

# The impact of leadership, management and power in an international knowledge-intensive organization

## O impacto da liderança, gestão e poder em uma organização internacional intensiva em conhecimento

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### Abstract

The shift to knowledge economies and the boom of knowledge-intensive organizations with their expert employees pose new challenges for leadership and management of development work. What is the appropriate amount and form of managerial control that is needed in knowledge-intensive development work? This paper focuses on illuminating the kind of leadership and management efforts that either support or hinder advancing development projects. The results highlight the paradoxical role of power and control, and reveal that employees need freedom and yet strong guidance and managerial commitment to develop work in order to stay motivated. Implications for leading knowledge-intensive development are discussed.

**Keywords:** power, control, innovation, management, responsibility, leadership .

### Resumo

A transição para uma economia do conhecimento e o aumento dos resultados positivos das organizações de conhecimento intensivo, com seus empregados peritos, colocam novos desafios para a liderança e gestão do trabalho de desenvolvimento. Qual o valor adequado e a forma de controle gerencial necessários no trabalho de desenvolvimento de conhecimento intensivo? Este trabalho centra-se na iluminação do tipo de liderança e dos esforços de gestão que apóiam ou dificultam o avanço de projetos de desenvolvimento. Os resultados destacam o papel paradoxal do poder e do controle e revelam que os trabalhadores precisam de liberdade e ainda forte orientação e comprometimento dos gestores, para permanecerem motivados no desenvolvimento do trabalho. As implicações inerentes ao desenvolvimento de liderança baseada no conhecimento são discutidas.

**Palavras-chave:** poder, controle, inovação, gestão, responsabilidade, liderança .

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## 1. Introduction

Knowledge-intensive organizations have been known for some time to be becoming the dominant organizational type in many industries and countries, taking an increasingly significant role in the economy (EUROPEAN COMMISSION/EUROSTAT, 1999). Knowledge-intensive firms are usually large firms, employing substantial numbers of people working with complex tasks, offering to the market fairly sophisticated knowledge or knowledge-based products. The core of their activities is based on the intellectual skills of a very large proportion of the labor force deployed in development and often also in the sale of products and service work. They call for autonomy and the use of judgment, possibly rendering traditional forms of control inadequate or only partly relevant. (ALVESSON, 2004) In addition, the demand for management of knowledge infrastructure increases (SMITS, 2002).

In these organizations, leadership and management at all levels are based less on the domain-specific knowledge and skills, and more on skills managing the organization and its people. In development work, the managers coordinate and support their subordinates, who are the experts of their fields. This situation, and the skills it calls for, differs dramatically from that of traditional manufacturing-based organizations. The appropriate amount of management control and attention in this new situation, however, is not a straightforward matter. For example, drawing from previous research, Sethi, Smith and Park (2001) conclude that senior management's close monitoring of a new product development (NPD) project can provide a signal of the importance of the given project, which in turn is expected to affect the team's motivation level and aid in garnering resources from individuals and units outside the team. On the other hand, they note that very close senior management monitoring can also have a downside as teams can view such monitoring as interference, which may adversely affect their motivation. Any implications on employee motivation should not be taken lightly in development management, as motivation to engage in the task at hand has been noted to be one of the most important prerequisites for creativity (e.g. AMABILE, 1983).

The management and leadership challenge is further complicated by the diversity of the approaches, phases, and behaviors required for achieving innovations. It is widely acknowledged that innovation demands unconventional thinking, creative work, risk taking, and challenging the future (BUJIS, 2007). Innovation, along with NPD and design, require highly diverse activities and approaches (GASSMAN, 2006). Many forms of design deal with both precise and vague ideas, call for both systematic and chaotic thinking, and need both imaginative thought and mechanical calculation (LAWSON, 2005). The innovation process is typically divided into phases, for example, in product innovation a differentiation is typically made with between a front-end phase, and a development phase (e.g. KOEN et al, 2001). The front end phase deals with identifying opportunities, creating ideas and developing them in to concepts, while the development phase aims to develop these concepts in to finished products. The front end and development phases are considered inherently different, with the front end being experimental, explorative and often unstructured, and the development phase being structured, formal and goal-oriented. The different phases of the innovation process all require their particular form of managerial support and leadership (DOGSON; GANN; SALTER, 2008). Can some general management and leadership related enablers and hindrances be identified for innovation and development despite this diversity, or does the approach need to be so case-specific, that such generalizations are not meaningful? The present understanding of issues, such as the amount and form of control that should be exercised by the management to achieve desirable innovation outcomes, is undeniably insufficient. The study described in this paper set out to investigate the leadership and management practices utilized in the development work conducted in one multinational knowledge intensive organization with these questions in mind.

