DISCRETIONARY POWER OF PROJECT MANAGERS IN THE KNOWLEDGE INTENSIVE FIRMS AND GENDER ISSUES

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RÉSUMÉ FRANÇAIS

On compte peu de femmes chez les professionnels qualifiés des services technologiques aux entreprises, métiers de l'informatique, ni en Europe ni en Amérique. Le mode d'organisation du travail qu'on y pratique est celui de la gestion par projets, qui a de multiples conséquences en termes de conditions de travail : l'importance des longues heures et la résistance à la réduction du temps de travail, les heures supplémentaires non payées, la très grande flexibilité exigée des employés, les aménagements d'heure ou de lieu de travail sujets à négociation avec le chef de projet, selon des critères arbitraires. Les femmes sont celles que défavorise un tel système, car on observe un lien entre la flexibilité à cet égard et le fait d'avoir la responsabilité principale des enfants.

RÉSUMÉ ANGLAIS

There are scarce women among the highly qualified professionals in business-to-business information & communication technologies (ICT) services, either in Europe or in North America. Work is organized and managed by projects and that has many consequences: long working hours, fierce resistance to reduction in working time, unpaid overtime, high employees' flexibility requirements (of the management), and flexible time or working at home tightly negotiated with the project's manager, who can act on arbitrary grounds. Women are particularly disadvantaged in such a system, as there is a strong relation between the flexibility one can offer and the fact of assuming the main responsibility for children, if so.

Keywords: Knowledge-Intensive Firms (KIFs), Gender, New Organizational Forms, HR Management Practices, Professional Women

Mots clefs: entreprises du savoir, genre, nouvelles formes organisationnelles, pratiques de gestion des ressources humaines, femmes professionnelles

Classification JEL: M12 Personnel Management ou M13 New Firms-Start up

MANAGERIAL IMPLICATIONS

Our research indicates that to integrate more women in knowledge-intensive firms (KIFs) and thus to have a more diversified workforce, major change is necessary. First of all, the organization of work should be reconsidered. With a quite young workforce, managers are asked to take in account the private duties of their employees. From this standpoint, the implementation of work-life balance policies is necessary. Then, we underline the limits of a management based on informal rules and on case by case negotiation. The objective is not making companies too rigid by an excess of bureaucratic rules, nevertheless, according to our respondents, certain rules are necessary to preserve within the company a feeling of organizational justice and to guarantee an equitable treatment for employees.

INTRODUCTION

Firms of the so-called "new economy" such as the business-to-business (B2B) technology services companies (B2BTSC), information and communication technologies (ICT), multimedia and computing companies which employ highly qualified workers are the subject of a growing number of studies in North America (Barley & Kunda 2004; DeFillippi 2003; Paré, Tremblay & Lalonde 2001a; Robertson & Swan 2003; Tremblay 2003) as in Europe (Davies & Mathieu 2005; Fondeur & Sauviat 2002; Gerd 2003; Perrons 2003; Walby, Gottfried, Gottschall & Osawa, 2007). Some authors call them « knowledge-intensive firms or companies » (Alvesson, 1995; Kunda, 1992). The knowledge intensive firms (KIFs) are either product or service oriented and characterized by high intellectual added value and knowledge content. The distinction between KIFs and less intensive knowledge firms is not self-evident, but we could say that this category of firms stands out as a type of workplace where intellectual activity and highly qualified employees are predominant (Alvesson, 1995 & 2000). These firms feature several new specific organizational characteristics that distinguish them from traditional bureaucracies: a flat organizational structure, a work organization by project, a more decentralized decision making process and a workforce with great autonomy (Child & McGrath, 2001; Courpasson, 2000; Legault, 2005).

These new organizational forms could offer new opportunities for professional women. Some authors (Fondas, 1996; Eaton, 1999) argue that, these firms could be more gender-neutral. In spite of this optimistic stance, studies show a widespread decline of the female proportion in this economic sector; in North America as well as in Europe, women are significantly under-represented in the B2B technological services companies (B2BTSC) that hire highly skilled professionals (Legault 2005; Igbaria, Parasuramen & Greenhaus, 1997; Panteli, Stack, Atkinson & Ramsay, 1999; Valenduc et al., 2004, p. 14-20).

According to Habtu (2003), despite women accounting for 46.9% of the working population in Canada in 2001, they represented only 27% of ICT qualified workers. Studies still show how the ICT sector stands apart from other knowledge-intensive sectors; for instance, women accounted for only 17.7% of the software engineers (Habtu, 2003, quoted in OECD, 2004, p. 257). In comparison, the highly qualified women are especially well represented in health care, and social services (76.5% of the highly qualified workforce in 2002) in social sciences, teaching and the public administration (66.6% of highly qualified workforce) and arts and culture (52.5% of highly qualified workforce). In Europe, women still remain under-represented in the ICT sector in several countries (Valenduc et al., 2004, pp.14-20). While women are under-represented in the ICT employment sector, they are even more severely under-represented in some ICT occupations, making up only 15 % of ICT workers across the European Union as a whole in 1999, 17 % of ICT professionals in 2001 (Valenduc et al., 2004, pp. 18-19). If women are making progress into qualified employment as a whole, occupational segregation still persists.

Our study, based on empirical qualitative data, investigates the specific situation of professional women in the ICT industry in Montreal (Québec, Canada). This research has been launched following a request from TECHNOCompétences1, a joint committee funded by ICT industry partners and by Emploi-Québec to support and promote the development of labour and employment in the ICT industry, including multimedia, software, telecommunications, manufacturers and computer services.

