
How does telework influence the manager-employee relationship?

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Abstract: Companies are sometimes reluctant to implement telework in their teams because managers may lose control over their teleworking employees. The question we try to answer in this paper is: Does telework have an impact on the manager-employee relationship and, if so, what sort of impact is it?

We first propose a literature review on this theme. We then restate the empirical results of a case study realised in a salespeople team of home-based teleworkers. Through the analysis of e-mails, in-depth interviews, and direct observation, we show that:

Telework reduces formal communication between employees and their direct manager while it develops interpretation bias. It facilitates communication between distant hierarchical levels, reducing the importance of professional and social status.

Telework increases employees' autonomy towards their manager. One of the only ways for the manager to evaluate teleworkers is to devote their accountability to results. Overall, telework reduces the importance of the manager in the employee's professional concerns.

Keywords: telework; NICT impact; management; interpersonal relationship.

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1 Introduction

Telework was born in the mid-70s, after the first petroleum crisis, “following the idea that it was possible to spare energy by limiting travels. Shifting the work was fostered rather than shifting people” (Alix, 2001). This work practice knew little development till the late 90s. But, since then, continuous improvement of information and communication technologies, combined with their decreasing cost, has changed the rules. The so-called ‘internet boom’ has strongly contributed to the development of telework practices. Whereas assembly line work stemmed from industrial development (especially in the car industry), telework stems from the virtual economy (Alix, 2001).

Telework has started to boom in Europe.

“While in 1994, just a very few million teleworkers could be identified in Europe (Korte/Wynne, 1996), the figure has risen to around nine million in 1999 and it can be expected that we have already or will be approaching the ten million sometime this year (2000). The 1999 figure of nine million teleworkers equates to 6% of the workforce in Europe.” (e-Work, 2000)¹

No doubt that this development will intensify given that telework depends on the innovations made on information and communication technologies. In addition, this work organisation that aims at optimising the individual’s autonomy corresponds to the current mood of empowerment within organisations.

In academic research works, telework is often analysed through a juridical or a country-planning perspective. It is seldom considered in a managerial point of view. And then, it raises numerous questions relating to the manager-employee relationship. For instance, telework is said to weaken the collective representation of the organisation. It is supposed to bring about more commitment and sense of responsibility by the teleworker. At the same time, it forces the manager to redefine his role and the way he evaluates his subordinates.

In this paper, we intend to focus on salespeople for three main reasons. First, salespeople are most concerned with telework implementation. The activity of salespeople is actually compatible with telework since it entails (for most sales activities) high autonomy and much time spent outside the organisation. Second, this population is characterised by deep changes that indirectly concern the manager-employee relationship. For instance, the function is more and more organised according to a customer logic (rather than the previous geographical logic) that goes with more delegation and autonomy for the sales person. Third, the sales management function is too seldom in academic management literature.

For these various reasons, we will study the following question in this paper:

How does telework influence the manager-employee relationship among salespeople?: First, we will define our variables – telework and the manager-employee relationship – and make a brief literature review on our research question. Second, we will present the preliminary results of a case study including in-depth interviews, document analysis, and direct observation. Eventually, we will conclude with some implications for further research.

2 Theoretical insights

2.1 Defining the independent variable: telework

Telework is “remote working supported by information and communications technologies” (Gray et al., 1993). This definition stands among the simplest to be found in the literature dealing with telework. Our focus on the manager-employee relationship leads us to highlight what lies behind ‘remote’. Remote means away from a traditional office (work at home, in telecottage, during travels, in hotels, etc.) *and* away from people able to control the activity realised by the teleworker.

“The most obvious difference between home-based workers and traditional employees consists in the absence of any direct supervision and thus, the emergence of another kind of supervision.” (Gauthier and Dorin, 1997).

Other definitions include other criteria to specify telework. For instance, Daniels et al. (2001) characterise telework with five variables. The first two ones are the usual variables (location and ICT² usage) to which the authors add the three following variables:

- knowledge intensity – extent of knowledge required to complete tasks, indicated by, for example, ease of output measures and autonomy over work [...]
- intra-organisational contact – frequency and range of intra-organisational contact [...]
- extra-organisational contact – frequency and range of extra-organisational contact [...] (Daniels et al., 2001)

In our study, we will define telework in the following way:

“Telework is a work organization that implies remote working (distant from the company’s main premises *and* without the physical presence of any person in charge of controlling the teleworker’s job execution) and resorting to ICTs.”