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## 2. Methods

The aim of the study was to identify leadership and management efforts, decisions implications, and practices in the development work conducted in knowledge-intensive organizations. Data was gathered in nine in-depth critical incident –based interviews conducted in a large, international, Finnish-lead private sector company.

New product development was chosen for the context of the study, as new product development can be a core mechanism in the knowledge creation of the entire organization (NONAKA; TAKEUCHI, 1995). Development work and change is particularly prominent due to the necessity of continuous improvement and innovation, and the issues addressed are too complex for any one individual to solve, requiring intensive teamwork. The studied organization was an international, Finnish-based private sector company that develops sophisticated new technologies for business to business (b2b) markets around the globe. The core of the company's activities is based on the intellectual skills of a substantial number of people deployed in NPD tasks.

## **2.1 Participants**

A total of 8 participants were interviewed. One of the interviewees was interviewed twice (interviews 8 and 9), however, the interviews were conducted five months apart and different examples were discussed in each interview. Participants were chosen around two development projects, one that had been a clear success, and one that had stalled for years. The projects and participants in question were identified by a company manager, who was instructed to select two development projects that differed greatly as well as participants from different phases and tasks of the projects. The manager had overseen both projects, and worked with all of the participants.

All of the participants were currently employed in the same large Finnish-lead private sector company, four of them at managerial level. Their titles included for example a vice president, a senior consultant, and a product engineer. The interviewees' years working in the company ranged from 4 to 42, averaging at 15 years. The average interviewee had a Master's Degree in engineering, and their age ranged from 27 to 70 years, averaging at 42 years. All of the participants were Finnish men.

## **2.2 Data collection and analysis**

The in-depth interviews utilized a critical-incident approach (e.g. CHELL, 2004; FLANAGAN, 1954), focusing on two product development projects, one that had exceeded all expectations, and another that had stalled for years. In addition, other significant development-related experiences (as judged by the interviewees) were charted. The interviews were all conducted in Finnish, the mother tongue of the participants. Thus all examples presented in this paper have been translated.

The interviews lasted between 60 and 98 minutes, averaging at 80 minutes. The audio-recordings were transcribed, producing 125 single spaced pages of data. This data was segmented into individual arguments (CHI, 1997). Attention was paid in particular to leadership and management efforts, decisions implications, and practices. 229 segments were found related to leadership and management issues, and these were categorized into mutually exclusive categories based on thematic similarity. First recurring themes were searched for, resulting in 11 repeated subjects including themes like leadership and development, responsibility and trust. These 11 themes were further grouped into larger, more defined, groups producing 6 categories containing altogether 21 thematic groups, 3 to 4 groups in each category, (later referred to as subcategories), each subcategory containing 3 to 21 segments and representing a distinct theme. For example the following segment was first found to repeat the idea of absence of managerial control, and was later grouped into the subcategory of weak management:

*"I can say that this is weakly managed. A weakly managed organization. There should be a stronger management that has clearer visions of things." (interview 5)*

A final category other was formed from five subcategories, unclear organizational structure, lack of human resources, building up experience and career advancement, difficulty of scheduling and lack of documentation that did not fit any of the other categories, along with the 29 segments that did not fit any subcategories.

In order to ensure representativeness, the resulting categories were checked for occurrences against the conducted interviews. All of the categories appeared in 6 to 9 out of the nine interviews, and each individual interview produced data for at least 4 categories (see Table 1).

### 3. Results

The classification process resulted in seven categories (see Table 2), out of which one (employee-management relations) stood out in size. All seven categories are strongly linked, for example freedom is often affected by power, which in turn affects decision making. This chapter presents the results in category order, their relationships are further reviewed in the discussion.