The partners of TECHNOCompétences were confronted with a chronic shortage of skills and recruitment difficulties. This issue could have been addressed by recruiting a higher number of qualified women who are largely under-represented in this workforce but… was not. In such a context, the objectives of our research were to identify the reasons of this low recruitment of women, leading to low representation of women in the ICT industry. As an

outcome of our inquiry, the work-life balance practices and policies stand out as an important factor of the absence of women. We propose solutions to increase the attractive power of this sector for women. It could be a first step in a process of planned change to introduce more diversity in this sector. Our results highlight the importance of the gender roles on organizational behavior and stress that this has stronger explanatory power in the under-representation of women than gender differences.

The purpose of this article is to overview how some organizational characteristics such as informal work policies and informal organization of work contribute to exclude women out of these workplaces. We particularly highlight the organization by project which is a main feature of KIFs and we stress the discretionary power exerted by the project managers in KIFs on their human resources, particularly with regards to balancing work and private life. Through these topics, we can understand why, despite a possible will to open these firms to women, it needs an in-depth change which exceeds the simple acknowledgement of so-called gender differences to affect the ways organizations can reproduce gender roles and their impacts on women's professional lives.

In order to address these issues, the paper is structured as follows. First, we briefly present our method, our sample of firms and the respondents' characteristics. Next, we set out the work organisation in multifunctional project teams which is widespread in the KIFs. We explore the consequences of this work organisation in terms of overtime and its impact on the employees. Then, as an illustration of informality in these workplaces, we explain the management of overtime that is the main issue of the negotiation between the project manager and each employee and an important source of power for the project manager. Lastly, we examine the effects of the project manager's discretionary power on his employees and particularly on women. Our analysis enables us to emphasize the main organizational characteristics and some features of this labor market of highly qualified professionals which explain the under

representation of women. We conclude with a discussion concerning these new organizational contexts and the future women could expect in such workplaces.

OUR SAMPLE AND METHOD

We have conducted a qualitative study in seven Canadian companies based in Montreal that employ highly qualified people. Five of them are small loosely structured B2B technology services companies acting in multimedia, information technology (IT) business services and optics-photonics; which make up the core sample. Two big bureaucracies stand as the comparative sample (corporate real-estate management services and insurance) in which we interviewed professionals from the IT department. We have chosen them in order to compare conditions relating to the same professions in different organizational contexts. Our objective here is to study how both men and women, exercising the same profession but in different organizational contexts, negotiated their arrangements to balance work and private life and to compare the results of their negotiations.

We conducted 88 extensive semi-structured individual interviews with women and men in the same positions: Managers, Computer Analysts, Programmer-Analysts, Project Managers, System Analysts, System Architects, Testing Engineers, Software Designers, Optical Engineers, Process Engineers, Operating Engineers, Optics-Photonics Researchers and IT Engineers. The data were collected between January 2001 and April 2002.

In each company, we interviewed the Human Resources (HR) manager, one or two supervisors and ten to twelve employees, ensuring similar numbers of women (45) and men (43) in order to compare discourses and their situation at work concerning the work and life balance (WLB). Our goal is not to reach a representative sample of this specific population of workers where women are poorly represented. On the contrary, by comparing nearly even

samples of men and women's discourses, we set down conditions to emphasize specific issues, like the rationale and strategies toward WLB, that tend to differ between men and women in the literature (Legault & Chasserio, 2003).

In our sample of 88 respondents, the average age for women (n=45) was 35.19 years old and 35.21 for men (n=43). We counted an average of 1.2 children per woman and 1.32 children per man. Sixteen women out of 45 (35.5%) and 13 men out of 43 (30%) were childless. Among all women, 39 were married or had a partner, 2 were single, 2 were divorced and one widowed. Among men, we counted 37 married men, 2 single men and 3 were divorced.

A proportion of 59.5% of our respondents had a university degree and 26% had a college degree. The average income was around 60 957$ CAD; these professionals have considerably higher wages than the general population with the same level of education (between 50 and 100 % extra).

For information, we indicate the proportion of women in our surveyed organizations.

Table 1

We do not claim to have a statistically representative sample; yet, it is interesting to observe that our Canadian companies' staffs were composed with the same low proportion of women as the European and US studies quoted earlier. Nevertheless, we have to outline the important differences in the women's representation among the seven sites (shown above).

Professionals were chosen randomly among the lists of professionals provided by the human resources departments or by the upper management. The semi-structured interviews lasted one and a quarter to two and a half hours. They were held in closed offices at their workplaces, and everyone interviewed received a guarantee of anonymity and confidentiality signed by the research team members that mentioned their commitment to the *Commission d'accès à l'information* [Quebec Access to Information Commission].

We asked people about their job contents and job requirements, the rules of advancement, HR management practices, especially for balancing private life and work, and their problems, strategies and professional decisions in this regard.

A MAIN CHARACTERISTIC: THE ORGANIZATION OF WORK BY PROJECT

To fully understand the specific organizational context of the KIFs, we must first describe the organisation of work within the firms we surveyed. In the five B2BTSCs as well as in the IT department of both bureaucracies, we noticed the same work organisation in multifunctional project teams. These project teams are relatively autonomous, temporary and created to meet the customers' needs. This work organisation by project is implemented in all the seven sites. Indeed, work practices within the IT departments of the two surveyed bureaucracies are more similar to those of small loosely structured B2B firms than to the Weberian bureaucratic ideal-type (Weber, 1921, p. 28-29, 35, 48-52, 55-57); more, their work practices are different from other departments within their own bureaucratic structure.

We noticed that the IT departments of these bureaucracies are considered by the corporate management as autonomous business units offering their services to the rest of the company with great expectations for optimal productivity. In fact, they are virtually in competition with external ICT firms that can offer the same services; our respondents are well-aware of this situation and often refer to it. As explained by the managers interviewed, the corporate management could very likely decide to outsource the ICT function, close its own IT department and transfer its employees to this external firm if the operating cost is lower. That could explain to some extent the similarity of work organisation between bureaucracies and smaller B2BTSC.

