifestations. We are entering the age of the infinite examination and of compulsory objectification" (Foucault and Sheridan, 1995/1997: 189).

This process, Foucault argued, arose in modernity and the organizations of industrial society. But according to many succeeding scholars, the process is reinforced by digital information technology. Power is provided with new opportunities to be both everywhere and to come from everywhere (cf. Campbell and Carlson, 2010; d'Urso, 2010; Lyon, 2013; Zuboff, 1989). At the same time, this technological change also changes the object, and the disintegrated and visible work effort becomes very much less visible when the abstract knowledge content in production increases (Alvinn et al, 2011; Dessein and Santos, 2006; Drucker, 1999). The collection of information also changes form and pattern based on technological conditions. In relation to the monitoring that took (and is still taking) place in the traditional factories of the industrial society, it is not always clear what kind of information is being gathered. This uncertainty constitutes the ultimate conditions for the perfect panoptical tool (Büyük and Keskin, 2012).

In Bentham's ideal prison, the "panoptic" inmates could be imperceptibly observed by a prison guard, a condition that was presumed to generate self-discipline. In the same vein, cover: modern surveillance technology disciplines individuals. Those subjected to surveillance adapt their behavior in order to conform to what they believe those monitoring their movements and actions will find acceptable or normal (cf. Brannigan and Beier, 1985; Goffman, 2008; Westin, 1967). The private sphere shrinks: "Electronic monitoring systems are a kind of virtual simulation of the panopticon. All video recordings, electronic monitors, GPS signals, sound recordings create a prison environment in our daily lives by not allowing a single dark spot" (Büyük and Keskin, 2012: 83).

A literature review shows that the idea of the all-seeing, omnipresent eye did not end with Foucault. Rather, Bentham's panopticon has inspired a considerable number of researchers. Social science research on surveillance normally takes its starting point in Foucault's interpretation of Jeremy Bentham's prison system (cf. Campbell and Carlson, 2010; d'Urso, 2006; Sewell et al, 2006). As d'Urso (2006) notes, the panoptic metaphor provides a good tool for understanding the effects of electronic surveillance in the workplace. In line with this view, the physical barriers that objectified and individualized workers in Bentham's system share striking similarities with the electronic information and communication systems of today. In most literature, the authors note that the employee's awareness of being surveilled constitutes a crucial aspect of the panoptical potential of the technology (cf. Botan, 1996).
Internet behavior, for example, communication, performed by employees is both task-oriented and socially oriented, a ratio that is enhanced by weakened boundaries between work and private life. For many employees, a workday means a mixture of professional and private activities. It is reasonable to assume that this new form of work and the employer's provision of digital equipment makes issues of monitoring and surveillance explicit. In our opinion, it is therefore of interest to study employees' awareness of their employers' monitoring systems and its possible "panopticon effects" in the intersection between the workplace and social media. To what extent are employees aware of the type of information their employers could gather about their internet behavior? To what extent do employers adapt what they post on social media with respect to present or potential future employers? The chapter continues with an analysis of Swedish employees' awareness of potential electronic surveillance, and to what extent this affects online activity.

Material and methods

The material was collected within two multidisciplinary research projects at Lund University: "DigiTrust - Privacy, Identity and Legitimacy in the Digital Society" and "Going home already? A study of the importance of social norms for spatial and temporal working patterns in knowledge intensive companies." The aim of these two projects is to further the understanding of (1) trust-based issues in a digital context, and (2) social norms regulating work time. In order to gain a broad perspective of how people relate to questions such as monitoring and surveillance in a digital context, traceability, what kind of information people trust online, etc., five central areas, that each in their own right represents different aspects of our daily life, were identified:

- surveillance
- banking
- healthcare
- working life
- media.

A questionnaire was sent by email to 1,193 respondents, of which 1,118 responded, a response rate of 93.7 percent. The respondents were selected randomly from the CINT CPX (Cint Panel Exchange) that consists of around 400,000 individuals, representing the entire Swedish population. The selection was stratified to represent the population in terms of a balanced distribution among men, women, and age groups. The questionnaire was comprised of 35 questions. Most of the questions were in the form of assertions the respondents could either agree or disagree with using a five-point Likert scale.

Results

According to the questionnaire, the attitudes towards surveillance in general are somewhat permissive among the respondents. A weaker interpretation would be that the results detect indifference or lack of interest. This is manifested, among other things, in that only 20 percent of the respondents agree with the assertion that cameras or video surveillance (CCTV) is a potential threat towards people's privacy and personal integrity. Men seem to be generally somewhat more negative towards surveillance than women. Of the male respondents, 24 percent considered CCTV to be a potential threat towards people's privacy. This is compared with the group of women where only 15 percent considered CCTV to be a potential threat. The same pattern can be seen with regard to the surveillance of people's work and of working life in general (Larsson and Runesson, 2014).

In this study, our focus is on the response to employers' surveillance of the internet at work, and the results indicate a general awareness of surveillance in this area as well. According to the questionnaire, half of the respondents were not aware of the type of information their employers gather on their internet behavior. And conversely, only 21 percent agree with the assertion "I am aware of the type of information my employer collects regarding my internet use" (see Table 12.1). Nor did the respondents express much concern for the type of information their employers could potentially collect. Only little more than one out of five respondents (21 percent) voiced concern for the assertion "I worry that my employer will monitor my use of internet and email." It is also of interest to note that as many as 28 percent of the respondents state that their employer uses technology that limits their internet use (see Table 12.1).