*Table 1: Number of segments in each category according to interview source*

Category	Interview									Total no. of segments
	1	2	3	4	5	6	7	8	9	
1. Employee-management relations	9	2	14	6	0	3	5	2	11	52
2. Responsibility	1	1	10	0	8	0	2	7	9	38
3. Freedom	1	1	7	1	4	0	6	4	9	33
4. Decision making power and clarity	0	4	11	5	1	3	2	1	5	32
5. Managers' lack of exercising control	0	1	4	0	11	1	7	0	2	26
6. Power utilization	1	0	6	0	3	1	2	1	5	19
7. Other recurring themes	3	1	12	1	3	2	1	4	2	29
Total no. of segments	15	10	64	13	30	10	25	19	45	229

(KIRJAVAINEN; BJÖRKLUND; ELORANTA; LAAKSO, 2010)

#### 3.1 Employee-management relations

The first category, employee-management relations, reflects the importance of communication and clarity of procedures between the two parties. The most frequently repeated theme among all of the segments was managerial commitment to the development of new products, skills and processes. All of these development targets were seen equally important. As interviewee 1 put it, managements' commitment to development is one of the key factors of success.

According to the interviewees, managerial support eases taking projects forward. The mentioned types of support included both practical help during projects and mental support, such as making fast decisions and keeping the projects on high priority resource-wise. However, the interviewees felt that the management did not

**Table 2: Resulting categories and subcategories of the interview segments**

<b>Category</b>	<b>Subcategory</b>	<b>No. of segments</b>
1. Employee-management relations	Management commitment to development	21
	Role expectations	12
	Mutual trust	11
	No clear management procedures	8
	<i>Total</i>	52
2. Responsibility	Responsibility is clustered	15
	Clarity of responsibility	14
	Attitude towards responsibility	9
	<i>Total</i>	38
3. Freedom	Freedom over own work schedules and methods	15
	Freedom over own work tasks and content	12
	Too much freedom	6
	<i>Total</i>	33
4. Decision making power and clarity	Clear allocation of decision making power	13
	Getting decision made requires lobbying	10
	Unclear allocation of decision making power	6
	Decisions are not made	3
	<i>Total</i>	32
5. Managers ' lack of exercising control	Weak management	15
	Lack of managerial interest	8
	No management	3
	<i>Total</i>	26
6. Power utilization	A need for stronger hierarchical power utilization	6
	Apparent power	6
	Strong use of power utilized on a small scale	4
	Hierarchical use of power	3
	<i>Total</i>	19
7. Other recurring themes	Unclear organizational structure	10
	Lack of human resources	8
	Building up experience and career advancement	5
	Difficulty of scheduling	3
	Lack of documentation	3
	<i>Total</i>	29
<i>Total</i>		229

(KIRJAVAINEN; BJÖRKLUND; ELORANTA; LAAKSO, 2010)

prioritize development sufficiently, and perceived this as a lack of commitment. Acute situations were often perceived to result in a higher priority than development, and those working with development projects ended up having not enough time to work on their main projects.

*“We also support delivery projects by those different country offices, I for example support delivery projects of Eurasian market area, and it has been a little bit like fire fighting, so that these client projects have always gone before these development things.”(interview 3)*

The interviewees felt that the management was, in fact, contributing a larger effort towards developing skills and process than towards developing products. One product development team leader described his role:

*“Basically, when I’m leading a product development team, I think that I’m firstly the superior in this team and exist for them. And practically it means, that to some extent I aim at sparring these team experts, in a way to help them to develop in their own work to the highest level.” (interview 1)*

The interviewees mentioned having shared learning themes inside the organization, discussions about the organizational values, and individual progress assessments. These were seen as important factors that support them in their work, and they were more satisfied with skill development support than the managerial commitment displayed towards product and process development.

One of the subcategories in employee-management relations was mutual trust. Mutual trust was seen as a very important factor in the company and most interviewees brought it up how much they value the trust that is put in them, however, too high level of trust, as they described, can be a harm to the relation between employees and management, as the employees feel that too much trust indicates that the management is neglecting its role and responsibilities.

*“Of course, if you are given a project, you should also take the project through, and the project manager should oversee that as well. But it just always tends to be forgotten; they trust that they’ll (the team) will finish it.” (interview 7)*

The subcategory of unclear management procedures, in turn, revealed that unclarity in management procedures were hindering work motivation. The ways of leading seem to vary greatly between managers, and some of the interviewees felt that the same rules did not apply to all. Nevertheless, the feeling of being treated equally in terms of rules and processes was reported as especially important by the interviewees in order to stay motivated and pull projects through. Management applying substantially different rules and processes, and having goals that appear controversial, was seen as a factor that slows down working and creates inequality.

