Core - Work, Employment and Society: Theories, Realities and Methods

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Essay Question 6

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1 Introduction

Information and communication technology (ICT) is no longer a new concept in the world of management. Therefore, one might ask if there are reasons for continue seeing ICTs as a problem in the workplace.

When answering this question, I believe it is important to look at all the different elements that are affected by the introduction of information and communication technology in the workplace. This is because the consequences of ICT is far greater than what first meets the eye, when initially assessing the concept. I will therefore try to answer this question by discussing the different aspects of ICT at work that I believe are the most important ones.

Firstly, the essay will discuss one of the most debated areas of ICTs, which is whether or not it means upskilling or deskilling of work. Some argue that ICT is the light that management have been searching for in order to remove repetitive and monotonous work, just as job rotation and job enlargement was the "answer" in the 1950s (Huczynski & Buchanan 2001, 79), whereas other observers claim that Harry Braverman's thesis is still true in this new era of information and communication technology, arguing that technology is used to deskill workers (Verma & Zerbe 1989, 119).

A discussion will then follow on the degree of surveillance of work that has been made possible by the use of ICT, and how this have emerged in more forms and disguises than may first seem evident when assessing the problem.

The essay will then discuss some viewpoints of the trade unions regarding the introduction and implementation of new technology in the workplace, and

how they see its impact on their members.

I will then go on to assess two other changes to the nature of work that has emerged as a consequence of new information and communication technology, namely call centres and teleworking. Also, I will look at the aspect of how ICT may influence women's position in the workplace.

The last sections of this essay will deal with the impact of ICT on management itself and how information and communication technology has affected the organisational structure and culture of work.

2 Upskilling of Work

Many people, especially in the world of management, forecasted that the introduction of information and communication technology would result in an upskilling of the workers and create multi skilled jobs. It was argued that new technology in the workplace would lead to job enlargement and more brain work, proving the Braverman's thesis wrong, that technology would not cause deskilling and segmentation of the work, separating the "brain from the hand". And this might be true in some cases, especially for workers that have to use advanced computer software to do their job and are given a certain level of discretion on how to conduct the work (Webster 1996, 148).

Huczynski & Buchanan (2001) are supporters of ICT, claiming that it has a positive effect on work. They argue that technology is often blamed for unemployment, as for example in Freeman (1996), but argue that this is not justified. By looking at unemployment in a broader historic perspective, they argue that there is not more unemployment now, than there was before ICT came into the workplace. Furthermore, they convincingly argue that

technology creates new jobs and gives upskilling to existing jobs. The crucial factor for the impact of introducing new technology is how work is organised in the organisation and not the information and communication technology itself (Huczynski & Buchanan 2001, 70-73).

Furthermore, supporters of the upskilling theory, argue that the fear of job loss due to new technology is only due to inexperience of new technology implementation in the workplace and an ignorance about the need for technology change in order to cope with the contemporary market (Bamber & Lansbury 1989, 30).

However, critics towards the upskilling thesis, argue that even though technology in some cases do lead to upskilling, for the most part the opposite is evident. Information and communication technology in the workplace consists basically of number punching and filling in the cells of spreadsheets, often with the input coming from the telephone. Also, work is constantly interrupted by telephone calls, resulting in a very stressing working environment (Baldry, Bain & Taylor 1998, 170).

When the personal computers started to come into the office in the 1970s and 1980s, it was forecasted that there would be a revolution and that white collar workers would increase and the number of blue collar workers would decline as a direct result of this. Technician jobs and engineers were all forecasted an "outstanding" future (Kassalow 1989, 42).

In hindsight, there has been a lot of truth to this prediction, however even the technical "elite", especially software developers and system analysts, have experienced both monotony and alienation to their work. Computer programmers are not as independent or have such a great degree of autonomy

as once was announced in the 1970s. Decisions about design and implementation are made elsewhere, and the computer programmers therefore often perform monotonous and repetitive programming tasks. Also, software engineers experience a move towards Taylorism, since computer software is demanded to be on time, on budget and with as few errors as possible. The new technology has also changed the culture of work. Software developers are now expected to work both longer and harder hours than before, and not necessarily with compensation. Many companies expect the employees to work extra hours with additional pay in times of high workload (Bernie, Ramsay & Panteli 1998, 143-154).

