Telecommuting resistance, soft but strong:

Development of telecommuting over time, and related rhetoric, in three organisations

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Abstract

Telecommuting, or working part of the time from another location than the office, normally from home, has been tried by several organisations in the recent years. This has not always been a success. Still, many arguments in favour of telecommuting are forwarded by previous studies. This paper investigates the development of telecommuting in three organisations, and elaborates on mechanisms behind the fact that the practice of telecommuting has not been as widespread as expected. The study is longitudinal, covering three years, and mainly based on interviews. The practice of telecommuting is found to have a negative development over time in all three cases. The social/symbolic aspects are found to be strong, but initially not reflected upon by the organisations. Many arguments in early phases of telecommuting are of a rational/functional nature, and tend to treat work as an output-related activity, without considering social and symbolic aspects of distancing oneself from the worksite and the colleagues. Over time, symbolic aspects become more pronounced. This complements/overrides the rational/functional arguments initially used by those in favour of telecommuting. This shift over time needs to be taken into account to understand the initial positive response to, but difficulties to sustain telecommuting.

Keywords: Telecommuting, Telework, Geographical dispersion, Organisation, Change

Telecommuting is a relatively new concept, with roots in the early 70s. The recent development in information and communication technology (ICT) has facilitated communication and collaboration over a distance. This development has made it possible for employees to work from locations remote from the centre of the organisation. Several tasks could theoretically be performed from any location, from the normal office, while travelling, from a client's office or from the home of the employee. There are certain technical limitations, but in addition to this, there seems to be other factors that influence the acceptance of telecommuting.

How does telecommuting develop when it is an option but not a requirement? Will telecommuting spread spontaneously in the organisation, or will it decrease over time? What are the mechanisms behind the development of telecommuting? The aim of this study is to examine these questions by following the development of telecommuting over time in the three organisations.

First, we will look into previous studies of telecommuting and its development over time. This is linked to arguments in favour of telecommuting, and experienced problems and resistance to telecommuting. After that, the choice of approach for this study is discussed, as well as definitions and limitations. A basic framework for analysis is presented, consisting of a rational approach versus a social/symbolic approach to the issue. Findings regarding the development of telecommuting over time in the three cases, and relater rhetoric regarding the appropriateness of telecommuting are presented. This is analysed, and theoretical and practical implications are suggested.

Introduction to telecommuting

The introduction of telecommuting, predicted future adoption, and resistance found to telecommuting has been discussed by several previous authors. Telecommuting has been predicted to spread rapidly at least three times in the last three decades. The term was first coined by Nilles in 1973 (Nilles, 1994), and described as a growing trend and the future way of organising work. The second telecommuting boom was in the early and mid 1980´s, when Toffler (Toffler, 1981) and Handy (Handy, 1984) predicted telework to spread rapidly. In Sweden, several studies of telecommuting and neighbourhood centres were performed (Engström et al., 1985, Ranhagen, 1985). Again in the mid 1990´s the interest in telecommuting increased, with several workshops and conferences on the subject[1], and market forces such as IT suppliers and teleoperators claiming telecommuting to be the new way of working more efficient and combining work and private life (Telia/TEMO, 1995). A government committee examining the impact of telecommuting in Sweden was put together in 1995 (SOU 1998:115, 1998), and several other reports by government agencies were published (Lagg, 1994, Utrikesdepartementet, 1996, Frisk, 1994). During 1994-1996, a popular-press magazine on telecommuting and new work forms was published ("Distans") but it was closed in 1996. All three times when telecommuting has attracted public interest, the development has not lived up to the expectations, and according to Engström (1998) the number of telecommuters is more or less constant over the last decades. Brewster, Hegenwisch and Mayne indicate that less than one percent of the population were telecommuting in the early nineties (Brewster et al., 1994).

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[1] International workshop on telecommuting, Brunel 1996, Amsterdam 1997, Helsinki 1998, Tokyo 1999, Stockholm 2000; Telework 1997, Florida, ETCF, European telecommuting forum, formed in European Union.

Some studies still report a steady increase in the number of telecommuting. This discrepancy is due to definition problems, where the increase is in most cases consisting of employees with a PC at home, doing overtime work. As discussed in the following section, this is not considered telecommuting in this study.

