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## Global Challenges of Management Control and Reporting



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## Introduction

Contemporary management control and reporting both face challenges. Consequently, a new and more sophisticated scientific approach is needed. From one point of view, interdisciplinary studies and theories are necessary. From another point of view, empirical research and practical issues call for a more specific and specialized approach. This complexity is reflected by the content of this book, which covers topics that emerge from present world's complexity. Therefore, the authors focus on ever-important issues (such as the strategic approach and its support by management control and reporting, survival of companies), and more modern issues (e.g. cultural aspects, measurement and reporting adjusted to branches, spheres and organizations and specific issues of management control and reporting).

The strategic approach to managerial control and financial statements and their role for company's survival is presented in papers by J. Dyczkowska (who addresses the question whether annual reports communicate strategic issues and focuses her study on reporting practices of high-tech companies), A. Bieńkowska, Z. Kral, A. Zabłocka-Kluczka (who explain the role of responsibility centers in strategic controlling), P. Kroflin (who explores the value-based management and management reporting examining impacts of value reporting on investment decisions and company value perception) and A. Reizinger-Ducsai (who discusses bankruptcy prediction and financial statements). The problems of management control and reporting and their adjustment to specific conditions and organizations are undertaken by T. Dyczkowski (who introduces his NGO performance model), Z. Kes and K. Nowosielski (who present the case study of the process of cost assignment in a local railway company providing passenger transportation services), S. Łęgowik-Świącik, M. Stępień, S. Kowalska and M. Łęgowik-Małolepsza (who analyse the efficiency of the heat market enterprise management process in terms of the concept of the cost of capital), and M. Pietrzak and P. Pietrzak (who discuss the problem of performance measurement in the public higher education). The cultural aspect of managerial control and reporting is explored in papers written by M. Nowak (who presents cultural determinants of accounting, performance management and costs problems showing the issue from Polish perspective using G. Hofstede and GLOBE cultural dimensions) and P. Bednarek, R. Brühl and M. Hanzlick (who provide a literature overview of planning and cross-cultural research). The specific problems and concepts of managerial control and reporting are investigated by M. Ciołek (who discusses the lean thinking and overhead costs), E. Nowak (who analyses the role of costs control role in controlling company operation), Ü. Päril, R. Koyte,

S. Näsi (who examine middle managers' mediating role in MCS implementation), R.L. Sichel (who discusses the relevance of intellectual property for management control), J. Paranko and P. Huhtala (who analyse the productivity measurement at the factory level).

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## EXAMINING MIDDLE MANAGERS MEDIATING ROLE IN MCS IMPLEMENTATION

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## BADANIE POŚREDNICZĄCEJ ROLI MENEDŻERÓW ŚREDNIEGO SZCZEBLA WE WDRAŻANIU SYSTEMÓW CONTROLLINGU

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**Summary:** Management Control Systems (MCS) are a socially constructed process in which communication between people creates interpretation and, as a result, information, and coordinated actions throughout an organisation. The dialogue between top and ground level looks a main assumption for successful business. To make better strategic decisions and act in a way that is more suitable for organisational objectives, executives and ground-level employees need a better understanding of the actions and decisions at the other end of the organisational hierarchy. Arguably, middle managers (MMs) act as determinants in the dialogue between the senior and the ground level. The aim of the study is to better understand the role that MMs play in the dialogue between the senior and the ground level for facilitating organizational changes. The research question for the study is: What role do MMs play in implementing MCS for facilitating organizational changes? Based on this research analysis, we can conclude that to better understand how and why MCS works as it does in a given part of an organization we have to focus on the middle level. The implementation of MCS on the operative level or quality of information on the senior level depends on the middle level and it accentuates the importance of middle managers mediating role of information-based management of innovative and fast changing environment. The second contribution of this study is its use of an interdisciplinary approach. This study connects the semiotic and managerial frameworks. The study contributed to communication theory of MCS based on Lotman's cultural semiotics. The findings of the study extend our understanding of the role of MMs in implementing MCS in creating changes and innovation.

**Keywords:** middle management, management control systems, dialogue, organizational change, ground managers, communication, semiotics.