*“To get to visit plants and to get to know machine shops and manufacturing side, that is a permanent theme --- Well, I think that it is also a varying thing, that some project managers might carry that out and then, in some other project you don’t get to go.” (interview 4)*

Finally, management and employees did not always have congruent role expectations. Some employees expressed a wish that management would have more courage to lead. The employees felt that the biggest expectation placed on them was to take projects forward. Although the management also expected the projects to proceed, one interviewee reported the management conveying that one is allowed to make mistakes, but not the same mistake twice.

### **3.2 Responsibility**

The second biggest category was responsibility. Category 2 comprised of segments regarding the distribution of responsibility, the clarity of that distribution and attitudes that people hold towards responsibility. One of the key factors affecting the ability to successfully complete tasks was the clarity or unclarity of who holds the

responsibility in certain situations. At times, the responsibilities seemed to be very unclear, especially on the individual level. One of the interviewees reported that “you just simply cannot find a single person in this organization who clearly says that how we should deal with these acquisitions globally.”(interview 5) Despite unclarities regarding the person who is responsible, it was usually quite clear on a more global scale which unit or part of the organization held the responsibility. According to the interviewees, unclear responsibilities caused the projects to stall, inhibited decision making, and it caused work to overlap. Also, very often the interviewees reported that their organization was not very hierarchical, thus responsibilities often were controversial or overlapping. This further slowed down working and complicated the organization.

*“Really the wish would be to clarify the responsibilities. In my opinion it hinders our work too much at the moment.” (interview 5)*

In addition to the clarity of responsibilities (or lack thereof), uneven allocation of responsibilities was a recurring theme. Responsibilities were often clustered to one person, unit or part of the organization. This happening on a big scale was seen as problematic, as it built up the workload of key persons, and provided too little attention to any one of the tasks the person was overseeing. Nevertheless, on a small scale, for example in project teams, it was seen as a good thing that there was clearly one person holding the responsibility of making the decision and communicating with other parts of the organization.

*“Before there was this one person who had the responsibility of technological development and which direction to take it and marketing strategies and...And in addition to those that same person was responsible of all these practical things to do with the machine. Now it is like that, that [one person] is responsible of these practical issues and this technology manager above him is more responsible of this technology development and marketing and such. In my opinion it has really been a very positive change, now there are some resources to do the practical work as well.” (interview 3)*

In addition to clarity and allocation of responsibilities, the category also contained segments regarding attitudes towards responsibility. The interviewees brought up three different attitudes towards responsibility. Firstly, they felt that there were some people who often avoided responsibility, although they were unable to clearly verbalize why they felt this way. Secondly, responsibility was often neglected towards the end of a project, and projects were not brought to completion. Thirdly, despite the view of others neglecting responsibilities, personally having responsibility and being able to fulfill the expectations brought on by that responsibility was as a source of satisfaction.

### **3.3 Freedom**

The third category, freedom, revealed the paradoxical role of freedom. Freedom to control ones own working routines and schedules was highly valued, but it also created problems. Freedom to work according to ones own schedules was praised. The interviewees stated that freedom and flexibility brought efficiency to their work and that it had a good effect on their work motivation. One interviewee even felt that flexibility was the best thing about working at the company. Working times were not monitored, instead the most important thing was to get things done and have projects moving forward. However, the same level of independence when granted to one's colleagues was often seen as a negative thing that hinders progress. Even so, control over schedules was mostly seen as a positive thing.

*“The best thing about ways of working here is, that you get freedom to do things. To many things, it is said that you can do it within certain limits but in your own way. I'd say, that oneself can schedule things pretty nicely.” (interview 9)*

In addition to control over one's own schedule and working methods, the freedom to work on those tasks that one thinks are important was a recurring issue. Both teams and individuals had fairly free hands to define their own tasks, and the interviewees saw this as both problematic and positive. One of the positive aspects was having decisions made by those who were most familiar with the project. This was said to ease idea advancement especially by removing bureaucracy and speeding up the decision making process. The

interviewees also saw it as a good thing that they were given freedom to act as they felt necessary within given limits or subjects. However, this held only when there were some clear limits given or a clear enough subject.