There is no general agreement on how to define telecommuting, and several groups have tried to establish their own definition (Qvotrup, 1996, Rognes and Rogberg, 1996). Telework is sometimes used synonymous to telecommuting, but telework is generally used in a broader sense, covering a wider array of distributed work. Some definitions of telecommuting are as follows:

> *...the partial or total substitution of telecommunications technologies, possibly with the aid of computers, for the commute to work.(Nilles, 1994)*

> *...working at home or at an alternate location and communicating with the usual place of work using electronic or other means, instead of physically travelling to a more distant work site. (AQMD, in (Moktharian, 1991))*

In most attempts to set a general definition, telecommuting is very broadly defined. When telecommuting is studied scientifically, the problem or interest area is often more specific and more stringent definitions than the general ones are needed. The present study focuses on telecommuting on a part time basis, at least 1 and no more than 4 days a week should be used for telecommuting (working from home), counting only regular working hours. Overtime at home is not considered telecommuting in this case. The study also focuses on one regular office and a home based telecommuting office, excluding mobile workers and excluding flexible office solutions. The category of work studied is professional non-routine tasks, with an interaction component in the work. The telecommuters are all skilled professionals, working with information and knowledge production. This implies that both solitary work and communication are parts of the task, as well as certain group activities. The contract form is full time employment. Information Technology is in these cases seen as a requirement for telecommuting, but this is not focused on, technical solutions as such are not evaluated.

Telecommuting has apparently not developed as expected. How shall then telecommuting be set up to be successful? Several criteria need to be fulfilled, such as task nature, individual characteristics of the telecommuter and trust. A discussion on criteria for successful telework is held by Olson (in (Huws et al., 1990)). Six criteria are proposed, not too high dependence on equipment, self-control in work, measurable results, need for concentration, natural checkpoint in work and finally a low or manageable need for co-operation. These criteria are used and developed by several authors. Heilmann (Heilmann, 1988) proposes further dimensions, such as whether the task is presence oriented or result oriented and if the work is done in a group or on an individual basis. Barusch (Baruch, 2000) identifies four factors that all need to be present at the same time for telecommuting to work. These are 1) the technical interface, including technical issues and also the private and family situation 2) the job, tasks and position 3) individual characteristics of the telecommuter and 4) the organisation, and in particular issues of organisational culture and trust. An important factor is the individual attitude towards social or professional interaction at work, with persons assigning a high value to interaction being less likely to prefer telecommuting. Generally, a strong company culture, the motivation of all parties, in other words commitment to the use of telecommuting, and clear and measurable result variables are said to facilitate the implementation of telecommuting.

The adoption of telecommuting may be contingent on the organisation of the firm, where smaller, less bureaucratic firms with sufficient organisational slack are most likely to pursue telecommuting (Tomascovic-Devey and Risman, 1993). This is based on the notion that larger and older firms are more reluctant to changes in these areas. Tomascovic-Dewey and Risman suggest that the organisation is contingent upon internal organisational constraints rather than on technology. The two dimensions of organisational inertia (similar to institutional factors) and power and status are seen as important. The study is done as an attitude survey among US managers, checking for organisational, managerial and employee constraints for implementing telecommuting. In a study of the telecommuting program in the San Francisco bay area (Fay, 1996), it is concluded that the resistance to telecommuting in this case is mainly dependent on management resistance. Technology is not seen as a major hindrance.

The resistance to telework found in American companies is discussed by Perin (Perin, 1991). Her conclusion is that this originates from a cultural division between home and work. The organisation of work is claimed to be designed to suit industrial, machine-dependent activities with mass production logic and bureaucratic control. The home is connected to relaxation and personal issues while the office is where you perform paid work. This in combination with the fact that many managers have a low degree of trust in their subordinates, and rely on direct supervision to make sure that they actually work, makes telework difficult to accept for them. Performance is based on presence rather than on result, which means that absence will have negative effect on the employee's personal career. Absence is culturally unacceptable since it undermines the norms in the group and reduces the authority of the manager. Telework is thus ”*culturally inappropriate, no matter how functional*” according to Perin. This is also commented on by Perlow (Perlow, 1998, Perlow, 1999), who suggest that there still is an assumption that individuals must be present at work to succeed. In organisations where this is the case, telecommuting will not succeed.

The studies related to above focuses on the importance of social and organisational factors in telecommuting acceptance. In contrast to this, there is a large set of telecommuting consultancy literature, which mainly stresses the advantages of telecommuting (Gray et al., 1993, Handy and Moktharian, 1996, Kugelmas, 1995, Leonhard, 1995, Nilles, 1994, Reid, 1994, Schepp and Schepp, 1995). Efficiency and increased productivity is one of the major arguments for introduction of telecommuting. An increase of between 4 and 80% in productivity is claimed for telecommuters in various studies, with an average improvement of around 40%. Forester notices that productivity changes reported so far in telecommuting experiments are all on the plus side and rarely less than 35% (in Brocklehurst, 1989). Perhaps the most extensive US study - of 1200 employees by Electronic services Limited of New York - found average productivity gains of between 40 and 50%.