The work teams that we observed in all the seven sites are temporary, thus created for the

duration of the project, for example the time of the software development or the creation of a website. Afterwards, when the project has been completed, the team is dismantled and new teams with new managers are created for new projects and people move to them depending on their skills (the same practice have been observed by Alvesson, 1995; Anderson-Gough, Grey & Robson, 2000; Berrebi-Hoffmann, 2002; DeFillippi, 2003; Kunda, 1992). However, even after delivery - after software has been installed for example- a few employees provide customer support, sometimes in addition to doing their development work. They must remain available, on call day and night to deal with any problems that might arise. Some employees compare their job requirements to those of the medical profession. They must remain available anytime, nights and weekends, linked to a pager or cell phone in case of emergency.

One employee summed up his professional obligations:

> This weekend was father's day, and I had excellent theatre tickets. But, by noon, Saturday, someone called me to say… "We have a problem…" So I went to the office at 4 PM, Saturday and I missed the play... My wife is used to it. I am like a doctor who must go save lives…..so either you are selfish and you want him to get a new job, or you understand that he goes to save lives… For me it is the same, I go to save millions for someone (respondent laughs a little).

In such a context, management expects absolute willingness to respond anytime to the customers' demands. The respondents' speech is eloquent: In these firms, flexibility is employees'. Working conditions are not conducive to balancing work and private life, particularly when it comes to reducing one's working hours, which will be highlighted when we examine overtime and the inability to reduce working hours.

REQUIRED OVERTIME

Long work days, a phenomenon well described among professionals (for instance lawyers or accountants, as in Bailyn, 1993; Evetts, 1998; Simpson, 1998; Johnson, Lero & Rooney,

2001), are largely widespread in KIFs (Alvesson, 2000; Grugulis, Dundon & Wilkinson, 2000; Kunda, 1992; Perlow, 1999; Singh & Vinnicombe, 2000).

In our KIFs, interviews reveal several specific factors that put pressure on people to spend extra hours at work: organisation of work on a project basis, presented earlier; strong competition from other firms; tight deadlines; changes in the original order brought in by customers during the project; shortage of skilled human resources affected to each project; unforeseen technical problems and limited budgets to deliver the products on time to very demanding customers, partly due to fierce competition.

These particular working conditions explain the noticeable widespread practice of long working hours and overtime. The project managers of our sample stay after hours and can overlook those who work overtime; it is also a way to set an example for their employees. By their after hours presence, they demonstrate the sort of commitment they are expecting (also noticed by Perlow, 1998).

Here, for instance, a female project manager comments:

> Personally, I expect an employee to give 100% at work… with regard to productivity. I want him/her to reach his/her full potential in his/her work, develop new skills … […] he/she must be personally satisfied at work, but must give the best of himself/herself. We are nevertheless professionals; we are well paid, so I expect my people to give work their all … I don't require people to spend long hours at work…we say crazy working hours…; except at the end of projects […] Near the project deadline, we sometimes require some extra… to work hard,… […] So I expect, when people are here, that they work hard and work well (ASF-3-3-11-7)

The project manager and corporate management expect dedication, more than commitment of employees (Legault & Chasserio, 2003). Employees are encouraged to put in "however long it takes" rather than a set amount of time. They should be available and flexible to put in extra hours when their supervisors ask, even if their hours exceed the normal workday or

workweek. Employees know this tacit rule as shown in our interviews. Our subjects used expressions such as "be available 24 hours a day", "work 24 hours a day", "don't count your hours, putting on a lot without expecting anything in return", "everyone makes sacrifices together to do overtime", "available day and night", "always say yes, agree to do anything" and "available at ridiculous hours" to describe their job.

In our surveyed organizations, the official working time per week differs among firms: 35 hours (real estate services bureaucracy and a B2BTSC), 37.5 hours (insurances bureaucracy and two B2BTSCs) and 40 hours (two B2BTSCs). Among our respondents (n=88), 49% reported working more than 40 hours per week, 40% of women (n=45) and 58% of men (n=43). 13.6% of respondents (n=88) reported working more than 50 hours per week (6.6% of women and 20% of men). Some of them claimed having worked 80 hours per week for three months, without any compensation for overtime.

In both the B2BTSC and the IT departments of the two bureaucracies, employees put in overtime hours at home in the evening or on weekends. Among our respondents, 14 out of 45 women and 27 out of 43 men bring work at home in the evening, after the workday, as this female respondent explains:

> When it happened recently, I got a computer and took it home with me. That way I can work at home. It doesn't really bother my family. I wait until the children are in bed. (AF-14-7-22-5)

Working overtime, whether at the office or at home, is a form of commitment behavior, and one that is very advantageous for the employer when it is unpaid (Legault & Chasserio, 2003).

We can remark that the women of our study work less in overtime compared to their male colleagues. We can also notice than among the 21 women who work overtime, 12 are childless. For men, it's different. Indeed, among the 35 men who work in overtime, 23 have

children.

It's interesting to note that the group of women who work overtime (over 40 hours per week) is mainly composed of childless women: we find only 9 mothers among 21 women working overtime. Among men, we find a different situation: 23 fathers among 35 men working overtime. The number of children plays a role among men, though less when they have only one child (table 2).

Table 2

Interesting too is the children's age group breakdown of professionals who are parents (9 women, 23 men) and work overtime. Without any great surprise, we found the biggest difference between men and women among the parents of young children (0-5-year-old), where women are less eager to work overtime than men (table 3).