Thus, we keep two main criteria to characterise telework: location and ICT usage. In our opinion, they constitute the only criteria related to the prefix ‘Tele’. Many other criteria are to be found in academic papers dealing with telework (see Table 1). It seems that they rather characterise the root ‘work’, or even the organisation type taken as a whole.

2.2 Defining the dependent variable: the manager-employee relationship

The manager-employee relationship interests us as an interpersonal relationship between two individuals taking place in a hierarchy. We could have investigated the literature dealing with the manager’s role but it usually favours only one point of view, the manager’s one, whereas we are interested in the *relationship* between superiors and subordinates. Thus, we have chosen to investigate the literature dealing with the notion of hierarchy. To define hierarchy, we refer to three authors.

Table 1 Criteria characterising telework

<i>'Tele' varies according to</i>	<i>'Work' varies according to</i>
Work location (Gray et al., 1993; Daniels et al., 2001; Coope and Panetier, 1998; D'Amours, 2001; Alix, 2001; Gauthier and Dorin, 1997) including focus on the absence of direct supervision (Alix, 2001; Gauthier and Dorin, 1997)	Knowledge intensity (Daniels et al., 2001)
ICT's usage (Gray et al., 1993; Daniels et al., 2001; Coope and Panetier, 1998; D'Amours, 2001; Alix, 2001; Gauthier and Dorin, 1997)	Intra-organisational contact (Daniels et al., 2001)
	Extra-organisational contact (Daniels et al., 2001)
	Legal status (salaried, self-employed) (Alix, 2001)
Telework also varies according to the organisation type:	
Type of structure (degree of decentralisation: Coope and Panetier, 1998; Gauthier and Dorin, 1997)	
Type of customer	
Type of product/ service	
Type of organisational culture	

Blau defines hierarchy as “a basic trait of organizations [...] through which control over operations is exercised” (Blau, 1972). A second definition by Jaques completes this first one by focusing on individuals rather than on the whole organisation: “managerial hierarchies (are) systems that allow organisations to hold people accountable for getting assigned work done” (Jaques, 1990). Actually, it is quite difficult to find definitions of hierarchy. Authors often consider hierarchy as given, something unavoidable or essential to organisations and treat it through its effects without defining what it is indeed. For instance, Tannenbaum, who used to work deeply on hierarchy, tackled hierarchy through its psychological effects on individuals and its usefulness. According to him, hierarchy is necessary to coordinate, to maintain order, to forward the leader's decisions to the bottom (Tannenbaum et al., 1974).

In this study, we will select four dimensions to characterise the manager-employee relationship stemming from our various readings on hierarchy:

- *Coordination*: organisation of cooperative collective actions to reach an expected result (Maggi, 1996)
- *Division of labour*: distribution of official duties among a number of positions (specialisation) and shape of the role structure (configuration) (Pugh et al., 1968)
- *Evaluation*: includes the various control modes exercised on n (activities and behaviour) so that n + 1 can measure and reward his performance.
- *Adjustment*: ways an individual adapts himself to the hierarchical environment he is working in (Tannenbaum, 1967).

Each of these dimensions includes various components (see Table 2 for details).

Table 2 Dimensions of the manager-employee relationship

<i>Main dimensions</i>	<i>Sub-dimensions</i>
Coordination (Maggi, 1996)	<p>Communication: modes, frequency, reasons in both top down and bottom up directions</p> <p>Manager's interventions in the subordinate's activities: frequency, reasons</p> <p>Team work organisation: frequency and reasons of meetings and of horizontal communication</p>
Division of Labour (Pugh et al., 1968)	<p>Autonomy: opportunity given by the manager to his subordinate "to try out his own ideas on the job" (Ouchi, 1978)</p> <p>Responsibility: activities for which an individual is 'concerned' and for which he is 'held accountable' (Vancil, 1978)</p> <p>Authority: formal right assigned to an individual, according to his rank or his job, to give orders to people under him in the hierarchy (Tannenbaum, 1967) and to decide about the use of organisational resources he has been confided (Vancil, 1978)</p>
Evaluation	<p>Evaluation criteria: nature of objectives (output/behaviour control in Ouchi, 1978), ways of defining them</p> <p>Evaluation organisation: frequency, persons involved, evaluation matter</p> <p>Evaluation consequences: basic remuneration, additional rewards, sanctions</p>
Adjustment (Tannenbaum, 1967)	<p>Attitudes toward the superior/the subordinate (participativeness, supportiveness, see Tannenbaum et al., 1974)</p> <p>Real practices (misuse of rules/tools, self-control behaviours, etc.)</p>