It is argued that the level of impact will be different if the whole organisation is telecommuting. In many cases, as in the three studied cases, telecommuting is practiced in parts of the organisation only, or on an individual basis. Olson and Primps (Olson and Primps, 1984) has suggested that up to 50% of all tasks could be done from home, while others claims that up to 2/3 of the workforce may use telecommuting in some way (Korte et al., 1988). However, later studies imply that telecommuting is not so generally applicable. Moktharian (Moktharian, 1994) presents a conceptual model on the individual decision to telecommute. In following articles (Moktharian, 1996a, Moktharian, 1996b, Moktharian, 1997), based on empirical

studies, job unsuitability and management disapproval are found to be major constraints when telecommuting is a preferred alternative for the individual. Only for 11% of the sample in Moktharian´s study, was telecommuting preferred, possible and chosen. This makes a large-scale introduction of telecommuting unlikely. The most likely practice of telecommuting is an organisation where only a fraction of the employees telecommute part time, and a majority of the employees does not telecommute.

This gives us a multi-faceted picture of telecommuting, but still not an explanation to why it apparently is appealing to many, but not developing the way it is predicted. There are two positions, one arguing on cultural inappropriateness and one arguing on functional advantages. This study aims to investigate the dynamics between these two positions in cases where telecommuting is implemented, and relate the use of either of the two lines of argument to the development of telecommuting over time.

Research Design

The next section deals with why the longitudinal field study approach was chosen, how data was collected, and how this was handled analytically. The study was undertaken as a longitudinal field study, with one major case and two complementing, smaller cases. The choice of approach was based on the explorative nature of the research. To find underlying mechanisms, a possibility to collect rich data is needed, and to follow the development over time, a longitudinal study is preferable. It could be argued that this is possible by using historical data or document, but this is likely to come in conflict with the need for rich data. This, in combination with the access to a suitable case, made for the choice of a longitudinal field study. The approach chosen for this study is to study one major case, for depth and for rich input. This is then complemented with two mini-cases, to seek similarities and widen the base for generalisation. A single case is limited in generalisability, and has a potential bias in misjudging the importance of a single event. This is helped by using a multiple case approach (Leonard-Barton, 1990), as in this study.

The total time of the study was three years. The approach to data collection can be described as a combination of participatory research, or action research, and traditional semi-structured interviews. The combination stems from the fact that the researcher was taking part in an evaluation group following the introduction of telecommuting in the organisation in the main case study. In this role, he got to take part of the internal discussions of the project group, and thus following the arguments forwarded internally in relation to telecommuting. In addition to this, interviews were conducted with telecommuters and colleagues during the period of the study. Participatory research builds on the idea that knowing about the studied subject is facilitated by close interaction with the subject (Gioia and Chittipeddi, 1991). Thus, the researcher spends time at the site, and participates in some of the work of the studied object. In this way, an understanding of the internal logic is reached, and interpretations made by the researcher may also be commented on by the studied group.

Studied organisations

The major case is a telecommuting trial in Telia Research, a research and development department in Telia, Sweden's major teleoperator. Telia Research was running a trial on telecommuting within their own organisation, and there were obvious synergies between the interest of this research project and Telia's own internal goals of their project. A total of 11 persons are selected as telecommuters, and another 11 persons, chosen from their nearest

colleagues, are selected as a comparison group. The 11 telecommuters work in a department with approximately 40 employees, which make the telecommuters ¼ of the total work force. The second case is a service company also planning to test telecommuting as an option. A similar set-up to the one at Telia is used, and Telia also functioned as an implementation consultant in this case. The third case is the Swedish Ministry of Health and Social affairs. The similarities are that all three groups are in non-routine knowledge-based work. Telecommuting is part time, and only for parts of the organisation.

Data collection

Data was collected from telecommuters and colleagues in all three cases by interviewing them on several occasions. The interviews were of a semi-structured character, where some questions were specific, and some were of an open character, prompting the respondent to elaborate on an issue. The questions were regarding the impact of telecommuting on the respondent's work, the development of telecommuting over time, and the perceived reasons for the changes or lack of changes the respondents thought to be important. The interviews had the same basic set-up in all cases, and over time, using an extensive interview guide. A majority of the interviews were taped. In addition to the interviews, a work diary and a self-assessment of telecommuting impact was used. A total of 69 interviews, taking 1-2 hours, were conducted, with a total of 39 respondents. The telecommuters in the main case were interviewed 3 times each over a three-year period, once before telecommuting became an option, and three times when they had telecommuting as an option.