Table 3

If we analyse separately professionals working more than 40 hours weekly and less than 50, on the first hand, and then professionals working 50 hours or more weekly, on the other hand, we have the following results. In the majority of cases, childless women are those who are likely to work more than 40 hours weekly but less than 50 (11 against 7); men behave differently (8 childless men, 18 fathers) (table 4).

Table 4

Difference among men and women who are parents are bigger when we consider separately professionals working 50 hours weekly and more, where we count only 2 mothers, whereas we count 9 fathers. However, number of young children (i.e. younger than school age) is inversely proportional to overtime among mothers.

Table 5 shows the portrait of men and women, parents or not, consenting to work over 50 hours weekly. Among 3 women consenting to this, two are RH directors and one is project manager.

Table 5

Our numbers are very small, and we don't claim any statistical representation here; they are given as an illustration. These differences can be explained by women still being primarily responsible for childcare in our sample (table 6; as developed in the master thesis and an article from Benoît, 2005).

Table 6

The traditional gendered division of housework and domestic labour is one of the cultural obstacles in the path of professional women. Men and women alike must check their home life at the door and demonstrate their commitment to the company, but the gendered division of domestic labor favors men in this regard (Benoît, 2005; Simpson, 1998).

KEY ROLE OF THE PROJECT MANAGER

Main studies of work in KIFs set out their flat and decentralized structure (Alvesson, 1995; Kunda, 1992, Perlow, 1998, Pina e Cunha, 2002). They also highlight as a main characteristic the informality and ad hoc practices in the management of work relations. In the same way, in our surveyed companies, corporate management prefers informal practices, as illustrated by this comment of a project manager:

> We aren't saddled with the heavy seniority, the heavy bureaucracy — we don't have that at all, not
> at all. But we do have a certain complexity, because things aren't always clear […]. We don't have
> an organization chart pinned up on the wall, with squares, and everyone knows exactly in which
> square …There's a gray area in everyone's job descriptions, just as there's a gray area in the
> organization chart. (DSF-13-1-23-8)

We notice that this informal environment leads to a decentralization of decision making to people; it's a mean to gain flexibility and efficiency. A direct consequence is empowerment of working teams and workers, and some scholars assume that it can increase the organizational commitment and innovative skills of workers (Child & McGrath, 2001).

Decentralization and informality in decision-making process create a specific and favourable context for an actor in particular: the project manager, as we will later see. The project manager is most often the sole link between corporate management and employees. According to corporate management in our firms, the project manager is considered as a coordinator who leads and orients his team to meet corporate objectives. The seven sites observed fit the classical definition of project work organisation (Hobday, 2000, p. 875-876): the project team is the basic unit where all the usual managerial functions are coordinated, whereas the same functions are separated and specialized in a bureaucratic context (production, research and development, marketing, human resources, finance, etc.). The project manager there controls all of these dimensions. In fact, he must attain and reconcile varied objectives and, among them, mobilize his team members. However, despite appearances and discourses, the project manager represents corporate management and must watch and control his people (Elangovan & Lin Xie, 2000; Hales, 2002) like in traditional organizations (Hales, 2002).

In the surveyed organizations, we noticed the weakness of the HR departments and lack in leadership pertaining as much to the application of HR policies as to the development of balancing work and private life policies. At the time of our study, policies concerning balancing work and private life were not a top priority, according to our interviews; none of them had WLB (work life balance) policies nor intended to set up some. Furthermore, the HR people never deal with or put guidelines forward regarding the management of people, leaving the issue to project managers.

In addition, in the four organizations with a more structured HR department and some official HR policies (two of the B2BTSC and both bureaucracies), HR people didn't interfere in the relationship between the project manager and his or her employee. At best, they could advise the project manager. More interesting, even when official rules exist concerning part-time,

flextime or leaves for personal reasons, for example, the employee needs to have the authorization of his/her project manager to benefit from these policies. The HR department has no decision-making power while project managers have a large discretionary power (Legault, 2004; Legault, 2005).

The corporate management entrusts the project managers with an important responsibility. They must reach high productivity objectives while, at the same time, managing their teams on their own. The project managers can't count on any help so they spontaneously develop ad hoc practices to mobilize and orient their employees. One of these practices is the management of employee's demands for work/life arrangements. Due to the lack of official policies and rules, the project managers have total discretionary authority and autonomy to decide who can obtain an informal arrangement and under what conditions they consent to this arrangement.

Indeed, in our seven sites, the project manager with his/her discretionary authority could unilaterally consent to or refuse arrangements based on his/her own standards. Most often, these negotiated arrangements allow employees to temporarily or occasionally decrease their work hours or to spread them out differently during the week. It can also lead to occasional working at home, as we have demonstrated in a previous analysis of the same data (Chasserio & Legault, 2005). Finally, arrangements regarding working hours or place of work become a HR management tool to punish or to reward people for their commitment.

As an illustration of the informal context, we will present in the following section how project managers dealt with the informal compensation of these many extra hours without any HR managers' guidelines.

OVERTIME AS A BARGAINING TOOL IN THE CASE BY CASE NEGOTIATION

In four surveyed firms (one bureaucracy - the corporate real estate management service company - and three B2BTSCs), there is no official compensation policy for overtime. The extra hours worked are not paid and are unofficially counted by the project manager and the employee to be taken in days off at a later date. But the employee doesn't have any guarantee of making up all his or her extra hours.

Indeed, these unpaid extra hours are the employee's bargaining tool to negotiate arrangements to balance work and private life. In order to demand arrangements, it is understood that you have to have some accumulated extra hours in the unofficial time bank. However, the employee is not guaranteed to get anything… it depends on his or her capacity to negotiate with his/her project manager. In order to obtain informal arrangements about their schedule, workplace or absences, he or she must first prove his/her dedication, his/her commitment to the project manager. The professional should show his/her availability and flexibility and accept working overtime. The paradox is as follows: to be able to balance work and private life with an unofficial arrangement, employees must first work overtime and consequently relinquish certain family and personal obligations in order to gain this form of advantage. Moreover, these extra hours are most often left unpaid or unrewarded. In other words, these professionals have to work much in overtime to benefit WLB measures (Chasserio & Legault, 2005).