Finally, from the questionnaire one can note that the ability to screen potential employees affects the kind of information being submitted to social media. As many as 45 percent of the respondents agree with the assertion "I
adapt what I publish on social media because it could be read by my present or future employer. This result indicates "anticipatory conformity", even if an overwhelming majority simultaneously claims that the risk of surveillance does not affect their behavior on the internet. Only 22 percent agree with the statement "The risk of being monitored affects my behavior on the internet" (see Table 12.1).

Table 12.1: Attitudes towards surveillance in working life among the Swedish population

<table>
<thead>
<tr>
<th>Assertion</th>
<th>1 agree</th>
<th>Neither agree nor disagree</th>
<th>1 disagree</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>I adapt what I publish on social media because it could be read by my present or future employer</td>
<td>45%</td>
<td>25%</td>
<td>30%</td>
<td>1,029</td>
</tr>
<tr>
<td>The risk of being monitored affects my behavior on the internet</td>
<td>22%</td>
<td>27%</td>
<td>51%</td>
<td>1,027</td>
</tr>
<tr>
<td>My employer uses technology that limits internet use</td>
<td>28%</td>
<td>25%</td>
<td>47%</td>
<td>1,023</td>
</tr>
<tr>
<td>I am aware of the kind of information my employer collects regarding my internet use</td>
<td>21%</td>
<td>27%</td>
<td>52%</td>
<td>1,024</td>
</tr>
<tr>
<td>I worry that my employer will monitor my use of internet and email</td>
<td>21%</td>
<td>23%</td>
<td>56%</td>
<td>1,025</td>
</tr>
</tbody>
</table>

Therefore, to a direct question concerning whether their behavior is influenced by the risk of being monitored, the response is no. However, in response to a more specific question on their online behavior, it becomes obvious that people tend to appropriate their behavior in relation to a potential employer. Clearly, it also seems that potential "Googling" or screening by a potential future employer seems to be more important, and affects behavior to a larger degree than the fear of being actively monitored online in their current job.

As discussed earlier, digital technology has the potential to challenge the borders between private life and (or perhaps, rather than) working public life. For example, every fourth respondent (25 percent) claims that they use their employer's equipment to carry out private errands on the internet on a weekly or daily basis, thereby making ignorance of the type of information the employer collects yet more alarming, since it potentially implies information of a private nature. On the same note, it can be said that 30 percent of the respondents claim that they use the internet to perform their work from home on a weekly or daily basis (Table 12.2).

### Discussion

In relation to working life, digitalization in general, and the changing nature of work, an increasing amount of work is carried out in an online environment. One aspect of this change is probably that there is a greater effort to monitor employees' internet behavior. A second aspect is that surveillance has changed in form and content. Overall, the amount of information has grown more extensive and has changed in nature. It seems that the goal, as well as the purpose, of data collection becomes more vague with regards to the type of information that is to be gathered.

The information collected can be used both to improve productivity and to take action against immoral behavior such as loafering, harassment, and even activities of a pornographic nature. The extent of surveillance stands in relation to the image of the employee's character. Fear of low work morale means more surveillance. The unique novelty of online surveillance, in the context of a (post-)industrial society, is that it potentially invades the employee's life more thoroughly – this since private and public spheres are often confused. Private chores are carried out during working hours and work duties are performed at home. A situation emerges where the employee's home becomes a place of work and where the employer's equipment is used for private communication.

The development of a potentially omnipresent digital surveillance, it is argued here, has direct implications in terms of trust/distrust for the relation between employer and employee. In the long run, it can also affect behavior in other areas of life. Not knowing what kind of information is being gathered and at what time can give the impression of constantly being monitored. In line with Foucault's arguments concerning the panopticon and the self-discipline of the individual, one could say that the purpose of surveillance is not the object of interest, but rather its effects. Probably, the labor force is monitored in order to protect the company's brand and to increase production by delimiting the maneuverable space for any potential lack of work morale, but at the same time, the awareness of being monitored also creates an awareness of being visible.

The results indicate that the discomfort expressed by the respondents concerning the experiences of being monitored is relatively weak. Further, respondents report that they do not in any significant way adapt their
behavior online due to the risks of being monitored. In response to a more specific question concerning whether they adapt what they write in social media with an eye on current or future employers, it appears that they do so, despite the contrary claim. Not knowing when one is being observed is can be a powerful panoptical tool, which is why this inherent uncertainty can be favorable for the employer in the context of behavioral control. However, this is also a system that can potentially challenge trust between employee and employer: previous studies show that collecting data on employee behavior based on undetermined and vague mandates can lead to the erosion of trust. Gouldner (1960) formulates it in terms of "norms of reciprocity": the employees perform in accordance to work morale standards as long they are entrusted with discretion and autonomy. Or, as Frey (1993) argues in terms of misattribution effect, surveillance crowds out morale. In other words, a system designed to combat immoral behavior can, in fact, contribute to creating the very same behavior it is said to annihilate. It is not monitoring itself, or its causes or technical forms, but rather the fear and uncertainty it creates. It is our uncertainty about the digital footprints we leave that is of most interest.

References