2.3 *Telework's influence on the manager-employee relationship in the literature*

Academic papers do not give any specific answer to the question of telework's influence on the manager-employee relationship. However, they often indirectly tackle this subject by describing the positive and negative effects of telework³. Therefore, we will propose a synthesis of literature about telework's positive and negative aspects, selecting only those relating to the manager-employee relationship. We have classified them according to their link with our four variables characterising the manager-employee relationship: impact on coordination, impact on division of labour, impact on evaluation and impact on adjustment (see Table 3). This enables us to link the dual vision of telework found in literature with our interest in the manager-employee relationship.

Table 3 Literature synthesis on telework's impact on the manager-employee relationship

	<i>Individual level</i>	<i>Organisational level</i>	
<i>Telework's positive aspects</i>	Impact on coordination		
	Impact on division of labour	More flexibility: autonomy, mobility, time management (Daniels et al., 2001; Coope and Panetier, 1998; Gauthier and Dorin, 1997)	Better knowledge on the job's content and volume (Gauthier and Dorin, 1997) More flexibility in skill's management and work planning (Coope and Panetier, 1998)
	Impact on evaluation		
	Impact on personal adjustment	More commitment (Coope and Panetier, 1998) More work efficiency (Gauthier and Dorin, 1997) More control over one's work (Coope and Panetier, 1998)	Increase in productivity (D'Amours, 2001: 10–30 %, Gauthier and Dorin, 1997: 30–40%; Daniels et al., 2001; Coope and Panetier, 1998) Less turnover and absenteeism (Gauthier and Dorin, 1997)
<i>Telework's negative aspects</i>	Impact on coordination	Social isolation (Daniels et al., 2001; D'Amours, 2001; Gauthier and Dorin, 1997) Professional isolation: lack of information, lack of support, less promotion opportunities (Daniels et al., 2001; D'Amours, 2001; Gauthier and Dorin, 1997)	Difficulty in motivating (Daniels et al., 2001) Difficulty in organising team work (D'Amours, 2001) Difficulty in transmitting knowledge (D'Amours, 2001) Weakened collective representation, difficulty in transmitting organisational culture (Daniels et al., 2001; Alix, 2001)
	Impact on division of labour		Necessity to develop new work planning (Daniels et al., 2001)
	Impact on evaluation	Perception of no regard from the manager (Daniels et al., 2001)	Management's loss of control (D'Amours, 2001; Alix, 2001; Gauthier and Dorin, 1997; Nilles et al., 1976; Olson, 1988) Difficulty in supervising (Daniels et al., 2001; Alix, 2001) Necessity to develop new performance measures (Daniels et al., 2001)
	Impact on personal adjustment	Less interest in work due to routinisation of tasks (Daniels et al., 2001; Gauthier and Dorin, 1997)	Loss of employee's fairness (D'Amours, 2001)

In our readings, there is only one direct hint at the manager-employee relationship being affected by telework. It concerns the manager's loss of control over the teleworkers.

Actually, telework's risks essentially affect the manager (Alix, 2001). Middle managers tend to be opposed to telework since they link it with a change in common management roles and practices, a reduced feedback from their subordinates, a reduced control over them and, as a consequence, a threat to their professional identity (Weisenfeld et al., 1999). What are these common management roles and practices that are questioned by telework?

“The supervisor's traditional roles consist in giving instructions to the workers, controlling the task's execution, controlling their behaviour and making sure the work has been performed. [...] Telework radically transforms the supervisor's role. The supervisor cannot exercise control as he used to do, due to distance. [...] The employee is out of reach, sight and hearing.” (D'Amours, 2001)

Therefore, a management based on close watch over working hours, breaking times, etc. is impossible as well as irrelevant (Gauthier and Dorin, 1997).