In one of the bureaucracies (the ICT department of insurance company) and in two B2BTSCs, the situation is different. Indeed, these three organizations have a relatively well structured HR department with some HR policies, among others concerning extra hours compensation. In such cases, the project manager counts extra hours in an official time bank and some of these hours are compensated at a higher rate, although just a small part of those are (Legault

& Chasserio, 2003).

We could believe that the presence of a structured HR department and the official policies concerning extra hours or part time work for example, would protect employees against the discretionary authority of the project manager. However, our findings show a different reality. Despite the presence of a HR department and official policies, the project manager still has complete autonomy to consent to or to refuse even the official days off and arrangements about working hours or workplace.

For example, the IT department of the insurance company offers interesting policies such as the compensation of extra hours and the possibility of part-time work. However, the employee who wants to benefit from these policies first needs to have the authorisation of his project manager. As in other firms, the project manager holds tremendous discretionary authority in that matter as we can see with this female project manager:

> It's not been long since all employees can benefit from the part-time policy… But it is always according to the manager/supervisor discretion. We (project manager) can always refuse because we are in a project with tight schedules or near the delivery date… (ASF-3-3-11-7)

The project manager is keener to consent to arrangements to employees who are more flexible and open to overtime. Here is the eloquent comment of this male project manager:

> Here we trust employees, above all in my team...; meaning that… when we demand, as directors/ project manager, overtime, the employee always agrees. So when he/she asks for a day off or something like that, we (project manager) don't have any reason to refuse. But, if each time we (project manager) ask for overtime, the employee always has good reason to refuse… then when this person asks for a day off, so…. [INT You are not inclined to consent to him/her? [...] that's it, yes, it's a "give and take". When the employee is responsible, he/she has good productivity, we (project manager) don't hesitate to grant a day off to him without necessarily officially counting and everything like that (STSH-10-7-7-2)

Despite the expression « give and take », in this negotiation, neither the result of exchange

(the compensated hours) nor the power of the both parties is symmetrical. For example the following extract shows how the employee cannot have any control on his/her work time arrangements and particularly on his/her extra hours. One project manager expresses his standards to decide about an arrangement:

> First the workload, then the reason given for the day off. It must be a valid reason… For example, a person has a task, and he/she has an appointment at the bank for a loan… I said "that can be delayed, it is not really important" If it was with a doctor or with a dentist, that's OK. But when it's trivialities, when it can be delayed, in the past, I have refused such requests (MSH-1-3-21-8).

Most of the surveyed employees have the feeling of giving much more extra hours compared to what they demand and obtain in case of a time arrangement. So employees never really get back all their unpaid extra hours. Arrangements are seldom consented to without preliminary "banking" of extra hours. Moreover, arrangements are consented to like favors and rewards in return for flexibility and abnegation.

CONSEQUENCES OF CASE BY CASE ARRANGEMENTS IN AN INFORMAL CONTEXT

This case by case arrangement negotiation process between project managers and employees admittedly sometimes allows for balancing work and private life. However discretionary power can entail iniquity and arbitrary decision-making. In such a context, we can notice an individualization of working conditions stemming from fickle rules.

Iniquity in Employees' Treatment

In their study on Canadian civil servants, Lee, Duxbury, Higgins & Mills (1992) emphasize that some mothers felt uncomfortable with the absence of official policies concerning balancing work and private life and the project manager discretionary authority concerning case by case arrangements. They were stressing their frustration regarding this uncontrollable situation and iniquity.

In the same way, 21 women and 10 men among our respondents clearly indicated that they would prefer to have official policies concerning balancing work and private life in their organisation in order to be protected against the project manager's discretionary power. As mentioned by one of our respondents, arrangements seem to be arbitrarily consented to. According to her, an official policy would guarantee equality between employees:

> I would prefer a written policy… Because… I feel that sometimes case by case can be really interesting. For example, one can say to you: « you are hired for 37 hours and half but you'll work only 35 ». But What is it good for? I prefer when it's written. The sick day leaves, I believe…last year, when I was hired, it was 5 official days, it was new because before it depended (she takes a little voice to imitate someone, a manager). « I will pay, then finally I won't pay », it always depended. And that, I get worked up about that because it's always if you are « nice ». If what? To what conditions? If the person for whom you work likes you, that's OK. If this person doesn't like you, too bad for you! (CGF-3-6-24-7)

In such cases, arrangements are consented to depending on the project manager's arbitrary appraisal standards, unwritten, not explained. Because they are informal, these standards cannot be officially contested. This individualized HR management multiplies delicate situations and creates amongst employees a deep feeling of iniquity and unfairness. However, studies show that equity is a key factor in trusting relationships between an employee and his project manager (Whitener, Brodt, Korsgaard & Werner, 1998). This situation is therefore detrimental to the development of trust between actors whereas trust is necessary to cooperation and commitment, key elements for the organizational performance (Paré, Tremblay & Lalonde, 2001a).

Moreover, the organization by projects implies frequent changes of project managers. It means that an employee has a new supervisor at each project. So he/she should build a new relationship with each project. And nothing guarantees that the previous arrangements with the latest project manager will still be effective with the following manager.

So we can assume that in these informal environments in the small ICT businesses, the project managers are key actors. They have a huge power over their professionals.