*“It works well for us...I mean really well, that it is enough that we somewhat frequently, which is not very often, report what has been done and accomplished on the higher level and then the smaller things, that there are, we don’t... I mean that if we discover in some group that it looks like we have to change this, then it just will be changed and we don’t need to get any signatures from anywhere.” (interview 8)*

*“That I don’t need to get the permission from a big commission to make some small thing, that it just -- can be done [encourages to realize ideas].” (interview 9)*

The negative aspects regarding the freedom to define one’s own tasks had mostly to do with the resulting fuzziness in the organization. Some of the interviewees felt that when projects or individuals frame their own work, it caused information breakdowns and disrupts the orderliness and discipline. They stated that common, shared processes were not followed, which further worsened the information availability on projects. The interviewees also felt that the right reasons were not always behind the development projects and use of time, as interviewee 3 said; *“the organization enables people to work on their own, unofficial development projects, so the development part is not business driven at all.”*

The third recurring freedom related theme found was excessive freedom. In most cases where too much freedom was perceived, it was in relation to the freedom of one’s colleagues. The interviewees were especially worried of organizational members having too much freedom on a global scale. It was stated that other divisions tended to start working towards their own goals instead of mutual, shared goals. The biggest issue seemed to be the lack of cooperation, which resulted in doing overlapping work. This was perceived to harm the projects as well as the end results. The interviewees also felt like too much freedom caused a lack of work perseverance, projects were not always finished as people became tired of them and rather started to work on something new.

*“This system of ours doesn’t force the project to be finished 100 percent, that they flag at about 95 percent. Other projects are being started and there is this little, that the end kind of slips.” (interview 7)*

### **3.4 Decision making power and clarity**

Category 4 raised the issue of decision making inside the organization and teams. The most discussed issues in this category were the clarity of who had the power to make decisions and that getting decisions made often required lobbying one’s ideas inside the organization.

The interviewees felt that most of the time it was clear who the decisive party is. Usually there was no unclarity regarding whom it was that should make a certain decision when the decisive party was a group, for example a management team. However, often when the decision was to be done by one individual, it was very unclear. Thus the decision making power and responsibility mirrored the same division in clarity that could be found in more general responsibility in category 2. According to the interviewees the unclarity of the deciding individual was created because no one was willing to take the responsibility that the decision would bring along.

The second subcategory was segments regarding the need to lobby decisions inside the organization. Interviewees felt that in order to get a clear decision on, for example whether a project or idea should go forward, they had to sell the idea to the decisive party. The decisions were not always made based on the best knowledge available or on fact, but for example based on the perception of customers not accepting the idea. Collegial support often played a big role in getting the idea into consideration, and later getting an approving decision on it. As interviewee 2 said:



*"We have always had this expert group in this area of knowledge. And I was a member of that group as well, and there we discussed test results, and from the reports of that group we got the information to further to the management, that hey, this is an idea that should be taken forward. So this support from international colleagues was of course valuable. "*

Sometimes it also seemed to the interviewees that people hindered decision making for their own personal reasons, for example to get their own ideas to be the ones that get through.

*"We were considering a change in the design, and it was shot down really because – I'm not sure if it went so far that it would have been suggested to the customer – but at least the doubt was so strong even inside our own house that customers are not going to accept it." (interview 4)*

They also brought up that sometimes decisions were not made at all, or that decisions were postponed or prolonged without a clear reason. This was seen as a problem, causing the projects to stall or to be totally forgotten. At worst, ideas that someone thought might be very valuable were left unhandled.

*"We had a development project, where we had a particular part of a machine that was quite expensive to make and then an idea of how to make it cheaper. And it would have been better as well. And then it was presented and it started a big discussion, emails were sent inside our organization and it was dwelled upon for a year or so, different developments were made and then it was kind of forgotten. And the development was never even reposted anywhere and I remember that it was just left somehow, I don't know what happened." (interview 3)*

### **3.5 Managers' lack of exercising control**

Category 5, managers not exercising control, reflects the problems experienced regarding weak management, lack of managerial interest, or in the extreme situations, no management at all. Weak management was the most frequently recurring theme in this category. The interviewees felt that often the management provided no larger frame or context to the employees' work. This feeling was greatly caused by the management having no clear positions in regard to product development projects issues. The interviewees wished for more assertiveness in managing the organization, as well as in managing teams. One reason for the lack of strong management was perceived to be that the relationships between superiors and subordinates were a bit too informal or friend-like. The interviewees often felt that the teams were left alone, so that they needed to lead and manage themselves even when it came to issues that were beyond their own mandate or authority remit.