To come back to the four variables characterising the manager-employee relationship, managers of teleworkers should have skills focused on the following aspects:

Table 4 Expected skills from a teleworker's manager (based on D'Amours, 2001, Gauthier and Dorin, 1997, Tannenbaum et al., 1974)

	<i>Necessary skills and abilities</i>
Coordination	Maintaining vertical communication (sticking to regular contacts with teleworkers, informing about rules, procedures and methods) Fostering horizontal communication (facilitating communication between peers, having knowledge and improvements transmitted horizontally)
Division of labour	Defining clear responsibilities and developing job descriptions Adapting planning
Evaluation	Measurable objectives Evaluation based on results rather than on methods or behaviours
Adjustment	Ability to manage conflict Management style based on trust, participativeness and supportiveness ⁴

Authors interested in telework insist on those essential skills. However, it seems that *all* managers should have them, and not only managers of teleworkers. Therefore, rather than modifying the manager's skills, telework appears to intensify the main requirements concerning managerial skills.

“More and more managers tend to become motivators rather than controllers, but in a classical work context, this transformation is not compulsory. In a telework's context, it is.” (D'Amours, 2001)

Then, telework contributes to develop the manager's coaching role and leads to shift middle managers' role towards more monitoring and less close supervision.

3 Empirical results

3.1 Methodological choices

3.1.1 Objectives

Before beginning any empirical research, we have specified some requirements.

First, we want to study teleworkers who spend at least 50% of their working time away from their employers' main premises (at home, in a remote office or during travel). We favour one special type of telework: home-based telework. It is actually considered as the most virtual form of telework (Gauthier and Dorin, 1997), the most debated one being nevertheless promised to the strongest development (Alix, 2001).

Second, we plan to focus on fields such as sales of electronic components, management information systems, etc. In these fields which combine NICTs and services, the customer relationship is more complex as the product or service offered requires high skills and knowledge from the salesperson. Furthermore, telework practices should be more usual in such fields (Daniels et al., 2001).

Third, we intend to conduct case studies in an inductive approach to understand the influence of telework on the manager-employee relationship better and generate some propositions on our research question.

3.1.2 Design of the case study

This paper describes the preliminary results of a first case study. We have realised it in a French subsidiary of an American company manufacturing and selling electronic components. Telework has been applied in their sales departments since 1991. In this company, salespeople are home-based teleworkers. According to the director of the subsidiary, teleworkers spend 75% of their working time outside the company's main premises. Managers who have a hierarchical authority are not teleworkers even if they have the same technological equipment at home as this of teleworkers.

We have carried out semi-structured interviews lasting one hour on average of 15 persons including the 11 members of the distribution team (eight sales engineers, two managers, one assistant), one ex-sales engineer of the distribution team, one marketing teleworker, one human resources manager and the director of the French subsidiary. As salespeople are very good at selling ideas, we have resorted to other data collection types. We have analysed the following secondary sources:

- one teleworker's work contract with its appendices
- approximately 400 e-mails from one teleworker's e-box (including 300 e-mails from his manager) covering a period of nine months
- past schedules from one month and previous schedules for six months in the electronic agenda of one teleworker.

We have also collected data through non-participant observation of one teleworker of the team during two days. The first morning, we observed him working at home and during the journeys. We were not allowed to attend a meeting at his company in the afternoon. The second day, we went with him to a customer's place. During this observation, we tried to specify the type of telework he is engaged into (according to the variables

of Table 1). We paid high attention to the interactions occurring between the teleworker and his manager.

3.2 Results

3.2.1 Influence on coordination

In the context of telework, formal⁵ communication seems to decrease between managers and their subordinates. From our one-morning observation of home-based telework, we noticed that the home-based teleworker only sent two e-mails to his direct manager and gave him no phone calls (out of 16 e-mails sent and 17 phone calls made in this morning). His manager phoned him once and e-mailed him twice (out of 16 e-mails and 14 phone calls received in the morning).

When communication occurs between the manager and the employee, telework increases the possible bias in interpretations. One manager describes how he can get wrong perception of his salesmen morale through a simple phone call because of distance and time distortion. He does not have always the context to interpret correctly the communication signals he gets.