It is not only junior developers that experience alienation in the workplace. Even experienced, senior developers have to do repetitive and monotonous work. This has two primary reasons. Firstly, a lot of development is merely bug fixing of existing software, giving little autonomy in ways of creativity new development of software. Secondly, all developers need to write documentation, something which is considered a necessity but a real pain by all software developers since this is not what they are trained to do, but no one else can do it since the developers made the program and are therefore best suited for explaining how it works and how to use it (Bernie, Ramsay & Panteli 1998, 153).

3 Surveillance at work

Another great concern of the introduction of new technology in the workplace is the of surveillance of the workforce that is made possible by the new technology (Coombs & Hull 1996, 173).

This criticism has been around for a long time, and was commented by Harry Braverman already in 1974 before the great technology conquest reached the shores of the workplace (Huczynski & Buchanan 2001, 77).

The concern for management surveillance of the workers in the workplace is also expressed by Oliver (2002) who argues that the development in the practises in using technology as means of monitoring the employees is worrying. This surveillance includes monitoring sending of emails, telephone usage and internet browsing. She argues that employees have both the right to a certain degree of privacy at work, and that the employer will benefit from giving the employees a certain degree of privacy. Privacy gives the employee some degree of autonomy, which again will give them a dignity and well being at work, knowing that the employer trusts them enough to not peak in their electronic mailbox. Also, Oliver argues, it may be beneficial for the workers to develop their ideas before announcing them to management or the rest of the company. This way, the ideas are of better quality when they are to be assessed by the company (Oliver 2002, 322-352).

A certain degree of privacy at work also allows employees to share intimate information among each other, which again creates trust among the workers and gives an emotional release. The building of trust is very important for the building of effective teams. Strong, mutual trust is not developed over night and it is therefore important that management gives room for the emergence of this among its workers (Robbins 1998, 294).

Another problem in connection with surveillance at work is the conflicting issues it has with the Human Rights Act 1998. The Human Rights Act 1998 states the freedom to express and privacy. Oliver (2002) argues this could

indeed be applied to the issues of monitoring email and internet, although it is questionable what weight this alone would have in court. Especially since the converse is true; if the the employer makes it clear that email and internet usage are not tolerable, there is nothing the worker can do. Also, after the introduction of the Telecommunications Act Regulations 2002, the employer's rights to monitor the workers is hardly limited at all, giving the employer the right to use technology in any degree the employer finds fit to monitor the workers in the interest of securing company performance and profitability (Oliver 2002, 322-352).

Surveillance at work has changed much the last 20 years, and not only directly as a result in information and communication technology, but also how the workplace is organised. Clerical work is now often conducted in new, "intelligent", buildings. These new "intelligent" buildings represents great usage of new technology. Heating, air and ventilation are all controlled by computer software. A greater degree of bureaucracy is introduced with these buildings, since workers can no longer adjust simple working conditions, like temperature, themselves. Earlier, workers could just open a window if the room was too hot, whereas now, the workers have to direct their inquiry of adjusting the room temperature through the organisation hierarchy in order to get the matter sorted out. This both represents a re-emergence of bureaucracy in the workplace and an example of how the new buildings have become an instrument of managerial control. The building of new "intelligent" buildings are also always a top down decision, without any consultation or interaction with the workers (Baldry, Bain & Taylor 1998, 180-181).

These building have also an important new feature that the clerical work

did not have before, and that is the concept of open plan offices. These offices provides the management with a way of constant surveillance of the workers in the office (Baldry, Bain & Taylor 1998, 166) and combined with the possibilities of total overview of the work each individual worker has done in a given day thanks to ICT, one might argue that Braverman was right (Armstrong 1988, 157); the main function of management is to control the workforce (Braverman 1974, 63).