**Streszczenie:** Controlling ma charakter procesu społecznego, w którym komunikacja międzyludzka służy interpretacji, generującej w efekcie informacje oraz skoordynowane działania w organizacji. Dialog między najwyższym a najniższym szczeblem w organizacji jest podstawowym warunkiem sukcesu w biznesie. Podejmowanie trafniejszych decyzji strategicznych i działanie w sposób bardziej spójny z celami organizacji wymaga od kierownictwa i pracowników szeregowych lepszego zrozumienia działań i decyzji podejmowanych na innych szczeblach hierarchii. Można stwierdzić, że menedżerowie średniego szczebla determinują efektywność dialogu między najwyższym a najniższym szczeblem. Celem artykułu jest pełniejsze zrozumienie roli menedżerów średniego szczebla w dialogu między najwyższym a najniższym szczeblem służącym wprowadzaniu zmian organizacyjnych. W opracowaniu postawiono pytanie badawcze: Jaką rolę pełnią menedżerowie średniego szczebla w wdrażaniu controllingu wspierającego zmiany organizacyjne? Na podstawie przeprowadzonej analizy można stwierdzić, że aby lepiej zrozumieć dlaczego controlling działa tak, jak działa w danym obszarze organizacji, należy skupić uwagę na menedżerach średniego szczebla. Wdrażanie controllingu na poziomie operacyjnym oraz jakość informacji na szczeblu centralnym zależą od szczebla średniego, co podkreśla znaczenie pośredniczącej roli tego szczebla w zarządzaniu opartym na wiedzy w zmiennym i wysoce innowacyjnym środowisku. Drugim nowatorskim elementem badania jest jego interdyscyplinarny charakter, jako że łączy ono metody badawcze z obszarów semiotyki i nauk o zarządzaniu. Badanie stanowi wkład w teorię komunikacji bazującą na semiotyce kulturowej Lotmana. Wnioski z badania poszerzają nasze rozumienie roli menedżerów średniego szczebla we wdrażaniu controllingu służącego zmianie organizacyjnej i innowacyjności.

**Słowa kluczowe:** menedżerowie średniego szczebla, system controllingu, dialog, zmiana organizacyjna, menedżerowie szczebla operacyjnego, komunikacja, semiotyka.

## 1. Introduction

MCS and the organizational changes are reciprocally related. Organizational changes caused changes in MCS and conversely, MCS can in general play a role in the organizational change [Roberts, Scapens 1985; Hopwood 1990; Roslender 1996; Catusus et al. 2007]. For example, Roberts and Scapens [1985] showed how MCS have the capacity to transform and construct the way actors perceive one another, the environment, and themselves for interpreting organizational changes and actions.

Previous research has claimed that giving information by indicators is not enough to spur an organization into changes [Catusus et al. 2007; Ahrens, Chapman, 2007]. According to Hopwood [1990], the power of numbers is potentially great and MCS could play a powerful role in organizational changes. It could influence perceptions, facilitate communication and by that guide changes but sometimes could not.

Although middle managers (MMs) alone cannot make things happen in an organisation [Fauré, Rouleau 2011], they have important roles in the MCS implementation. Studies have shown that MMs have the intermediating role, interfacing

between different levels which otherwise are disconnected or involve contradictions and tensions [Woolridge, Schmid, Floyd 2008; Balogun, Johnson 2004]. For example, Pärl [2014] has documented the fact that MMs could significantly support or counteract MCS implementation by powerfully acting as determinants. The aim of the study is to better understand the role MMs' play in the dialogue between senior and ground level for facilitating organizational changes. The research question for the study is: What role do MMs play in implementing MCS for facilitating organizational changes?

The case study gives an opportunity to analyse and compare different patterns of implementation of MCS by MMs and their role during the organizational changes.

The study builds on the sociological view of MCS [Hopwood 1990; Macintosh 1994; Macintosh, Quattrone 2010]; as a mediating process [Belkaoui 1978, 1980; Lavoie 1987; Arrington, Francis 1989; Boland 1989; Macintosh, Scapens 1990; Robson 1992]. In this study the mediation is defined by lens of Lotman's cultural semiotics [Lotman 1970; 2001, 2005; Pärl 2011; 2012]. The research analyses the role of MMs of implementing MCS by participant observation. The research shows first that although the formal MCS are the same throughout an organization, MCS is implemented in different ways depending on how MMs mediate and interpret MCS. Secondly, the research shows that the misunderstanding and understanding about organizational aims and economic actions is largely dependent on how MMs mediate information in the MCS. To decrease misunderstanding and increase understanding in a company, it is important that MMs are supported by a strong amplification the MCS.

The theoretical contribution of this study is its use of an interdisciplinary approach to understand processes in the field of MC. The study shows that the communication includes understandings and misunderstandings [Lotman 2001; Pärl 2012], both of which are necessary and important for a meaningful communication for changes and innovation. The study argues that in the change process, mediation on the middle level has a key role in implementing MCS.