Information is distorted. In an e-mail or simply by phone, you can sometimes say things in the grip of emotion or disappointment. You wouldn't say such things if you were facing your manager every day. [...] What makes the great difference is visualization. It is so easier to communicate with people when you see them every day than when you call them by phone even five minutes a day. (one teleworker)

Information is naturally delayed. When you're face to face, you see problems very rapidly. When you're with teleworkers, the problem is evolving little by little till it is suddenly disclosed. [...] With telework, you always discover how things are going on. You can discover a problem in the late term. (one teleworkers' manager)

Reciprocally, teleworkers may interpret the absence of communication from their manager in a wrong way (Pearl, 1993). Therefore, telework increases required efforts so that efficient communication occurs. One of the managers we met complains that he has to put constant stress on communication because home-based teleworkers rarely take the initiative to communicate with their manager. He has to organise regular formal communication, for instance, through meetings. According to him, organising formal communication is hard since he has to convince teleworkers to participate in by showing them the benefits they could draw for their job.

When you disturb their autonomy, they grouse. For instance, I know that one of my guy doesn't have any customer visit and I want to make an appointment with him. I get negative answers to such requests so many times! One time, I remembered one telling me "I can't see you at that moment, I must meet my housekeeper." (one teleworkers' manager)

Coordination is all the more difficult when people are distant from each other.

You try to raise initiatives and, in a telework context, people will react with less success. For instance, you ask them to make out a list of all customers that could initiate papers in newspapers. If you explain them the thing face to face during a meeting, and if you ask them to e-mail their list for the next day, you've got 90% chance of receiving their list on the next morning. If you do the same thing by phoning them, one of them will be in a train and won't pick up your conversation correctly, another one will be in his car, another one will be at a customer's premises. They tell you "OK!" because they are polite and because it shortens the phone call. And here, you receive 50% of the expected lists. And if you just send an e-mail without calling them, then you receive only 10% or 20% of the lists. (one teleworkers' manager)

Teleworkers' reluctance to meetings may be related to the feeling of control on their activities these measures are often associated with (D'Amours, 2001).

We expected to find weakened communication overall. We have seen the impact of telework on formal communication between managers and employees. Actually, telework also leads to a loss of informal communication. Communication seems to be only motivated by work matters. 'Coffee break discussion' vanishes.

There is less informal communication. Thus, there are certainly much information we miss. (one teleworker) You communicate only by e-mail or by phone and the human dimension is missing. (one teleworker's manager)

We don't have backstage conversation. So, how do we recreate it? (another manager)

This phenomenon hints at the loss of rumours described by Gauthier and Dorin (1997), and the shift from a 'management by osmosis' to a 'management by aims'. Furthermore, it is intensified by the fact that most communications constitute a one-way information transmission rather than a bi-directional discussion. Most interviewees point out the fact that they reach answering machines instead of the team member they would have liked to speak directly to. Nevertheless, we unexpectedly observe higher communication between teleworkers and their colleagues than between teleworkers and their direct manager.

First, frequent communication occurs horizontally with team members or with colleagues from other teams. This is fostered by off-shore telework, salespeople being often led to work with the European sales located in the UK and the international sales located in the US. Thus, virtual teams emerge, gathering functional colleagues distant from each others who are frequently in touch for their daily activities.

Second, communication occurs vertically between a teleworker and his superiors located at higher levels than his direct manager. For instance, the teleworker we observed exchanged many more e-mails with his direct manager ($n + 1$) than with his manager's superior ($n + 2$) in one morning of home-based telework. In his company, one of the telework principles consists in an 'open-door policy' that includes a hierarchy escalation process.

We have got an interesting policy here which is called 'the open-door principle'. The door is opened for everybody. Whatever hierarchical level you have, you can easily bypass levels and go and see directly the person which interests you. (one teleworker)

By the way, e-mails facilitate communication with superiors by limiting the importance of social status (Romm et al., 1996), and contribute to reduce hierarchical distances (Rowe and Struck, 1999).

Third, communication in a telework context seems greater between the teleworker and his customers. As most interviewed teleworkers noticed, in home-based organisations, time traditionally spent at office is spent working at the customers' premises rather than at home (as we might have expected). Even at home, teleworker's phone calls and e-mails are intended for his customers (in one morning of home-based telework: 10 e-mails out of 16, 5 phone calls out of 17) or come from his customers (12 e-mails out of 16, 7 phone calls out of 14). Therefore, telework seems to put the salesperson on the edge of the company's frontier, making him communicate more frequently with people who do not belong to the company.