Another aspect of managerial control related to new technology, is that it keeps the workers physically apart to a greater extent than before. Before the computers came to the office, workers had to have more direct interaction with each other during the day in order to communicate and get their work done, whereas now, they can or must communicate through ICT available to them, and management can this way monitor their correspondence through their computers (Greenbaum 1998, 128-138).

4 Trade Unions

The main objectives of management for introducing new technology in the workplace is primarily to get higher production quality and greater flexibility. The ability to rapidly change the line of production in response to market fluctuations and demands is seen as vital in the contemporary world market. The flexibility towards change in market demand is also one of the explanations of the Japanese success in the 70s and 80s. The usage of ICTs for controlling the labour process is only secondary (Bamber & Lansbury 1989, 22-3).

Even so, there is great mistrust amongst workers towards management's

real objectives about introducing new technology. When assessing whether or not the introduction of new technology is good or bad, it is therefore crucial to look at the management's intentions for the innovation (Webster 1996, 153).

The primary concern of trade unions is the employment of its members, so the concern of new technology making workers redundant attracts much of the unions' attention (Bamber & Lansbury 1989, 10).

On the other hand, employees tend to accept new technology at the strategic level, that is, they accept the need for change in order to reflect the market demands. However, the workers want to take part in the decision making at the workplace level (Verma & Zerbe 1989, 131).

This is one of the reasons why the workers would like to be a part of the decision making regarding new technology in the workplace. Trade unions tend to be suspicious towards technological change in the workplace and this can easily be explained by the fact that they are not a part of the decision making process (Bamber & Lansbury 1989, 11-12).

Some places, this has changed though, and the trade union is included in the decision making process of new technology. In Australia, unions have been granted the right to be consulted when new technology is to be implemented. These talks include whether or not the new technology should be introduced at all, what sort of technology that is to be used, and how management should implement the actual technological changes in the workplace (Davis & Lansbury 1989, 100-111).

However, this element of employee involvement has its limitations. Firstly, there is no real government directive for this that forces the employers to

implement the practise of including unions in the decision making. The companies are only urged to do so by the government. Therefore, a lot of companies are hesitant to implement this, as the management normally are hesitant to grant the unions more power as they see this as a threat to their authority. Another problem, is that many unions lack the resources to make a significant influence on the employer and at some companies there may be more than one union representing the workers and the employer will use this reason for completely excluding union participation in the decision making process (Davis & Lansbury 1989, 111-115).

The trade union situation is very different in the US, where there is no nationwide union operation as we would find in Europe. Unions in the US usually operate on either company or plant level, resulting in a significantly weaker bargaining position than in nationwide trade union negotiations we can find at the other side of the Atlantic. Even worse is that US employers strongly resist trade unions when new plants are opened. New technology is used as the reason for opening new plants instead of developing existing factories. This move opens up for total exclusion of trade unions at the new workplace. Technology is therefore seen as a real threat to the existence of trade unions in the USA (Kassalow 1989, 45).

5 Teleworking

Another dimension that information and communication technology introduces is that it diminishes the importance of geography. Workers do not necessarily have to be in a certain workplace in order to do their work, thanks to ICT. This aspect of ICT may bring work to other workers that

previously could not do any work at all as they could not get to work, e.g. due to physical disabilities (Goodard & Richardson 1996, 199).

Therefore, a new term has come with the emergence of ICT; the concept of teleworking. That is, that employees work remotely from the office, but are still connected to the usual company network and other company resources (Huczynski & Buchanan 2001, 91).

Teleworking occurs in three different forms. The first form is working from home, which has a number of advantages. Perhaps the most important one is that it gives the employee more flexibility in the time of work. This is of great help for working mothers who now can sit at home with a computer connected to the company intranet and work as if she was in her office. Working from home is a part of the government's new employment legislation promoting "flexible working". From the sixth of April 2003, parents with children under the age of six, or disabled children under 18 years of age, can apply for flexible working. This includes the right to request to work from home (Department of Trade and Industry 2002). Another great advantage of teleworking related to equal opportunities, is that it gives greater potential for employment for disabled persons, that now can be full time workers and conduct their work from home where they have all the extra accessibility equipment they may need (Noon & Blyton 2002, 40).