The paper is organised as follows. It begins with an introduction of identifying the role of the MMs in management both top-bottom and bottom-up changes [Currie, Procter 2005; Kumarasinghe, Hoshino 2010; Ouakoak, Oedraoga, Mbengue 2014; Conway, Monks 2011] and introducing the role of MM in dialogue between top and ground level [Pärl 2014]. The next section gives an overview of some aspects of Lotman's cultural semiotics which gives the basis for the understanding of role of balance between the similarities and differences of participants, and the role of MMs in an organization. The empirical section introduces a case study that interprets the dialogical process in practice. First, the section provides a description of the research method and an overview of the process and tools in the data collection. Second, the section provides a case description and gives one example of how a dialogue in different parts works in one organisation. Based on the research and using the framework of dialogue and lenses of Lotman's cultural semiotics, we will show how MMs could play a key role in the process of implementing MCS in an organization.

## 2. Implementing MCS for facilitating organizational changes

Focusing on individuals, we can distinguish two general factors in the implementation of MCS for achieving actions: goal and interpretation ambiguity. The implementation of MCS depends on how people perceive MCS's purpose [Pihlanto 1994, 2009; Kihn 2011] or how they make sense of it [Pärl 2011]. For instance, instead of serving internal decision or control needs, the figures provided by MCS may be used for merely cosmetic purposes, projecting an image of up-to-date management practice. For example, Hopper and Powell [1985] argued that MCS can be used to maintain the interests of individuals, reflecting that MCS play a political role rather than providing legitimate solutions to organizational problems. Therefore, reports and figures may look like a premeditated, carefully analysed decision. This study builds on definitions of MCS as a socially constructed process in which communication between people creates interpretation and, as a result, information, and coordinated actions.

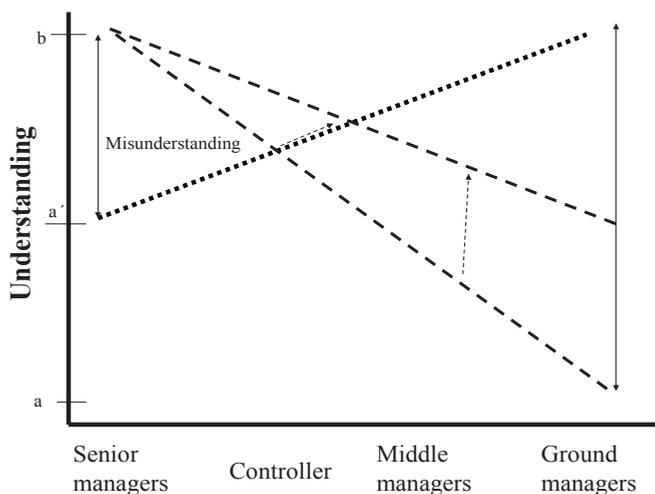
Recent studies have argued that organisational performance is heavily influenced by middle rather than top levels of organisations [Currie, Procter 2005; Kumarasinghe, Hoshino 2010; Ouakouak, Ouedraogo, Mbengue 2014]. Arguably, whilst MMs are a subordinate echelon of employees, they still do have a sufficient status which allows them to apply a degree of power and autonomy to decision making and operations. MMs are recognised as an important part of strategy realisation within an organisation [Burgelman 1983; Floyd, Wooldridge 1992, 1997; Nilsson, Rapp 1999; Floyd, Lane 2000; Dutton et al. 2001; Balogun, Johnson 2004].

Management literature has identified the role of the MMs in management both top-bottom and bottom-up changes acting as agents of change rather than just implementers of change [Conway, Monks 2011]. Hence, when an organisational change takes place with new strategic objectives (e.g. new CSR objectives), MMs, as recipients of change from the senior level, need to engage in a sense-making process [Balogun 2003; Balogun, Johnson 2005] in order to translate to the operational level [Floyd, Woodridge 1997]. The upward influences of MMs involvement have the potential to alter the firm's strategic course by providing top management with unique interpretations of emerging issues and new initiatives. In this way, the MMs are seen as the backbone of organisational activity and innovations [Marginson 2002].

This directly challenges the traditional view of a "top-down approach" of strategic implementation at a distance [Robson 1992]. Hence all subordinates can, and do translate strategic objectives into the context reflecting their own realities [Eisenhardt, Sull 2001; Mantere 2008]. Balogun [2003] specifies that MMs are broadly involved in coordination as well as management, i.e. MMs bridge the top and ground management levels, as 'linking pins' [Floyd, Wooldridge 1992]. This framework depicts MMs as mediators between the ground and the senior level.

The dialogue between top and ground level looks important for a successful business. As mentioned by Pärl [2014], to make better strategic decisions and act in

a way that is more suitable for the organisational objectives and strategy, executives and ground-level employees need a better understanding of the actions and decisions at the other end of the organisational hierarchy. Senior management has a strong understanding of organisational objectives and strategies (see point “b” in Figure 1), but they are not so well informed about everyday service and production processes. Ground-level employees, in contrast, have a strong understanding of everyday services and production processes (see point “b” in Figure 1), but they are not so well informed about organizational objectives and strategies (see point “a” in Figure 1). To make decisions, executives and ground-level employees need a good understanding of the actions and decisions at the other end of the organisational hierarchy. This makes it essential to increase understanding about each other’s actions and decisions (from level “a” to level “a’” in Figure 1) in both groups. It is important because it increases the overall useful information (understanding) within an organisation (compare the intersection of lines in Figure 1).