Analysing data

The analysis aimed to find patterns in the data on the practicing of telecommuting and on the perceived important aspects of telecommuting, regarding problems and applicability in the respondents organisation. To do this, the answers were coded and classified into different categories, or themes. Some of these themes were related to what were the arguments for and the arguments against telecommuting, or what supported and hindered the practice of telecommuting. This was used as a tool to sort the data, and thus to facilitate an interpretative analysis of the interviews. Responses were compared over time and between studied groups and cases, and patterns were sought. In this way, any change in attitude over time can be seen in the material. The technical approach to the thematic coding of the data was to use a computer-based text analysis program, Nud.Ist. All data was manually coded, automatic coding was mot used, since a manual coding procedure was considered more reliable, and also made up part of the interpretative analysis of the material, giving the researcher a further chance to study the collected material.

The coding of data regarding rational or symbolic line of arguing was based on interpretations of the arguments and comments made by the respondents. As a basis for coding, the dichotomy of rational/functional arguments vs. symbolic/institutional arguments is used as will be discussed further in the next section. The relative importance of these over time is examined, and linked to the development of telecommuting. Typical rational arguments are productivity and output related issues, technical issues, explicit advantages or disadvantages in relation to work output and performance. Social and symbolic issues are the feeling of appropriateness, fitting with ways of working, what others think, feelings of belonging, issues of participation in the group and in the organisation.

Rational/functional vs. symbolic/social arguments

Two major streams in social science and organisation and management studies are the rational/functional and the social/symbolic. The first is preoccupied with the logical and rational aspects of organising, while the second see aspects such as symbolic issues, politics, organisational inertia and social interaction as central when trying to understand organisations. This study has chosen to use this dichotomy, and apply it on the arguments used by the respondents, to see if it is useful to explain the development of telecommuting. The way this is done is to study how arguments fall into either of the two categories, and if this changes over time.

The rational/functional way of arguing is often dominant in everyday life. This is seen as an appropriate and scientific way of describing a situation, where seemingly objective facts are taken into consideration, and a logical conclusion is reached. The line of argument is considered with how to reach a goal in the best way. Much of the normative management literature takes a rational/functional approach. In telecommuting, most of the literature in favour of telecommuting follows this line of arguing.

The social/symbolic perspective includes areas such as institutional theory, organisational symbolism, symbolic interaction or social constructionism. One use of the term "symbolism" (Turner, 1996) is to focus on not what happened, but what it means. In this view telecommuting take a symbolic meaning, and make several symbolic interpretations possible. On a more specific level, Trevino et al (Trevino et al., 1987) discusses the symbolic aspects of media choice. The use of face-to-face as a communication media signals attention and stresses the importance of the issue discussed. Face-to-face communication is used in many cases where the content of the communication in itself does not call for such a rich media. By gathering people to a meeting, a sense of importance is signalled. The way work is organised is influenced by institutions, general or company specific, which by definition are not easily changed (Powell and DiMaggio, 1991). The degree of institutionalisation may be seen as the relative vulnerability to social intervention (Jepperson, 1991). Institutions with high resistance to any form of change may be regarded as strong, and the concept of working time and working place must be regarded as a strong institution (Perin, 1991, Weber, 1947). It is a worldwide concept, embraced by all legislation and incorporated in most cultures in the western world. This is not necessarily reflected upon by the organisational members, but will be noted if disturbed (Goffman, 1959). Behaviour may be labelled as inappropriate, or not fitting with the way we do things around here, without necessarily having any specific rational/functional explanation.

Telecommuting development over time

In the following section, we will examine the development of telecommuting over time in the three studied cases. The organisational settings in which telecommuting is introduced is also described.

The Telia Research case

Telia Research is the research and development department in Telia, the main Swedish teleoperator. Telia Research had in 1996 approximately 600 employees, located at 8 sites in Sweden. Of the 600 employees, more than 70% had a university degree. The studied unit within Telia research was the Service Development Division; Tu. Tu had approximately 60 employees, divided into three departments. Of these 60 employees, 48 were influenced by the telecommuting project. Telia Research as a whole had a matrix organisation, with a line

manager taking care of personnel and administrative responsibilities. All activities were organised in projects of various sizes, from one person working part time, with the projects lasting a few weeks, to projects with more than 50 people, lasting several years. The high diversity of projects and research subjects made co-ordination within departments difficult. One department manager described the situation as "fragmented, with many disparate activities". The level of bureaucracy could be described as low, with few coercive rules and a high degree of freedom for the individual. Each organisational member had a high degree of discretion on how to manage and perform his or her own work. As standardisation of work process or output is difficult in this type of projects and research to rely on other forms for co-ordination of work. Direct supervision is not a possibility, and mutual adjustment is the main co-ordination mechanism (Mintzberg, 1979). The persons and tasks in the case fit all common criteria for successful telecommuting (see previous sections for references)