Teleworking can also be nomadic, which means the employees usually work outside the office at the customers' place. Ad-hoc teleworking is the last form, which implies that the employee normally work at the company office, but sometimes takes the work home in order to be more flexible towards increased workload and meeting deadlines (Huczynski & Buchanan 2001, 92-

93).

Teleworking is by far a new concept, as it appeared already in the 1970s. However, it is first now that the costs and specifications of the technology is good enough for mass deployment. It is now the fastest growing trend in work scheduling and in 1989 it was predicted that half of the American workforce would do some sort of work from home by the year 2000 (Robbins 1998, 540-541).

In Britain, the number of teleworkers was, according to Labour Force Survey, 1.5 million in year 2000, which accounts for more than five percent of the British workforce. The Bargaining Report from 2001, estimated that about six percent of the European workforce were some kind of teleworkers (Noon & Blyton 2002, 40).

However, teleworking has also its drawbacks. The initial expenses of teleworking is higher for the company since it normally involves more investment in equipment for the individual worker. And also importantly, this equipment will not be shared with other employees at the company, isolating company resources to one employee. Another natural drawback of teleworking, is that since the only interaction with the rest of the office is communicated through electronic media, a lot of the social interaction and team spirit is lost. Staff may also lose the sense of the organisational structure and may lose track of overall company goals. Also, customers may be expect contact with a "real" office, and may react negatively towards a teleworkers representing his or her company (Huczynski & Buchanan 2001, 95).

From the worker's perspective, teleworking may feel very lonely, since the employee loses a lot of the social network in the company and the daily inter-

action with colleagues. Also, it may get difficult to distinguish and separate work life and home life, something both the company and the worker's family may find worrying (Noon & Blyton 2002, 40).

Another question is whether or not a teleworkers may be disadvantaged in office politics and if home workers will be less likely to be considered for promotion because of their place of work is not in the company office. A question about the worker is whether or not he or she can still get their work done at home as good and efficiently as they would have done in the office, considering all the distraction that may be in a home, such as children, kitchen and neighbours (Robbins 1998, 341).

6 Call centres

Call centres is another major industry that has come after the innovation of information and communication technology. Call centres normally fall into two categories. The first is the help desk, where customers can call the company and get help for their problems with the company's products or services. The second form of call centres, is so called "interactive processing". This means that the call centre provides a service or sell a product over the telephone. All transactions are handled over the telephone and no paperwork is therefore necessary.

The employees working at the call centres may be argued to be mutliskilled, since they have to deal with a vast number of different problems and questions raised by the calling customers. However, the level of absenteeism and staff turnover is worryingly high because of the intense stress and pace set out by the nature of call centres, which someone calls *"repetitive*

brain injury" (Huczynski & Buchanan 2001, 96-7).

7 Women

The developments in ICT is also of a concern for women in the workplace. One of the reasons for this, is the areas in which technology makes employees redundant. These areas are especially concerned where data automation is taking place, women are heavily represented, that is, traditional clerical work of low skilled workers.

This argument this also supported by Armstrong (1988) who argues that computerisation in general deskilled clerical work, and especially clerical work traditionally conducted by women, namely banking and and life insurance firms (Armstrong 1988, 145).

As with technology in general, the impact on women's work situation, is dependent on management's objectives for introducing information and communication technology.

ICT may present a threat to women in the workplace, since it it comes from a culture heavily consisting of men with a work culture that is no near or even compatible with women's lives (Webster 1996, 156). This was especially true in the 1970s and early 1980s, where software development was primarily done in dimly lit offices, with men wearing long beards and living much like "computer hippies".

Another aspect of the future of women and ICT in the workplace, is how computer science is taught in universities and in schools. Traditionally, computer science have been a male dominated science with teaching methods designed to suit a male dominated audience (Webster 1996, 155).

8 Management

Management on the other hand, has surprisingly also reported negative effects of the introduction of ICT. Managers complain that the upper management uses ICT as an excuse for requesting a substantial higher number of reports and figures from their work, arguing that this would mean hardly any more work from the individual managers since everything is now computerised. However, research has shown that managers complain that IT driven management gives increased work load and stress (Baldry, Bain & Taylor 1998, 173).