Legend: Understanding of operational decisions .....  
 Understanding of strategic decisions - - - -

**Figure 1.** Increasing of overall understanding

Source: [Päril 2014, p. 195].

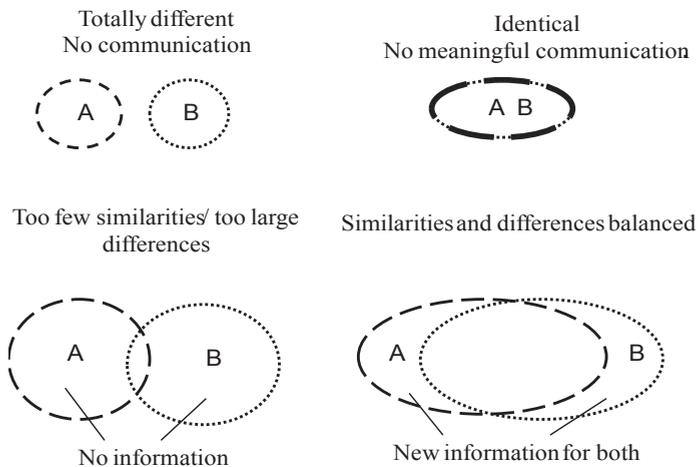
The controllers and MMs have a better understanding of decisions made by senior management and actions taken at the operative level, but they cannot make things happen alone. The controller has to develop MCS as a dialogical instrument that is able to generate, transmit and share information from and for different actors of the organization. However, in general, the ideal dialogue appears to be impossible

in business situations [Habermas 1981, 1987; Päril 2014] especially between these groups – senior and ground managers – often located far distant from each other.

### 3. The role of MM by lenses of Lotman's cultural semiotics

According to Lotman [1970] and Torop [2008], organizational communication differs in stable and dynamic organizations. The aim in the former situation is primarily to preserve the status quo and merely to describe the reality. In the latter organization, the aim is to change the reality by affecting actions. In these situations use is made of the conversion model in which a meaningful encounter with discrepant information can change organization's accepted goals, acting patterns and culture. Changes are initiated by giving the actors information about their activities, organizational processes, aims and strategies with enough amplification [Päril 2012].

According to Lotman [2000], all communication requires some form of translation in order for meaning to be potentially generated. Lotman [2001 [1970]], describes a paradox of the assumptions for communication: if two individuals are absolutely different from each other, if they do not have anything in common, then communication between them is not possible (see Figure 2).



**Figure 2.** The role of balance between understanding and misunderstanding in communication

Source: [Lotman 2001, 1970; Päril 2012, p. 63].

However, two individuals identical in every way would understand each other ideally, but the merit of the information transported is minimal and the information itself is constrained. The mutually identical participants understand each other ideally, but they have nothing to talk about. Consequently in this case communication is equally impossible – actually, it is possible, but there is nothing to communicate. This

model is suitable for giving orders, but not for normal communication. In other words, communication between totally similar participants does not create new information supportive of innovation and change. By definition then, meaningful communication to facilitate innovation and changes assumes that the participants are not identical. This is the situation which on the one hand creates differences and, on the other hand, similarities [Torop 2005; Kull 2005] providing new and adapted information for both participants.

In order to communicate, participants need to simultaneously have both different and overlapping areas [Kull 2005]. The overlapping space of participants becomes their natural area of communication. At the same time, the areas that do not overlap, at first sight seem to be switched off in the dialogue, and look to form an area of misunderstanding. However, if communication in an area of overlap is trivial, there is nothing new for the communicators. On the contrary, the area that does not overlap is that which contains new information and is the source for the innovation and changes for the other participant. That is, the non-overlapping area, in other words, the area of misunderstanding is extremely important for the new information and source for changes and innovation. In this way, the translation of the information from the misunderstanding area becomes the bearer of new information. Or as Lotman [2005 (1984)] points out: “The presence of two similar but simultaneously different partners in communication is one of the most important, but not the only, condition in which dialogic systems originate. Dialogue includes within itself a reciprocity and mutuality in the exchange of information” [p. 216].

According to these theories, for the MCS to work successfully to create and support changes and innovation it is important to have a balance between the similarities and differences of participants, which create the balance between the new and the familiar information (see Figure 2). If the differences are too large or the similarities are too less, the communication between participants will not give new information for participants.