*"We could have taken a clearer and stronger stand, and pushed our own operations model. --- Which might happen in the future, that we will do it, if the management doesn't clearly start to take a stronger stand on the issue. Then we will have to form our own opinion and act upon it." (interview 5)*

*"You see, we have this spirit of friendship here, that bosses are friends with their subordinates and then also friends with those who are one step higher. We are sometimes too nice. However there should be more assertiveness." (interview 7)*

The interviewees also felt that often the management was not very interested in the development projects. They felt that the management did not care if some projects do not proceed, or if the employees use a lot of time for unproductive purposes. Some interviewees told that this causes them to work less efficiently towards finishing their projects. They also felt like the managerial interest was raised only when the development had proceeded quite far and commercial value was already highly probable.

*"When a new invention has been tested and commercialized, it's mostly at that point when there is interest coming from above." (interview 3)*

The most radical manifestation of managers not exercising control was the occasional complete lack of any managerial procedures occurring. This was experienced very challenging especially in conflict situations, where expressions of management judgment or will would have been needed. In situations like this it was not

possible to take projects further, or execute already made decisions when the management did not act. One interviewee gave an example of a situation where new global purchase procedures were obstructed from being realized when management did not oblige the whole organization to act according the new rules, but rather departments needed to be persuaded by the project team.

### **3.6 Power utilization**

The sixth category, power utilization, revealed the need for a clear hierarchy in the utilization of managerial power, as well as a need for strong leaders. Stronger use of power would, in the interviewees' opinion, help clarify shared goals, reduce overlapping decision making and work, and help solve conflicts. Interviewee 3 stated that; *"in many cases it would really help if there was one big caliph who would say, that now everybody should do this."* Another large subcategory in category six was apparent power, i.e. power in name only that could not be realized. The interviewees perceived that because of the flatness of the organization, there were overlapping powers, which meant that nobody had the real power to make decisions and take them through. The interviewees felt that often they or someone else seemingly had the power to make decisions, but nobody was forced to listen to them or follow the decisions.

Although overarching organizational power was often perceived as weak, strong use of power could be detected on a small or personal scale, e.g. in the teams or regarding a specific person using the power. This was perceived as positive. Also some hierarchy-based power was realized, the interviewees reported processes that are in use and follow the organizational hierarchy. These were often relatively clear issues, where conflicts were not easily born, for example profit responsibility.

### **3.7 Other recurring themes**

In addition to the six larger thematic categories, there were some recurring issues, which did not fit any larger category, but formed clear subcategories. A final category, other recurring themes, was formed to encompass these issues. The five subcategories were unclear organizational structure, lack of human resources, building up experience and career advancement, difficulty of scheduling and lack of documentation.

Unclear organizational structure came up relatively many (10) times. The interviewees felt that the organization was too scattered and that it was not always clear who is responsible to whom. One problem that this kind of unclarity was told to cause was that the right people were not able to get the right information, even if it might be important to their work. Similar findings were also present in categories 2 and 4, responsibility and decision making power.

The second recurring theme was the lack of human resources. One interviewee reported a reorganizing of the organization causing a shortage in the human resources, so that there was a development project that was going forward, but there were too little people working on it (interview 1). Also the ways of recruiting were perceived as not meeting the needs of the organization. The interviewees reported that there were many openings to which someone should have been hired but had not been, and on the other hand, they told that recruiting is not very formal, but that *"the assignments one gets are shaped according to the persons special skills"*(interview 3). As a result, people did not necessarily work on the tasks their job descriptions or titles implied.

Third theme in the category was the chance to build up experience, and a having a possibility to advance one's career. The interviewees felt that their organization offered good possibilities for this kind of personal development. Many of them had been working in the same company for many years (averaging at 15), and they had been climbing higher in the organization, moving to more challenging tasks. They also felt that experience was valued, and that it was useful in their work.