I would say that when you're not a teleworker, you tend to come more frequently at your office to know what's going on in the company. When you're working at home, we think more easily about the customer before thinking about the company. I think that telework leads salespeople to go and visit more often their customers. (team assistant)

Salespeople are the interface of the company for the customers. They have this responsibility. They must complete a program and all communications aimed at customers pass through them. [...] Thus, there is a great sense of responsibility, which, in my opinion, is increased by telework as they are physically kept away from the office. We tell them "you go out into the field". And, when you're in the real world, you're in front of the customer. (director of the subsidiary)

<i>Coordination</i>	<i>Influence of telework</i>
Communication	Weak formal communication with the manager/intensive with peers and customers Loss of informal communication
Manager's interventions in the subordinate's activities	Bias in perceptions on employee activities
Team work organisation	Difficulty in organising team work Emergence of virtual teams

3.2.2 *Influence on division of labour*

The loneliness of the home-based teleworker forces him to show autonomy for solving the problems he faces. For instance, when a customer's request arises, the teleworker has to answer it even if he needs some help from a colleague he cannot reach.

If a sales engineer is facing a problem right now, he can't knock at my door, he can't easily come and speak with a team's partner ... He is alone. So, he may make two or three phone calls but he is definitely the only one who has to solve the problem. (one manager)

D'Amours describes how telework develops initiative taking and independence in task completing.

"Some people claim that telework enabled them to develop their skills. In a traditional context, they would resort to their colleagues' or superiors' skills in case of problem. In a telework context, they usually have no other choice than looking by themselves for the answers to the questions raised." (D'Amours, 2001)

One interviewee explains that telework “leads to undertake more research to get the same piece of information [he] would have got informally if [he] would have been visible by colleagues or managers”. This fostered independence in problem solving is one side of autonomy that goes with telework. Another very concrete signal of this autonomy lies in the absence of working hours setting and, consequently, in the teleworker’s freedom to manage his schedule. When it comes to working hours, the work contract is an interesting document to analyse. The work contract of a teleworker we observed depicts working hours in the following terms:

“Given the high degree of initiative required by the confided job, the contract holder is not compelled to precise working hours but will have to devote enough time to complete his job properly.” (trans. by us)

In this contract, we notice a non-definition of working hours and a recurrence of notions such as initiative, responsibility and autonomy which are not defined either. Work time, as well as schedule setting, depends on the teleworker. In the observed team, teleworkers plan their weekly schedule. Even if some recurring events appear automatically in their agenda, they can decline any event they cannot (or don’t want to) attend. Nevertheless, observing a teleworker in activity makes us question this autonomy for schedule setting. This home-based teleworker is actually constantly solicited (through phone calls, e-mails etc.). He does not seem to have so much choice as far as his schedule is concerned. In fact, he seems to deal with problems and requests in their order of appearance, which leaves him time for administrative tasks only during lunch or in the late evening. Autonomy turns out to concern priority setting rather than schedule and working hours setting. Autonomy usually takes place in an emergency context for the observed teleworker.

A third side of autonomy consists in its closeness to responsibility concerns. Interviewees often say they feel more responsible in a telework context because they are given more autonomy. If they are asked to explain what this responsibility covers, they usually evoke reporting requirements and their nearly exclusive accountability on results. They are free on the means used to complete their work (what they call their autonomy), but, on the other hand, high responsibility is placed on results. Alix claims that teleworkers are made aware of their responsibilities since they are conscious that the company trusts them by giving them more autonomy (Alix, 2001). As a consequence, telework leads managers to clarify the performance expected from their teleworkers.

I used to be a non teleworker and, as a teleworker, my objectives are much more tactical. Today, I am told to have this volume of products at this customer, and that this other customer must sale y products in x weeks. It is completely measurable. It is very well defined. A date, a place, ... it is under control. (one teleworker)

More than in any other work context, results are the only element for which the teleworker is held accountable.

People are measured by reference to results and not to time. In people evaluation, we don’t care about the presence time for instance. If somebody can achieve a dazzling performance by working two hours a week, good for him! (one manager)

It has been quite difficult to study the influence of telework on authority, our last dimension of division of labour. The teleworkers we met actually have no hierarchical authority. Furthermore, results are contradictory concerning their authority in using

resources they were confided. Some interviewees highlight higher authority on this point compared with their former jobs, others less authority. What we observed about managers' authority is a difficulty for them to have their requests completed without any discussion from their subordinates.