Performance Appraisal Based on Presenteeism

Long working hours are one of the characteristics of the work organization by project in IT departments, as both our study and earlier ones show (Perlow, 1998; von Hellens, Nielsen & Thrauth, 2001). Long working hours are, for the project managers we studied, the employee commitment indicator (our respondents are not different in this than many employees of the same sector (Singh & Vinnicombe, 2000). The project manager uses it to measure commitment and to determine who gets rewarded with a promotion. Commitment is a primary appraisal factor (Legault & Chasserio, 2003). That's why not only is cutting back on working hours very much frowned upon, it also compromises career advancement; that is the general opinion throughout all the companies in our sample. Anyone who asks for a reorganization of hours or place of work (working at home) or for other measures to help balancing work and family life is often considered to be less committed, and therefore less of a candidate for promotion.

Women are more particularly affected. Indeed women request more arrangements to balance work and private life than men do because, as we have said earlier, they are primarily in charge of the family and children due to the traditional gendered division of work (Legault & Chasserio, 2003; see also Benoît, 2005, for a Canadian literature review and an analysis of the same database). As other studies on KIFs have reported, a woman who asks to reorganise her working hours loses a great deal in visibility, networking and exposure to a variety of challenges (Evetts, 1998; Gerson & Jacobs, 2001; Perlow, 1998; Simpson, 1998). In our sample, women's career advancement is threatened if they have asked for some reorganization of hours or place of work, because their project manager can determine that they are less committed to their job than their male colleagues. One of the female project

managers we interviewed shared the following thoughts, while a male one shared the second set of thoughts:

> [Translation] When I have people on a four-day workweek, I think they're not ambitious [...]! [...] We have so much work, we push our people, the projects aren't easy, you know… Yet there are people who work four days a week… like the saying goes, it's a bad fit [...] The company does offer it, I'm happy for those people, but on the other hand, you look at them and you might not feel like having them on your team. When you have a really urgent project … (ASF-3-3-11-7-01-19-3)

> [Translation] It's part of the game. Yeah. Yeah. A consultant who does 9 to 5, I'm convinced that he won't be a consultant for long. Because there are all types of situations that require our availability…There can be a last–minute situation that makes it necessary to, well, you know…I'll give you an example; in my division we had a product to make in two days, so there was a chance we had to work both nights until midnight to be able to deliver. So that's a lot…You have to be flexible in these cases. Yeah. (CGSH-10-4-12-10-01-19-3)

To be visible means to adopt some behaviour such as to accept to do overtime, to be always available, and to be present on the most demanding projects without ever complaining. Many studies show the importance of impression management, that is, using the most visible strategies to indicate commitment, rather than subtle strategies, if you want to get ahead (Newell & Dopson, 1996; Rosenfeldt, Giacolone & Riordan, 1995; Singh, Kumra & Vinnicombe, 2002). Visibility is an essential condition to obtain a promotion or to be placed on the cutting-edge projects.

In our surveyed firms, project managers have the entire responsibility of performance appraisal. As we have seen before, they don't have any help or any HR tools, although they are not trained in the management of people, but trained in their own field of expertise. To this extent, visibility and presenteeism become major criteria in the assessment of workers. Thus we can understand why it is so important to do overtime for these professionals. These unpaid extra hours are the employee's bargaining tool to negotiate arrangements to balance

work and private life. Banking some extra hours is an understood condition in order to obtain informal arrangements for their schedule, workplace or absences. But extra hours and "openness" are also means to be visible. Professionals must first prove their dedication and their commitment to their supervisor, as this is essential for their future appraisal.

Side Effects on Women's Careers

Women know that their choices concerning balancing work and family have an effect on their career (see previous excerpts as an illustration of the managers' rationale). Nonetheless, among our respondents, they are more likely than men to refuse the project manager demands concerning working extra hours or during the weekend. Among our respondents 14 women and 5 men report that they refused all excessive demands such as overtime or working week ends. For example, a woman wanted to work part time even though she knew that there would be a negative effect on her career:

> I'm fully aware that by asking for a 4-day week, or when I don't go to a meeting, I have less chance of being promoted… […] that's the price to pay. It's a shame… Because if you work part time, it doesn't mean that you are not a capable person, but… In the current labour market, one should be conscious that that's the price to be able to work part time (SDF-19-12-24-9)

Amongst all our respondents, not only is reducing hours a major obstacle to promotion, so is asking specific schedule arrangements, because it reduces employees' flexibility and thus their commitment (Legault & Chasserio, 2003). In our sample, one woman was able to cut back her hours from 40 to 35, because of an ad hoc arrangement with her boss but there was a consequence. This is how she describes it:

> And my boss […] said: "What we'll do, in your appraisal, for commitment to the company and all that, we'll just put 'satisfactory.'" I went down a notch, you see. So instead of "very satisfactory," they gave me "satisfactory." That was the deal we made. […] That meant a bit less of a raise, but they said, "We won't ask you to do your 40 hours […] unless there's a rush." (MF-3-16-4-5)

Women in our study are quite conscious of the consequences of their demands on their career.

They are dependant on the trust relationship that they can build with their project managers in order to obtain needed arrangements, but also promotions.

The project work organization constitutes an additional difficulty to build a stable trust relationship. Indeed in a project work organisation, the project manager changes with each new project. That's why arrangements are short-lived and must be renegotiated with a new project manager in every team at every project shift. As women ask for more arrangements than men (table 7), there is a gender bias in the effects of project work organisation.

Table 7

Professionals who can not fulfil the supervisor's requirements (i.e. flexibility, presence, and dedication at work), such as mothers in particular, have fewer career opportunities and are less likely to be recruited on the most interesting projects. Our results show that women work less extra hours than their male colleagues. We asked our respondents if they wanted to reduce or to compress their work week, and the demand for fewer hours (part time) or more days off (compressed workweek) came from a significantly greater number of women than men (more detailed in Legault & Chasserio, 2003, p. 113). Women more often ask to their project managers for arrangements to balance work and family (table 7) and they do so regardless of the number or ages of children. Consequently, they negotiate more frequently with their project manager. Their absence makes them less visible, and affects their promotion prospects.