In the case of Telia, the initial aim for the telecommuters was to telecommute two fixed days a week. This initial aim was never reached. Telecommuting started off with slightly less than two days a week for the studied group. During the study the telecommuters were asked in each interview how much time they normally worked from home each week. The mean time was then calculated for the group. The level of telecommuting was found to gradually decrease, to become 0.7 days a week on average after two years. In the same period, it was decided that telecommuting would be a general option for all employees at Telia Research. This did not render any increase in telecommuting among the colleagues of the telecommuting trial group.

Telecommuting did not take off in this case, although management had supported the issue and there was a pilot project in the company. Beside the telecommuters, there was a large group of people that had a workplace at home, and who had the possibility to work from home outside regular working hours. This is not considered telecommuting in this study, but was officially displayed as a high level of teleworkers by Telia. This option to work overtime at home was claimed to be used by a large group of the white-collar employees, but working from home during regular working hours did not increase among the telecommuters colleagues, as found in the interviews held with these. The decrease in the telecommuting is shown in figure 1.

The Info Company

The studied organisation was active in the knowledge-processing field, and their main activity was to develop, market and sell information regarding products. The products from the studied organisation consisted of exhibitions, catalogues, books and databases. The organisation had 90 employees, all located at the same site. The most common educational level was a university degree, combined with at least a few years external experience before entering the organisation. The organisation was described as stable, by interviewed managers. The product was well known, employees were experienced and ways of working were well established. There was little formal documentation on working routines and procedures. Formal procedures and rules were few, but output was a standardised product. The organisation could be described as a Professional Bureaucracy using Mintzbergs terminology (Mintzberg, 1979). The professional skills of the editors were vital for success. This implied that the need for daily contact between managers and editors, and between editors, was limited, which was supported by the view of the editors. The project group consisted of all 9 telecommuters, computer support, HRM personnel, one external consultant and a project manager, who was also telecommuters. The persons and tasks were considered to fit the required characteristics for telecommuting.

In the case of the Info Company, the entire telecommuting initiative was followed. Telecommuting was introduced, evaluated and then abandoned as an option at the end of the trial period. The telecommuting trial involved the 9 telecommuters. The telecommuters themselves could be divided into two groups, editors (focused in this study) and managers. The editors thought they could spend 1/2 to 1 1/2 days a week at home. They expected to gain in efficiency due to the possibility of working undisturbed for longer periods. The manager expected to spend half a day at home a week, or use the equipment for overtime work at home. Even from the start, less time than planned was spent working from home, and this gradually decreased during the 9-month trial. At the end of the nine months, it was decided to stop, and not to have telecommuting as an option in the organisation. The development of time spent at home for the editors is shown in figure 1.

The Ministry

In case three, the Swedish Ministry of Health and Social Affairs, and parts of the surrounding organisation was studied. The Minister was herself practising telecommuting, while living 300 km from Stockholm, and normally spent one or two days a week at home. In addition to this, several of the employees at the ministry had the option of fully flexible work arrangements, in that respect they were free to work from home at any time convenient to them.
The organisation at the ministry of health and social affairs was a traditional hierarchy. The managers had influence over the work of the experts, and had to approve the work done. Responsibilities followed a line of command, but personal contacts were frequent across these lines. The department consisted of approximately 170 persons, of which roughly 10 were politicians and the rest non-political assignments. The personnel were mainly academics, with various ages and specialisation. The secretariat of law consisted of 18 people in the winter of 1996, and these had unregulated working hours, i.e. the possibility to telecommute. There had not been any attempt to promote telecommuting as an option within the legal unit, but there were portable computers for those who wanted to work from another location.

The option to telecommute had been there for a long time for the legal staff, which had had a free working situation for many years, with an option to do their work when and where they wanted, as long as it was done. In spite of this, telecommuting had not developed to any larger extent. Even though the top manager of the department started to telecommute, and the option was there for part of the organisation, it was not utilised much. The level of telecommuting for the minister was between one and two days a week, but the level of telecommuting for the legal section was low and not changing. See figure 1 for an illustration.