To maintain good relationship with my sales engineers, I have to legitimate myself anytime, I must show them my usefulness as a manager, which is not something to be taken for granted. I also must make them proposals that will help them. [...] If I want to make an appointment with one of them, I must justify why, and how, and what advantage he will take of it. I must prove him the interest of this meeting for him. (one manager)

It is all the easiest for teleworkers to contest their manager's wills as they are used to by-passing hierarchical authority levels through the escalation process we have already mentioned.

<i>Division of labour</i>	<i>Influence of telework</i>
Autonomy: opportunity given by the manager to his subordinate "to try out his own ideas on the job" (Ouchi, 1978)	Autonomy in problem solving Autonomy in working hours and time management Priority setting
Responsibility: activities for which an individual is 'concerned' and for which he is 'held accountable' (Vancil, 1978)	Accountability almost exclusively focused on results
Authority: formal right assigned to an individual, according to his rank or his job, to give orders to people under him in the hierarchy (Tannenbaum, 1967) and to decide about the use of organisational resources he has been confided (Vancil, 1978)	Contradictory results

3.2.3 *Influence on evaluation*

Since telework does not enable control in terms of worked hours, most telework situations imply control of results.

We evaluate result only, what we call the output in our jargon. Basically, a member's contribution is measured only by his/her output and not by the means used to produce the output. (human resources manager)

Here again, we find the focus on results that is inherent to most telework contexts. A teleworker cannot be evaluated on his presence and acts; evaluation has rather to be based on the achievement of objectives (D'Amours, 2001; Coope and Panetier, 1998). Management by objectives seems nearly inevitable. In the observed company, it is applied in combination with a 360° evaluation process. The evaluation criteria and organisation do not seem different compared with what can be found in more traditional work contexts. Nevertheless, telework has two main consequences related to evaluation concerns.

First, it intensifies the importance of evaluation by customers. Given that results are most important and teleworkers seem to be more in touch with their customers than in any other sales work context, customer's evaluation is central, so that the customer may appear as the true manager.

Second, telework influences the employee's behaviour towards evaluation (rather than evaluation itself). For instance, one of the interviewee compares his present job with his former one as a non-teleworker and perceives that telework leads to more measurable objectives that enable him to undertake rapid actions. Another interviewee claims that telework leads the salesperson to be aware of the variable part of his wage as he is entirely responsible for his activity. Thus, he spends time in activities that are profitable for him. He will not devote time to activities that are not directly linked with his 'M.B.Os' [Management By Objectives], otherwise, he would have the feeling of wasting time and money.

I have tracked my MBOs because I wanted to reach my objectives. I used to identify what was missing to be aware of what I still had to complete and to organize myself. (one teleworker)

We undertake actions only if it is profitable for our job, only if the return on investment is interesting professionally speaking. (another teleworker)

We have a ratio of 65/35. The variable part of 35% leans on very tactical objectives in one trimester. You are free to act but knowing that if you don't achieve your objectives, you lose 35% of your wage ... There is no stronger motivation than this one, especially in sales activities. (another teleworker)

Therefore, in this company, telework has been implemented in combination with certain evaluation practices that are also used in other contexts but it seem appropriate to have a fair performance evaluation of a teleworker's results. If telework does not have any direct impact on evaluation, it contributes to develop a feeling of direct influence on the performance levers among teleworkers.

<i>Evaluation</i>	<i>Influence of telework</i>
Evaluation criteria: nature of objectives (output/behaviour control in Ouchi, 1978), ways of defining them	Extreme importance of results
Evaluation organisation: frequency, persons involved, evaluation matter	Various standardised reporting Customer's evaluation is central
Evaluation consequences: basic remuneration, additional rewards, sanctions	Fostered behaviours to maximise remuneration

3.2.4 Influence on adjustment

As telework deals with potential control over one's work, it naturally leads to adjustments from teleworkers and their superiors. We have already seen how managers, in the observed company, have difficulty in representing authority for teleworkers. Indeed, results, embodied by customers, are much more important than any hierarchical request (except if it is proved to be of great interest for better performance). We have observed adjustments through the use made of three 'tools': e-mails, electronic agenda and meetings. Each tool is tentatively used by the manager to have some transparency on the work completed by the teleworker.