MCS could be an important medium for creating and increasing understanding and new information through dialogue within an organisation but it needs mediators or adapters sitting hierarchically between very different participants – top management and ground level located far from each other.

This is supported empirically in Chun et al. 2009, which reports that senior managers exert a heavy influence on MMs but by contrast they have a minimal influence on lower hierarchical employees. MMs are required to act as intermediary actors influencing lower levels that ‘distant’ senior managers cannot reach.

The role of MMs is to mediate the information to both parties using their “overlapping areas” with both – senior and ground level managers. They are regularly exposed to the demands of the external parties such as supplies and customers and are therefore well placed to recognise the potential value of divergent initiatives [Floyd, Wooldridge 1997]. They draw on their knowledge of customers, operating capabilities and top management intent to exert an upward and downward influence within the

organization. Based on that MMs have a good understanding of decisions made by senior management and actions taken at the ground level, but they alone cannot make things happen [Fauré, Rouleau 2011]. However, they can have a powerful impact on the MCS implementation process for creating innovation and changes and guiding actions.

To conclude, MMs can act as determinants in the dialogue between senior and ground level managers so it is important to better understand the MM role in mediating the organizational change processes.

#### **4. Methodology**

This empirical evidence was collected from a single case company, named for this research PowerLines, (referred to as PL) between 2007 and 2010. In 2007 PL needed to implement changes due to rapidly declining profitability and offered one of the researchers of this study the post of CFO. Acknowledging a potential conflict of interest in relation to the desire to collect empirical material for a study (collecting empirical material was the assumption of the contract from the researcher side), the researcher instead agreed to work with the company as a part-time consultant to management for one year.

During the research period when the researcher participated in management team briefings they attended 18 senior and middle management meetings (see Appendix 3), eight ground-level management meetings (see Appendix 2), and also conducted five workshops. She also attended finance division meetings and the annual meeting of the parent of the case company. The researcher had access to all accounting and management data, reports, budgets, formal instructions, and she used the accounting and financial analysis software, etc. On average, the researcher worked with PL for three days a week, usually at the company's head office.

In addition to observing, the researcher conducted semi-structured, in-depth interviews with PL personnel. A total of 20 interviews were conducted between July 2008 and April 2010 (see Appendix 1). The interviews lasted between 15 and 90 minutes and yielded approximately 20 hours of recordings; all were later transcribed.

Interviews were carried out with the senior managers, accountants, a controller, a middle-level controller and middle managers. There were 40 foremen in the company, and six were interviewed. The interviewees (foremen) were carefully chosen so as to cover the different aspects of MCS use. When deciding whom to interview, the researcher consulted MMs and controllers, analysed operative-level financial results, talked with different foremen, and participated in formal and informal meetings.

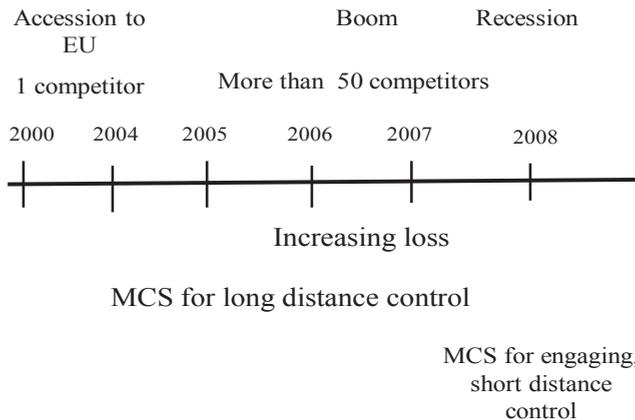
The interviewees often framed their accounts in a politically conscious manner [Alvesson, Sköldberg 2000]. According to Silverman [1985], interviews are about "moral story-telling." The researcher's part-time fixed-term consultancy agreement provided a better starting point for observations and interviews. There was no formal authority relationship, as she did not rank above of any other member of staff and vice versa. If, during an interview, the researcher felt that the interviewee was talking

about what was officially desirable, or polite, she could use her role as an insider to ask direct questions about generally unacceptable things; for example, manipulating data, stealing materials or everyday use and sharing of reports and information. This helped most interviewees to open up because they knew that there were no taboo subjects. In any case, the researcher would be familiar with such subjects which may never have been discussed officially (or unofficially) within the company.

Although interpretation and interaction are important, the interview texts as empirical data also have to be carefully analysed. The empirical material was organized and analysed alongside the interview process. The recorded interviews were played back and transcribed. They were then printed and organized into the interview catalogues according to the positions held by the interviewees. Textual-level analysis was conducted by coding the segments of ordered text. The texts were analysed between interviews to prepare for the next round of interviews.