Summary

The development of telecommuting over time has shown no spontaneous increase in any of the three cases. On the contrary, in two of the cases we see a decrease of telecommuting despite the seemingly positive circumstances in which it is implemented.
The cases show different patterns of telecommuting development, with one thing in common; the level of telecommuting was decreasing, or not increasing. In the case of Telia, the level of telecommuting among the trial group decreased gradually, from two days a week initially, to 0,8 days a week on average after two years. In Info Company, telecommuting was tested during a 9-month period, and then abandoned as an option in the company. In the third case, the Ministry of Social affairs, the only regular telecommuter was the Minister, but the option to telecommute for parts of the staff was not utilised to any larger extent.
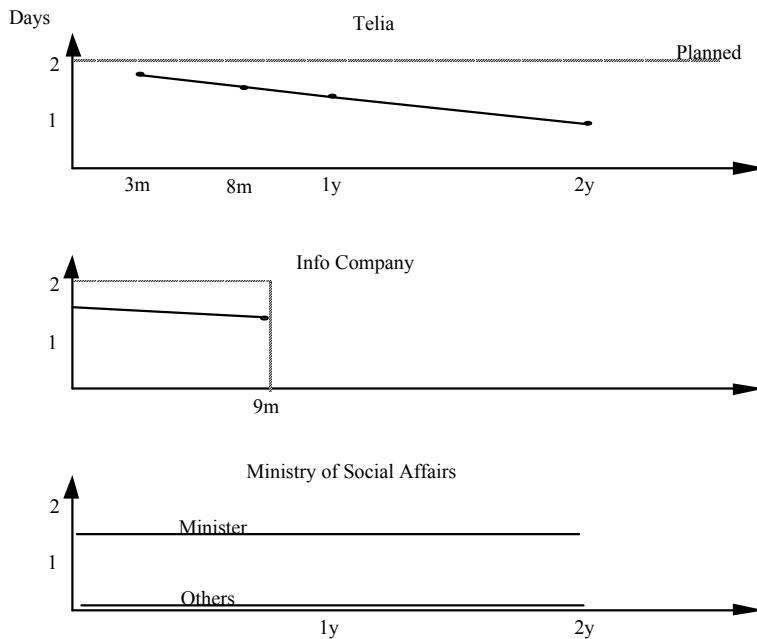
Framing of telecommuting, change over time

When the slow or negative development of telecommuting has been established, we start to ask why this is the case. What causes the level of telecommuting to go down over time? In the following section, we will look into the attitude towards telecommuting, and raised arguments and explanations to why telecommuting is/is not practiced in the different cases, and over time.

The Telia case

In the interviews before start up and in the initial phase of telecommuting, rational issues were dominant. Productivity, increased quality of solitary tasks, increased self control, less stress, better individual output and thus overall better results for the company were forwarded as arguments favouring telecommuting. People expected to produce better, due to fewer disturbances at home, and also to be able to combine work and private life in a better way. Group and communication issues were not seen as a problem yet; this could be handled rationally, by the use of alternative communication media, by rearranging meetings or by other minor adoptions. Fears of problems with social issues were raised by some of the respondents, but this was also seen as manageable. Thus, the initial phase was dominated by rational arguments and practical solutions around telecommuting.

After a year of telecommuting, these rational arguments were still seen as valid, but not the most discussed aspects any more. There is a shift towards discussing social and symbolic issues regarding telecommuting. Areas such as fewer personal friends at the office and the importance of spontaneous contacts and of being available are raised. The overall attitude towards telecommuting is still positive, even though the time spent at home has decreased. Colleagues comment on the difficulty to handle quick issues on a spontaneous way with the telecommuters. The telecommuters are described as more distant than other colleagues, not really part of the organisation, sliding away from the group, and not as social as before.

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After two years, when telecommuting had dropped even further, the spontaneous contacts and the importance of being present was mentioned more often by the telecommuters. It was noted that it did not "feel good" to work from home, some irritation from colleagues was mentioned, and the necessity to keep in touch with what was going on an informal basis, and being available and visible if things would require this was stressed. Many of the telecommuters said that they would like to have spent more time working from home, but that it was difficult to get back into the routine of telecommuting, once this had been broken. Frequently this breaking of the telecommuting routines happened when the situation at work was "special", such as in certain project phases, or during reorganisation or when a person changed position. The shift back to "normal routines" was easy, but returning to a telecommuting habit after a period of regular work practice was hard.