Every Monday, I print the electronic agendas of the sales engineers. The team manager asks them to me to know where they are during the week. He wants to know whether they update their agenda correctly. Sales engineers are asked to make at least three or four customers' visits per week. The manager uses the agenda to see whether they do them or not. (team assistant)

Now, we look into agendas. It is not to track them, but rather to coach them and teach them to use this tool as something useful for them. We involve the assistant but it is not always sufficient. Sometimes, we open one agenda and we tell the sales engineer "You've got an appointment here, but did you allow you some time to make a debriefing, to write a report, to follow actions? What time do you plan for your journeys?" (one manager)

Thus, looking for transparency leads the managers to question the freedom of means officially taken for granted by teleworkers. Reciprocally, these tools are considered by teleworkers as part of their autonomy. Let us take two examples to highlight the different adjustments made on tools. One manager has implemented weekly team-meetings and complains about the fact that teleworkers either do not attend them, or complete personal tasks (e-mails, phone calls) when a team member presents his own customers' profiles. To fight against this, he has implemented a policy of one euro paid for every five minutes of delay! Although never enforced, this measure is said to be quite efficient as a warning, a threatening signal. The second example deals with the use of the electronic agenda. On the one hand, managers would like this tool to be a management and control tool of activities. They actually ask teleworkers to fill it correctly and e-mail them the past weekly schedule with all customers' visits made. On the other hand, teleworkers do not fill their agenda systematically. They use it not to forget important things to do but do not write all their activities in it. It is also usual to find three different activities at the same time in a schedule, the teleworker being the only one to know which one of the three really occurred.

<i>Adjustment</i>	<i>Influence of telework</i>
Attitudes towards the superior / the subordinate (participativeness, supportiveness, see Tannenbaum et al., 1974)	Managers: Necessity to develop means to show their value-added to teleworkers and superiors Teleworkers: Reluctance to come back to the company's premises and participate in meetings
Real practices (misuse of rules / tools, self control behaviours, etc.)	Managers: Tentative to use tools as management and control tools Teleworkers: Tools used to maintain one's autonomy over work

4 Conclusion

This paper proposes an empirical contribution to the large field of studies dealing with the impact of telework. The impact has been analysed through a quite unusual point of view: the manager-employee relationship. This relationship has been divided into four dimensions stemming from a personal literature review which focuses on psycho-sociological and contingent references from academic literature in management. This point of view leads to empirical results that are intended for various research fields including management control, marketing, and human resources.

The implications of our research can be summed up by two major influences of telework. First, telework increases the ambiguous position of salespeople at the edge of the organisation. It fosters autonomy and leads them to self-management. Second, the counterpart of this statement is the necessity for teleworker's managers to redefine their role towards subordinates. If managers stick to controlling the teleworker, they are assured of failure. In a telework context, their role has to shift towards more coaching.

One of the difficulties we faced in the case study has been to identify the impact of telework among a sales team. Actually, telework is so appropriate to the sales function that it is hard to isolate what changes it can bring in this kind of population. Overall, it has been difficult to link the characteristics of the observed manager-employee relationships to the particular impact of telework. The impact we have depicted often stems from comparisons made by interviewees with former jobs as non-teleworkers. It is insufficient to draw general statements on telework's influence on the manager-employee relationship. Therefore, this case study is the first part of an overall research work that will include a second comparative case study in a non-teleworking sales team dealing with the same field of activity. This overall research work aims at questioning the possibility of a complete autonomy of the individual in an organisation, what brings us back to the question of coordination and control. It also tackles the highly topical interest for the so-called virtual organisation.

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Notes

¹Source: empirica (ECATT 1999) cf. www.ecatt.com, in 'e-Work 2000'.

²ICT: Information and Communication Technology. NICT: New Information and Communication Technology.

³or the advantages/disadvantages, or the expectations/risks.

⁴Participativeness: manager's tendency to make the employee participate in decision making relating to his work.

Supportiveness: Manager's tendency to support the employee (accessibility, displaying trust and consideration) (Tannenbaum et al., 1974, chap. 3)

⁵Formal: which takes place in the official organisational structure/informal: which deals with social practices, individual games and the use made of formal systems (from Löning, 1994).