Finally, two other management issues received repeated mentions. First, there were difficulties in scheduling. The interviewees experienced difficulties in estimating how much time new product development projects were going to take, and they often underestimated the time that a certain task took. Secondly, the interviewees brought up a lack of documentation. Deficient documentation caused the organization to sometimes put

unnecessary effort into ideas that might have already been researched and discovered useless, and to copy mistakes of previous project to newer generations of the same product

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#### 4. Discussion

Ideally management creates a motivating operational environment for development, where freedom and control are in balance (HERSHEY; BLANCHARD; JOHNSON, 1996). However, how one achieves such a balance remains unclear, especially in knowledge-intensive organizations aiming for innovations. This paper aimed to explore the issue by studying the ways of leading and managing in a large, international, Finnish-lead private sector company. The main focus was on identifying what kind of leadership and management efforts and practices supported taking projects forward (or caused them to stall) in product development, a core mechanism in the organization's knowledge creation (NONAKA; TAKEUCHI, 1995). The results of the study illustrate that, while the intentions of managers are good, the optimal balance state between freedom and control had not necessarily been achieved. Employee-management relations, power and responsibility allocation and clarity, and management interference and attention all rose as critical factors for development work, but were seen as hindrances as often as enablers. The utilized ways of leading and managing sometimes lead to unwished outcomes, such as unfinished projects, lack of employee motivation, and overlapping work being done.

Power was the most prominent issue in the results, affecting all of the formed categories and forming the core of employee freedom, decision making power and clarity, as well as power utilization categories. On one hand, the high level autonomy experienced by the employees was perceived to be an important motivator and enabler of efficiency and effectiveness. Indeed, research has revealed autonomy to be a basic psychological need and an important antecedent of intrinsic motivation (RYAN; DECI, 2000). On the other hand, however, freedom also easily created a feeling of a weak management. Transferring power to employees entails transferring responsibility and control as well (HERSHEY; BLANCHARD; JOHNSON, 1996), which can be perceived as a managerial vacuum by employees. In addition, freedom was often seen as harmful when the holder was someone else but oneself. The results illustrate that the employees perceived that there was, on one hand, too much freedom, but also that this power became merely apparent as it was so evenly distributed in the organization – when everyone could decide for themselves, no one had power to control anything beyond their own behavior. This led to no decisions being made and projects not proceeding. The employees indicated a need for stronger, more assertive managing, especially on matters where the employees, teams or units are not unanimous. The results of this study caution against distributing power too equally in the organizations, in order to avoid diluting it. Often the advancement of development work would have required more traditional, hierarchical managing, especially in the form of acting as an arbiter or referee and making the final decision in conflict situations.

In addition, having abundant freedom and power in framing ones' own work caused information breakdowns and disruption of the general orderliness and discipline in the organization, due to unclarity and inconsistencies in roles, responsibilities and processes. The clarity of management is one of the key factors of success (MINTZBERG, 2004), but the results revealed a significant lack thereof in the organization. Clarity challenges were especially prominent in the segments of categories of responsibility and decision making, as well as the subcategories of unclear organizational structures and unclear management procedures. Unclear lead to overlapping work being done and information breakdowns. Confusion was common especially when it came to the point where it had to be stated that who held responsibility in certain situations. Responsibilities were blurred on the individual level, and others were perceived to avoid responsibility, rather delaying decision making than taking a clear stand. However, despite problems on the individual level, the division and allocation of responsibility and power on global scale was perceived as clear and functioning.

Despite the clarity of global responsibilities, there was some lack in the common understanding of the goals of the organization. This resulted in teams and units having a low work motivation towards the goals of other organizational members, and decreased synergy. Teams and units concentrated more on working towards their separate goals than functioning as a part of a bigger organization. According to Senge and Sterman (1992),

local decision making and individual autonomy can lead to management anarchy unless managers account for the interconnections and long-term side-effects of their local decisions. They thus remind of the importance of the managers acting locally yet thinking globally. The present results underline the importance of clarity of common goals and roles in the organization, as a shared vision is indeed one of the key building blocks of organizational learning and development (SENGE, 2006).

Furthermore, unclear organizational structure caused further difficulties when the employees did not always know who their actual superior was, and what was expected from them. This resulted in inefficient work, not being managed by anyone and not being able to act fully as a part of the team they belonged to task-wise either. Employees having a hazy understanding of their role in the overall scheme of things, is known to be an often encountered problem in complex organizations (e.g. ANDREASEN; HEIN, 1987). In particular, many knowledge-intensive firms score high on ambiguity, due for a large part, to complicated authority relationships that may restrict the power of senior managers (ALVESSON; SVENINGSSON, 2003). Thus clear processes and organizational structures would be of essence to ease and enable efficient new product development work, especially in knowledge-intensive organizations.