In the KIFs' workplace, by and large, employers as well as employees say that they prefer informal and individualized relationships, but this entails iniquity when it comes down to WLB policies. This paradox does not emerge to their consciousness… But women with family responsibilities are those who are disadvantaged by these informal practices. We can highlight two major consequences. In everyday life, the female professionals we interviewed experience a lot of pressure and tensions between the expectations of their project manager

and their family obligations. The work organization by project is characterized by uncertainty and unpredictability. Overtime demands given with short notice pose major difficulties to family life planning. In the long-term, women who are less willing to put in extra hours like their male counterparts are considered by their project managers as less reliable, less dedicated, less committed. As a consequence, they will not be chosen to participate on the most challenging project, or to lead important projects due to their supposed lack of commitment. Therefore, they miss opportunities to acquire new skills and to build their expert reputation through these innovative projects. Yet, in the ICT sector, accuracy of skills and knowledge are essential conditions to maintain a professional reputation and to hold your position and ranking on this labour market; employability of these professionals depends on their participation to advanced projects (Arthur & Rousseau, 1996; Carnoy, 2000; DeFillippi & Arthur, 1994; Iellatchitch, Schifinger & Strunk, 2004; Tremblay, 2003). So it doesn't look good for the future of the professional career of women in this labour market. Our findings explain the presence of exclusionary gender effects in the organization by project.

CONCLUSION

Summary and Contributions to Scholarship

In analyzing the negotiation mechanisms of informal arrangements between the project manager and his/her employee, this research shows the interests and strategies of the different actors in this negotiation. Our findings moderate those concerning the importance of the project manager's support role to employees in helping to balance work and private life (Friedman, Christensen & DeGroot, 1998; Kickul & Posig, 2001; St-Onge, Haines & Sevin, 2000; Thomas & Ganster, 1995). We have explained how unofficial arrangements concerning the working time or the workplace were individually and informally negotiated between each employee and his/her project manager. It illustrates the predominance of informality in such

workplaces. Our data lead us to consider the case by case arrangement practice more as a control and management tool developed by the project manager than a practice to promote balancing work and private life.

The long hours are a part of the IT engineers' culture. The work environment promotes these long hours at the office as being synonymous with commitment to the organisation. Therefore, such organizational contexts are not favourable to balancing work and private life; it remains an individual responsibility and few, if any, formal supports are available in the workplace. Women are the first concerned with this informal management which is based on presence and availability criteria. Due to their family obligations and the weight of the traditional gender roles, women are unlikely to meet these flexibility standards. Consequently their career opportunities are fewer than those of their male colleagues. One could think that an informal environment would give more opportunities for women to progress in such workplaces (Eaton, 1999, Ferguson, 1984, Savage et Witz, 1992). But that leaves aside the weight of gendered division of housework as a major factor of women's working time, on the one hand, and the importance of flexible hours of work as a major factor of appraisal and promotion, on the other hand.

Furthermore, the weakness or the absence of official HR policies in the surveyed firms can be observed in the high tech firms as in both bureaucracies. Even in the companies with a structured HR department, the project manager retains his/her discretionary autonomy to interpret and apply working time policies as he/she wants. We can question why, in firms where human resources and employees' skills are the core activity, is the HR department so weak in the management. In principle, a HR department should play a major role to supervise practices, avoid iniquity, advise project managers in their everyday HR management, increase awareness of balancing work and private life, as they're part of modern HR policies; that could improve the perception of fairness among employees and improve organisational

commitment (Castells, 2001; Gould-Williams, 2003; Harrisson, Laplante et Bellemare, 2005; Paré, Tremblay, Lalonde, 2001a et b; Scholarios et Marks, 2004).

We should also deeply analyse the reasons behind a certain uniformity of results among the seven surveyed organizations, B2BTSC and bureaucracies and, more precisely, the development of an individualized model of working conditions which becomes more widespread.

Joan Acker (2003) wrote:

> Such a transformation [Taking private life in account at work] would be radical in practice because it would probably require the end of organizations as they exist today, along with a redefinition of work and work relations. The rhythm and timing of work would be adapted to the rhythms of life outside of work (p. 58).

The KIFs, despite their new organizational characteristics, do not challenge the socio-sexual order in any way, nor do they challenge the deepest social relations between men and women. We notice in these workplaces the reproduction of traditional gendered patterns. Indeed the corporate management of these companies continues to ignore the multiple dimensions of their employees' life. Even if they claim to be gender neutral, in fact their ideal type of worker is still a young, male worker fully dedicated to his job. Private life or family are not taken into account in these workplaces, as the top management and the organization are not concerned by these private issues. However, we know that private life and professional life are not separate spheres; they are intertwined (Bailyn, Drago & Kochan, 2002; Catalyst, 1998; Galinsky, 2001; Parasuramen & Greenhaus, 1997).

Applied Implications

Our findings reveal that the low representation of women in this economic sector could be partly explained by the work organization by project which is deeply structured on gendered patterns, on a masculine conception of work. Finally, work organization by project and work

relations in these new organizational forms reproduce in their way the traditional gendered inequality observed in classical forms of organization. Thus, for women, long working hours bring them into conflict with their other social obligations stemming from traditional gendered division of work. In the same way, the specific rules concerning the labour market of the IT professionals based on reputation, recognition of skills by peers require a visible commitment that women can not always provide (even if they effectively have the same skills than their male counterparts).