#### 4.1. Changes in the case company

The case company, PowerLines (PL), constructed and maintained power lines in one of the Baltic countries and had 350 employees. Prior to 2000 PL had been a department of a monopolistic state-owned corporation (PPL) that handled the generation, distribution and supply of electric power and now owned 100% of PL. In engineering terms, PL was generally recognized as a high-class organization with well-educated and experienced engineers; most of the managers and specialists had a university degree in engineering and over 10 years' work experience.



**Figure 3.** Changes in the environment and MCS

Source: authors' own research.

The Baltic countries have been subject to diverse regulatory regimes since 2004 (see Figure 3), when accession to the European Union led to the opening of the energy

markets. In preparation for competition PL's market was geographically halved with the other half privatised and run by an international competitor. PL, reported on a results basis to PPL, its main customer. Throughout the decade 2000–2010 PL's operational goals were set by PPL, as said by CEO worked with PL till April 2007: "to provide maintenance and repair service at any time to ensure continuity of the country's power supplies." The business culture at PL was traditionally based upon the notions of stability and the general interests of the state.

Although PL was founded to prepare for market competition, little competition actually existed from 2000–2005 as regional PPL managers, who were former colleagues of regional PL managers and still co-located, tended to give contracts for work to PL rather than contract private providers. Competition existed in name only, not in practice. Gradually, during 2004–2007 actual competition for PL grew as many construction companies entered the market. At the same time, turnover of many regional PPL managers meant that PL could no longer rely on automatically getting PPL's work. So by 2005 PL had to genuinely compete with around 50 small competitors for services to PPL.

Due to a building boom starting in 2006, input costs escalated and PL became loss making. PL's financial position was compounded by a lack of attention to management controls including poor billing and payment collection practices. Despite a boom in the construction industry, PL was operating at a return on sales ranging as low as negative 15%.

These financial results reflected the chaos and ineffectiveness of the organization. It seemed clear to the board of the company that the organization could not survive in this situation for much longer.

Based on financial indicators the company was in chaos, almost bankrupt, inefficient, and out of control. The CEO was replaced in April 2007. As a result, in the summer of 2007 the new CEO decided to develop MCS that would better monitor processes achieving top down control at a distance. Most of the company's resources were used at the ground (or operational) level (over 50% of its costs). As a result, the ground level was the "key level"; where it was possible to monitor and control costs (e.g. of materials and labour). The aim was to make ground-level processes more visible for reasons of control.

In 2007/2008 the onset of an economic recession led to a rapid change in market conditions. MM and ground-level managers had to decide how to react to these changes; to do this, they needed information and feedback about their own actions and project costs. At the end of 2007 there was a decision that the company also needed MCS as a short-distance (local) control available to directly support ground level decisions and engaging people to achieve organisational goals. The CEO strongly supported this view:

*"MCS is not just for senior management. MCS is to help every person to understand what is important, and to see his or her role in the organization. This system is the instrument by which one can reach every person's brain. Every person has to*

*understand that I (they) can work, but if the company gains no profit from it then nobody needs this work.”*

At the end of 2008, when the developed MCS had been in use in PL for almost a year, it became apparent that despite the formal MCS system being the same throughout the organization – for all departments and all teams – MCS was being implemented in different ways in different departments.

## **4.2. Different patterns of implementing MCS**

Each department had a management team with a department manager (MM) and a controller. Controllers gathered and analysed data for MMs, and provided some clerical support. The controllers’ official superior were MMs rather than the principal controller or CFO. However, they also worked closely with the accountants and with the principal controller.

While the company’s economic results in recent years were not good, the situation differed by department. In the case company, we can distinguish ‘underperforming’ departments (department I and II) and ‘well performing’ departments (department III, IV, V). Well performing departments had earned an adequate profit most of the time. The MMs in these departments had worked with PL for about 10 years and continued to do so during the research period. The two underperforming departments had made a loss in recent years. All the department managers of the underperforming departments were replaced during the research period.

### **4.2.1. Underperforming departments (I and II)**

Departments I and II were quite similar: both located in cities, performed line construction and maintenance, employed about 45–50 personnel with 9 teams with foremen, had made a loss in recent years, and respective department managers had been replaced many times. At the end of 2007, both department managers were once again replaced by new external recruits.