The Info Company

The initial idea with telecommuting was to introduce a new way of working for parts of the organisation, to then allow this in the entire organisation. This was supposed to increase output, and also to make it possible to save on office space in the future. The initial arguments for telecommuting were all rational. This was later also used for officially closing the trial, but an important factor that surfaced in the interviews was the fit between telecommuting and the company culture. At the end of the trial, both the personnel manger and the telecommuting project manager stated: "telecommuting does not fit into the way we work in this organisation". The organisation consisted of senior, experienced employees with a long time in the company. They were accustomed to a certain way of doing things, and changes in work routines had been few during the last years. At the end of the trial period the project was phased out, no formal report was made on the trial and the decision was to close the project and abort the telecommuting The decision to stop telecommuting and not have it as an option for employees was officially based on the technical problems during the test period. This, in combination with the low compatibility with existing ways of working, lead to the decision to discontinue telecommuting in the organisation.

The Ministry

The case of ministry of social affairs is a case where we enter late in the process of telecommuting awareness. The option has been there for a long time, and the arguments would have had time to shift towards the areas perceived as central. In this case, we see that the symbolic aspects are brought forward as central to the fact that telecommuting is not normally practiced. To stay at home during working hours has not been practiced much, and the reason given is that it is not seen as acceptable to stay at home, even though the minister telecommutes two days a week, and portable computers are available for loan. This can be linked to findings in an internal report from the ministry of foreign affairs (Utrikesdepartementet, 1996), where presence at the office was seen as a central factor, since visibility was seen as important. Doing a good job was not only linked to results, but also to the showing of commitment, by being present and being available. Some employees were sceptical to the appropriateness of the ministers telecommuting as well. The fact that she was the head of the office, and her telecommuting got a fair amount of positive media coverage, was obviously not enough to change the attitude

Summary: attitudes towards telecommuting.

In the Telia case, we saw an initial focus on rational aspects of telecommuting. Over time, the level of telecommuting decreased and during the same time the arguments on relation to

telecommuting shifted towards social and symbolic issues. The rationales in favour of telecommuting remained the same, but were overruled by the increasingly visible social and symbolic aspects. When telecommuting has been in place for half a year, soft issues were starting to surface. After two years, social and symbolic factors were dominant, and when telecommuting has been an option for a long time without being practiced, as in the ministry, it was considered inappropriate to utilise the option to any large extent. Social/symbolic issues, or soft issues, become increasingly more important as time passes and the organisation becomes familiar with telecommuting. In a "mature situation", soft issues are forwarded as the main reasons not to telecommute, and have thus become articulated. This relative importance of rational/functional vs. social/symbolic factors over time is visualised in figure 2.

Rational/functional factors

Social /symbolic factors
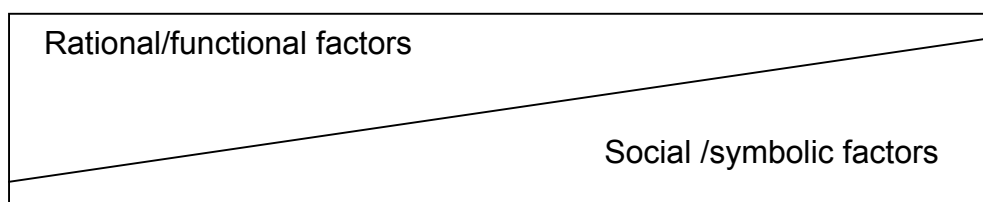
| Initial phase; introduction and testing, rational arguments are dominant | First year; period of accustomising, increased awareness | Two years, and later; Social /symbolic factors are more visible |

Figure 2

Relative importance of symbolic factors over time.

Work and workplace falls into a group of particularly stable institutions, discussed by Jepperson (Jepperson, 1991), when an institution is imbedded in a framework of institutions. From this perspective it is most likely difficult to change the perception that work is something one performs at the working place and during working hours. The concept of work is part of a group of institutions that are taken for granted, or even seen as moral obligations to be followed by all (Perin, 1991, Weber, 1947). This may be stated as a "Calvinistic imperative of work": being at the work site during regular working hours, doing "work". In recent years the rigid working hours and division between leisure and work has partly been relaxed, the concept of flexible working hours has spread, more so in the Nordic countries than in the US (Bailyn, 1988).

One aspect of telecommuting and group norms is that the underlying norms are not seen until they are disturbed (Goffman, 1959). This may help to explain the large number of failed telecommuting pilots. The underlying cultural resistance is not seen until it is challenged. It would also explain the lack of enthusiasm in the Ministry of Social Affairs. Here the possibility to telecommute has been present for some time, which may have lead to some reflection on the underlying symbolic meaning of working from home. This reflection on what telecommuting

may lead to could have made this less attractive to the employees. The time when telecommuting is accepted is when there is an external force to telecommute, not when it is a choice to distance oneself form the group, but a necessity.