Therefore, promoting the diversity of workforce in such a workplace is a major challenge. In these organizations with specific characteristics such as high mobility of professionals, high competition for the cutting-edge projects and unmanageable volatility of customers, the difficulty is that we can not limit the reflexion on organizational change and gender to the frontiers of the firm. We should take into account the external context which significantly influences organizations and workers. Moreover, the liberalism principles are largely accepted by the different actors of this economic sector (Ashkenas et al., 1995, Castells, 1996, Courpasson, 2000; Galbraith, 1993, Palmer et Dunford, 1997, Powell, 1990, Quinn, Anderson et Finkelstein, 1996, Snow, Miles et Coleman, 1992, Volberda, 1998); individualism is the rule and each person is responsible for his/her life choices and gender is not supposed to be an issue. Yet, as we have seen, the traditional gendered division of labour still has effects on women in these new organizational forms. Our conclusions moderate some enthusiasts about these new organizational forms and this new economic sector; the gender issues are still there!

Our conclusions indicate that there may be reason to be less enthusiastic about these new organizational forms and this new economic sector; the gender issues are still there!

Limitations and Future Research Directions
These observations leave room for a more in-depth discussion of gender roles to come further.

They can have important theoretical implications on forthcoming feminist study of gendered social relations and social sex roles as related to work. In the light of this study, we can observe that gendered division of life tasks – and claims to WLB - deeply influences integration in the B2BTSCs labor market. Delegating the care of children to the female partner still constitutes an important advantage for some men in the ICT sector, who can be as "flexible" and free to work overtime as asked from them by project managers. According to recent statistical studies, sharing housework is barely gaining ground (Benoît, 2005; Institut de la statistique du Québec, 2001, 2004; Le Bourdais et Sauriol, 1998; Rapoport et Le Bourdais, 2001; Robinson, 2004; Silver, 2000). The theoretical and practical implications of these forces go beyond the scope of this article but has been studied in other contributions using the same data (a master thesis and an article from Benoît, 2005) and still has to be developed for the sake of a better understanding of the labor market dynamics.

We have described the pressures that B2BTSC put on employees to spend extra hours at work. A study of how this is shared by other KIFs, first, and other employment sectors, second, would be interesting. Many of them have big recruitment problems and claim that practices have changed. Future research will give us a better picture.

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KEY ISSUE

This contribution falls within the bureaucracy vs small start-up companies of the new economy debate about integration at work of professional women in science and engineering.

The information & communication technologies (ICT) sector is under close scrutiny in this debate, because there are scarce women among the highly qualified professionals in business-to-business technological services, either in Europe or in North America. And yet, this sector is marked by a typical organisation of work by projects, that is not new in itself but new in its widespread scope.

Theoretical implications are twofold: first, developing the study of gender issues in the new forms of organisation of highly qualified work in science and engineering, particularly the management by projects; this field remains under studied. This first issue is linked to equity issues in the emerging labor market of the 21st century; it looks like after important gains with equity laws, and with the theoretical demonstration of the effects of discrimination on the working climate, we're about to start everything from scratch in certain sectors of employment. This latter theoretical implication is a practical one as well, because it's part and parcel of the women's struggle for integration in the labor market.

Second, our contribution has important theoretical implications on feminist study of gendered social relations and social roles as related to work; in the light of this study, we can observe that gendered division of life tasks – and claims to WLB - deeply influences integration in the labor market, constitute an important advantage for men in the ICT sector, while remaining below the radar of labor market observers, as if sharing housework was barely gaining ground.

Table 1
Rate of Professional Women in Highly Qualified Occupations in Our Surveyed Organizations

Companies	Rate of women among the highly qualified professionals (%)
ICT department of insurance company	31.8
ICT department of real-estate company	38.5
TI-1	1.7
Optique 1	8.3
Optique 2	8.8
TI-2	28.8
TI-3	28.7

Table 2
Respondents' Number of Children among the Professionals (<mark>average of the whole sample, Parents or not</mark>) who Work more than 40 hours Weekly

Number of children	Women (n=21)	Men (n=35)
0	12	12
1	0	11
2	7	9
3	2	2
4	0	1

Table 3
Children's age Group of Professionals who are Parents and Work more than 40 hours Weekly

Children's age group	Number of children among mothers (n=9)	Number of children among fathers (n=23)
0 - 1 year	0	4
2 - 5 years	5	19
6 - 10 years	7	7
11 - 15 years	3	5
16 - 20 years	2	4
21 years +	3	0
Total children	20 children, average 9 years	39 children, average 6 years

Table 4

Children's Number among Professionals (Parents or not) Working more than 40 hours Weekly but less than 50

Number of children	Women working more than 40 hours (n=18)	Men working more than 40 hours (n=26)
0	11	8
1	0	10
2	6	6
3	1	1
4	0	1

Table 5

Number of Children among Respondents (Parents or not) who work more than 50 hours Weekly

Number of children	Women who work more than 50 hours (n=3)	Men who work more than 50 hours (n=9)
0	1	4
1	0	1
2	1	3
3	1	1
4	0	0

Table 6

Mothers and Fathers who do Refuse Overtime by Gender and Number of Children

Nombre d'enfants	Mothers (n=14)	Fathers (n=5)
0	4	1
1	4	1
2	5	2
3	1	1
4	0	0
Total children	17	8
Total mothers / fathers	10	4

Table 7
Intentions to reduce or compress working hours, breakdown, by sex

	Women	Men
Have asked reducing or compressing their working hours	30/45	8/43
Work part time	4	0
Say that it does not apply to their type of position	3	2

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1   In French, *le comité sectoriel de la main-d'oeuvre en technologies de l'information et des télécommunications,* a joint committee set in place by the Quebec Labor Departement to plan manpower initiatives in several sectors. For more information, see the website: www.techncompetences.qc.ca

Table 7
Intentions to reduce or compress working hours, breakdown, by sex