Stress as a negative outcome of introduction of new technology in the workplace is also supported by Greenbaum (1998) who emphasises the importance of understanding the changes in technology in the workplace and how this leads to increased stress and pace of work (Greenbaum 1998, 127). The pace of work is therefore controlled by management, since they decide to implement the technology which sets the pace. This is also described by Braverman in his thesis on how management wants to control the whole labour process in order to secure company performance (Braverman 1974, 195).

Another aspect of ICT in the workplace is that workers in general, and perhaps especially managers, are required to have a certain degree of computer literacy in order to cope with the latest development. This can also be seen in schools, where teachers have to acquire a certain degree of computer skills in order to cope with the requirement posed by the school (Sarfati & Cove 1989, 242).

Strangely enough, even though the company requires its workers to keep

updated and enhance their organisational and business skills, such as ICT, they do not receive any increase in pay or formal recognition or career advancement in the company (Bernie, Ramsay & Panteli 1998, 144). The working conditions which the employees work within are neither improved because of their upskilled work. The claim of the workers gaining or updating their computing skills are just implied for keeping their job without any chances of other benefits from it (Greenbaum 1998, 128).

Another concern of management towards ICT's impact on work, is that it seems to absorb lower level management. This is because new technology can by far take over the work previously done by the lower level management. Middle and upper level management can now, with the help of computers, monitor and guide the work of the employees directly, without having to use other levels of management. Also, ICT gives workers new tools for coordination and organising their work, so in many ways normal workers can operate to a greater extent without immediate supervision by lower management who then become redundant (Greenbaum 1998, 128).

This in many respects, is an upskilling of the workers one might argue, giving them both job enlargement and greater autonomy to conduct their work. However, as critics point out, there is a ceiling for how much management will allow of employee control. Management tend to restrict the amount of formal approval of workers' autonomy, although it may be expanded by the introduction of information and communication technology (Bernie, Ramsay & Panteli 1998, 152).

Another consequence of ICT in the workplace that may not be so easy to predict, is that it has made it harder to climb the hierarchical ladder. Since

this traditionally have been associated with increased employee skills and efforts, it is harder to make a breakthrough with this, since information and communication technology skills are expected to be developed without any company reward or recognition. Therefore, workers have to find other ways of justify their case for promotion (Greenbaum 1998, 133).

The aspect of no promotion proposals may also have a negative effect on the workers' motivation (Baldry, Bain & Taylor 1998, 176). Early excitement about the changes made to the workplace because of IT may therefore decline because of no further developments in the individual workers' job. Continuous development is important for the workers' motivation and the lack of this may be an explanation why many successful work teams' performance have stagnated after initial success (Robbins 1998, 301).

9 Conclusion

ICT came to the office already in the 1950s, and by the 1980s it had significant impact on the workplace. Previously repetitive tasks were now automated by the help of computers, so called data automation. In many ways, this process of organising work may well be compared to Braverman's description of work fragmentation and job deskilling, as many critics of new technology argue (Greenbaum 1998, 24).

Since the 1980s, information and communication technology have been implemented in the workplace in numerous ways, which have given both positive and negative consequences for both the workers and the management.

There are massive discussions on the impact of information and communication technology and whether or not it represents an upskilling or deskilling

of work. Even so, there seems to be some sort of consensus among the different contributors of the discussion, stating that ICT can both mean an upskilling and a deskilling of work. It all depends on how it is implemented in the workplace (Greenbaum 1998, 138).

Information and communication represents not only new tools for workers to use, but also new ways of organising work and a set of new work cultures. Therefore, there are a number of new issues and problems that arise, which management previously did not have to deal with.

Even though information and communication technologies have reached a far more mature status than they had when they were introduced in the 1970s, the complexities of ICT are massive and diverse and have impact on many parts of the labour process and the workplace. Therefore, I will argue that ICT still represents challenges in the workplace, which require great attention and concern by management in order to create a successful company, that both responds to market demands and secures a healthy work environment for its employees.

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