The symbolic aspect of telecommuting may play an important role in the development of telecommuting. The importance of presence, and thereby showing commitment to the group and the common task, is made visible when telecommuting is introduced. Telecommuting can be seen as a non-deliberate breaking of institutional norms, which is interpreted symbolically by colleagues (Turner, 1996). This breaking of norms is not acceptable behaviour, and even when officially sanctioned, unwritten behavioural codes will counteract the acceptance of telecommuting. Presence at the work site signals a belonging to the group and the organisation.

To go further along this line of argument, a conclusion would be that telecommuting is not compatible with explicit or implicit group norms regarding commitment and presence. Commitment is in many cases constituted by presence, and voluntary geographical distancing from other group members is not accepted. The dispersion of the group is seen as weakening the ties, and leads to a weaker organisation. As discussed by Noriah & Eccles (Noriah and Eccles, 1992), face-to-face encounters play an essential role in establishing and maintaining lasting relationships. In this perspective, the dispersed version of the group may be seen as second best, not to be chosen if group coherence and common activities are important.

When a member of a group voluntarily decreases the presence and availability for colleagues, this sends signals to the environment (Trevino et al., 1987). The telecommuting member of the group is not as interested in the common activities as the rest of the group, who choose to spend their time at the office. The absence may have a positive impact on result, but this is outweighed by the symbolic action of distancing oneself from the group. Differences in productivity are accepted as a normal variation between people, but presence may be controlled, and is often seen as a more important measurement of performance, or willingness to perform. Choosing to stay away may be seen as a symbolic way of opting out, showing that there are other things more important than the team. The symbolic aspects is here linked to the low development of telecommuting in the three cases. A negative reaction to telecommuting and the lack of adoption on an organisational level may be seen as a reaction to the symbolic or perceived symbolic character of telecommuting. Telecommuting could in this perspective be perceived as a withdrawal from the group when a person chooses to work away from colleagues for part of the time, when the option to be present is there.

Implications

The arguments against telecommuting raised above could be handled, according to many of the telecommuting proponents (Kugelmas, 1995; Leonhard, 1995; Nilles, 1994; Reid, 1994; Schepp *et al.*, 1995) by educating people in the advantages or by changing company culture. The perception of telecommuting as culturally inappropriate would need to be changed, if we listen to the proponents of new organisations, such as virtual networks. A characteristic of institutions is the inherent resistance to change, and the built-in irrationality in the structure itself (Powell and DiMaggio, 1991). This links very well with the resistance to telework, although the rational arguments in favour of this new work arrangement are numerous. The concepts of work and work place can be linked to several underlying norms or institutions that counteract the strive to implement telecommuting. Following the above arguments, this would mean changing basic underlying assumptions of work, and this is indeed a formidable task, if it can be considered a

task, or possible at all. Telecommuting has been shown to create problems with the symbolic aspects of work and commitment, both on an articulated level, as in the Ministry of Foreign Affairs, and on a non-articulated level, as in Telia. Symbolic factors such as showing commitment, in combination with rational arguments of organisational coherence may be of greater importance than the actual performance. This only becomes visible after some time, which may lead us to believe that the blooming of telecommuting will happen again, when we have forgotten what happened the last time. The rational arguments are good, and still there, and when the softer arguments are forgotten, a new generation of telecommuters are likely to try again.

The trust to be a telecommuter is many times given to those whom it is believed will use the opportunity to a limited degree, or mainly during overtime. There may be a self-eliminating mechanism for telework for skilled professionals and managers. You may work from home if it is not likely that you will use the option regularly. This is linked to commitment, as discussed above; and career possibilities, as discussed by Bailyn (Bailyn, 1988). In this perspective, telecommuting may be seen as a possibility to do more work, overtime at home for the devoted worker, but not to be absent during working hours when it is possible to be at the normal work site. During working hours, you are supposed to be at the work site.

Proposed future research

The shown decrease of telecommuting over time that occurred in organisational environments that had a pronounced favourable attitude towards telecommuting underlines the importance of unspoken mechanisms. There have been several case studies and pilots initiated in the last years, but the follow up on failures are scarce, and a future area of research is one where not only success stories are studied, but also less successful initiatives, and the reasons why things did not turn out as planned. This is in particular true for the "virtual organisation" area, where large claims have been made, but little of substance has yet been produced.

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