Finally, many of the resulting categories reflected the importance of a good relationship between leaders and their subordinates. A good relationship, from the perspective of the employees, seemed to imply equal managerial treatment between employees, mutual trust between management and employees, and displaying managerial commitment towards the development of new products, skills and processes, as well as employees' ability to rely on managers in difficult issues and situations. Thus the management should aim at creating a balance between trust, support and commitment, but yet control.

One of the hindrances for achieving such relationships was the perceived inequality of treatment. Unclear management procedures were reported to hinder work motivation. The results illustrated that the utilized procedures varied a lot between different managers, mainly in terms of the amount of supervision and freedom provided, the extent to which work was framed in a larger context, and how much information the employees were able to acquire. This caused a feeling of being treated unjust, in contrast to the expectations that the employees had for good employee-management relationships. The perceived injustices seemed to have a negative impact on trust placed in management, as well as the employees feeling trusted in. Diminished trust increases politicking in organizations and pushing one's own interests (ROBBINS, 2003), which could be seen in the results of this study, as well, as organization's different units' interests often did not meet and considerable efforts were expended in order to maintain ones' own ways of working, or to advance ones' own ideas further. Trust is an especially important factor in establishing common processes and practices and ensuring that they displace the old ways of working. Employees' trust towards the managers is related to their support towards them (BROCKNER et al, 1997), and having power without being trusted decreases the influence that one has (FROST; MOUSSAVI, 1992).

In addition to trust, perceived managerial support and commitment also played an important role in management-employee relations. Quite alarmingly, the employees often felt that the management was not very interested in the development projects and whether they proceed or not, i.e. that management was not too interested in their work. The lack of interest was inferred from the high extent of freedom granted for development teams, and the lack of takings of opinion from the management. The employees felt left alone, and had to lead and manage themselves. Although power is increasingly transferred to employees (ROBBINS, 2003), they still require managerial support, rather than being left alone with the power (FRENCH; RAVEN, 2004). As development was not seen to have a high priority among management compared to immediate revenue-producing projects, employees inferred a lack in management support and commitment.

Overall the results show that the management-employee relations were not always perceived as functioning and supportive, resulting from unclarities in management procedures (i.e. the procedures varied hugely between managers), lack of managerial interest, or an unbalance between freedom and control. The results suggest that when the organization shifts from traditional management to leading knowledge intensive development, there is a high risk of ending up with insufficient steering and the organization is easily left adrift. Despite the fact that

trust and freedom were highly valued, the employees felt that there was a lack of management and control, and wished that the managers would have more courage to lead the organization. Allowing freedom to the employees should be balanced with adequate use of power, clear roles and responsibility in the organization.

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## 5. Conclusions

As industries shift to knowledge-intensive organization, management faces new challenges. One of the key discoveries presented in this paper was the paradoxical role of power. Freedom is both praised and berated, depending on the context. The power held by the employees and the absence of too strict managerial control were seen as an important success factors in implementing ideas. The absence of detailed managerial involvement in one's own work was perceived motivating and reflecting trust. However, the same level of independence for colleagues was seen problematic and as a hindrance to progress, thus managerial control and interventions were desired. When confronted by difficulties, the managers' lack of exercising control was perceived as a lack of responsibility and caring on the part of the manager. Also stronger management was called after, especially regarding guidelines, decision making, and expressions of opinion in conflict situations. Managers thus find themselves faced by conflicting expectations, and a delicate balance needs to be found in the level of involvement.

The results of the present study also highlighted the lack of shared understanding and clarity of roles, power and procedures in the organization, along with the confusion and damage this can cause. Overlapping work, frustration with the organization, feelings of unfairness and inequality, incomplete information, and decreased perseverance all resulted due to the insufficient clarity and collaboration towards common goals. Although high level of autonomy over tasks, methods and time can be beneficial when aiming for innovations, they seem to require clear goals and shared criteria to create a balance. The results indicate that sometimes when management forfeits control to the employees, leadership is given up as well, and employees are left with little support especially in collaboration. However, when task management decreases, the results indicate that creating a trusting atmosphere with clear goals, roles, and power allocations becomes ever more important for the employees. Balancing freedom with the management of the big picture, as well as fostering clarity is the foundation for supporting the expert employees in their knowledge-intensive work.

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