The new department managers held degrees in engineering but had worked in different fields, and so had gained experience of working for private companies in a competitive environment. They had to restore the long distance control over these departments and turn around their financial performance. On entering the company, they faced an atmosphere of mistrust between employees and managers. MM I described the situation and his task:

*“I came here to create the team and develop communication. Actions in this department were not visible to senior management, the atmosphere was full of electricity and there was no volition to work.”*

Introducing MCS on the ground level created a new practice of sharing company overall results including department and teams performances across the company but was deemed necessary by the MM of the underperforming departments. MM I said:

*“I forward and share everything. As I understand it, they (foremen) study it very carefully and discuss it later with each other.”*

MM II said:

*“I share and give access to everything. But I think there are too many figures. I make an extra, smaller and simpler report from these huge reports and write a short analysis below it. I convey the most important information.”*

These department managers considered that the MCS works at the ground level. After one year of using MCS on the ground level, MM II, said:

*“We are now living in a totally different world – in the world of financial results. Seven or eight months ago the operative-level managers did not know much. Now they are getting the financial indicators of the company and the departments, as well as the ground-level team.*

*I have noticed that when they get this information, it is totally quiet in the offices for the next two or three hours, as they calculate and analyse, and compare themselves with others.*

*Even talking with workers about these figures will make them happy. They feel more like ‘white-collar workers’; they feel that we trust them.*

*They start thinking about which mechanism would work better, how to reduce expenses, or how to make processes more efficient. They like it. To sum up, the important thing is to talk to people.”*

According to the monopolistic philosophy, during the research period there was still a problem with the ‘budget discipline’ at PL. Senior managers surmised that lower-level managers did not accurately assign costs into the account or project which was substantially connected with the process. They used to use periodization of costs of materials to design short-term results and make a lot of corrections to the previous months’ inputs to manipulate accounting data, which resulted in weak control over resources.

According to the MM I, there was no reason to use methods like this because he and foremen were interested in getting correct information about the processes. He confidently rejected this belief about his department; he stated:

*“If you look – there is over-performance of turnover and profit. This means that the answer is a definite no. They (foremen) calculate to be sure that they fulfil the plans, not to manipulate numbers.”*

MM II talked about the possibility of designing results at the middle level:

*“Of course there is an opportunity to use some methods to dress up results in the short term. I don’t use them. We need to work to make results better, not use ‘chemistry’.”*

Although foremen thought that MCS information might be relevant, some of them did not understand how figures actually reflected their work. They believed the MCS

did not reflect their effort correctly as it showed their departments at the bottom of the performance ranking. Foreman II stated:

*“The accounting data was totally false. Totally! I did loads of work. It was too much. It was over my head. I worked like mad.”*

As they were not able to use financial information, they were not able to link the MCS and engineering processes. Foreman II claimed:

*“I cannot influence anything – the cost of materials – it is not under my control. ... Of course, maybe I could calculate and plan time, but anyway I have too much work to do, I have to run too much anyway, I have no time for paperwork and planning.”*

At the same time, some foremen had very detailed and online data about their construction and maintenance objects. They were well equipped with cost and process information and had gathered around themselves a local online accounting system. Foreman VI said:

*“My task in this company is to earn money. I calculate all the time. I calculate the budget, costs, result. ... If I calculate for myself then I know exactly what is there. I know how much, and why – every day. It does not take too much time. I have my data and overview. When I get the plan, then I divide it up into days, write it into a calendar, hang it on the wall – then all my subordinates can see.”*

At PL senior managers were not satisfied with the formal accounting system because of delay of information. In short, the problem was called “online accounting.” There were differences between departments in accessing primary data. Some departments were very well equipped with operative, ‘online’ data about the processes and others were not. For example, MM I stated that foremen had their own calculations and analyses on an “online” basis:

*“Workers and foremen are a team, they work and think together. They own the “online” information about their contribution margin all the time, they calculate it themselves. We – in middle and senior management – get this information a month later.”*

At the end of 2007 introduced the weekly meetings for MMs and training sessions for middle and ground level managers (see Appendix 2,3) to make official MCS work. MM I concluded about methods which made the positive changes in economic results possible in the department:

*“The method was cooperation and attention. ... the cooperation with senior management was important. We had these weekly meetings. The financial part was most important in these meetings – it was impossible to forget it.”*

To conclude, both MMs said that it would be important to develop a better formal MCS – to make it more online. They would like to have more support from

central MCS and at the same time, they were ready to cooperate more with the top management. In addition, as the MM said – besides reporting it is important to talk with people, to explain things.

Communicating requires some knowledge and pre-understanding of these concepts used. If the recipients of a report do not understand the meaning of terms or their roles in changing them, the information could create innovation and changes cannot be understood. A member of top management said:

*“Those who understood the meaning of reports and information have been coming with us into the process. But those who didn't, those who believed that the reporting and rewarding system was not useful had to leave the company, or they will have to leave in the near future.”*

#### 4.2.2. Department III

Department III constructed and maintained power lines and substations. The department had been successful in financial terms over the years. Similar to other better performing departments the Department III management had been stable for some time. The manager of that department had worked at PL for about ten years, had a degree in engineering and prior work experience with different companies, and also more than ten years of entrepreneurial experience.

MM III was generally satisfied with official MCS. They were supported by a department controller in getting information about projects and processes. It appears that MM in stable departments felt they were well catered for with primary data, receiving data from their own systems as well as from the official PPL MCS. The MM III explained:

*“I have never relied on the central accounting system! I have my own complete accounting system here. I need timely data. If I get this data from official system about the costs about a month or so later – if I see then that some project has run into the red, the next month is already almost over; if you discover this mistake, this ... sin, ... or this ... place... which makes this 'minus' it is difficult to correct it – the next month has already gone the same way.”*

MM III said about the indicator which he used to value the success:

*“No, I do not talk about profit or turnover I call it 'budget discipline' – the precision of keeping to budgets.”*

MM III explained his thoughts about using the progress method for smoothing and gaming purposes:

*“The progress method is very elusive. For example, it is not good to embellish results during a holiday period. You have to think how much to take on in sales to get the optimal result.”*

*Researcher – How do you decide this?*

*MM III – My controller somehow decides – she takes care that we do not make a loss. But we cannot take too much in sales. I think that accounting which uses the progress method – it is the ‘chemistry’ of head office. Behind these numbers – what has actually happened isn’t seen. For example, one team in our department has worked very well this month. They completed a lot of projects, but we postpone some of the sales to the next month, because this month was full, there is no more space for the sales. ... But these projects are completed, the work is done.”*

Although the manager called the progress method “the chemistry of head office” and said that it was not useful for describing processes, he used it in his department to design budgeted results (i.e. to manipulate data) in the short term.

Although it was known at PL that some MMs “make data to fit the budget better,” the manipulation had been condoned for many years if the department results were good. The MM III was actually the best MM at PL. As the corporate controller commented:

*“Many times there have been discussions about if the profit and turnover task is fulfilled, why is detailed (official) project accounting and analyses needed? It doesn’t matter what the MM does if the task is accomplished – why the hell do we do additional accounting and calculations here?”*

MM III described using MCS at the operative level:

*“I share all MC information with my foremen. Then they compare themselves with others. They are satisfied with these numbers – it has been like this all the time. In our department we have created the system to analyse the cause of the results, to see why the numbers are like they are.”*

The MM III shared this information to show to operative level managers that they had worked well and their position in the company was quite good and stable. Foreman III described his projects’ cost accounting and commented on the situation in another department:

*“My task is to make a profit. My team is like a small independent company. ... It is very important to calculate, analyse and budget very carefully. I have planned and thought through all my projects. I think and calculate all my projects in great detail... When I talk with other operative level managers – they don’t know how their projects are planned! How can they work like that? Their answer: the department manager knows – how can they work like that!? A few years ago we didn’t know anything about money, budgets and results. Our task was to work. Now we are calculating – it makes work easier. Without budget and cost data it is impossible to work. I have exact data and I also add records to the official accounts.”*

To conclude, in this department MCS was used for two purposes: actual and online local MCS for local management purposes, and official MCS for giving positive

feedback to the ground level teams. Information which went from ground level to senior level was censored and smoothed. At the same time, middle and ground level managers were well equipped with cost and process information gathered by a local online MCS.

#### 4.2.3. Department IV

Department IV focused solely on the construction of power lines. It differed from the others, which had to both construct and maintain the lines. With a focus only on construction, it made the processes more routine, and organizing processes in this department seemed simpler than in other departments. This department employed about 30 personnel, compared to 45–50 in the other departments.

The MM IV had been working for PL for over ten years. He was familiar with processes, rules and routines. In light of the financial results, one could say that the MM IV was successful and the processes in this department worked well. He described his success:

*“I think I have been successful. My task is to make a profit and I have done it all these years. Financial results are good and I have assembled a very good, professional team. I have completed it and saved it throughout these years.”*

MMs’ I, II and III opinions were that in order to manage successfully, it would be important to use the MCS on the ground level. Surprisingly, MM IV had a totally opposite position and a very strict standpoint on giving access to MCS and sharing information to ground level:

*“[In] this kind of department ... only I own and use information about budgets and costs. Our department is small. Work is simple. We have control over the materials and services, we know what happens here. My employees are satisfied with the work and they do not need data. They have their work and they get an adequate salary. Foremen have to construct, they do not need this kind of information.”*

He even thought that sharing information with ground employees was undesirable or even harmful. He adds:

*“I can say that sharing information is not good at the moment – if I tell my people that we are making a loss .... then they have no motivation to work. ... I have said that the profits are no longer what they were... but... accounting is just numbers, no emotions, we interpret the data here as we... want ... or as we are able to ... or....”<sup>1</sup>*

People in this department did not seem very enthusiastic and happy. Senior management decided to hold a meeting with operative-level managers of this

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<sup>1</sup> The researcher’s interpretation: dots in this citation indicate pauses which the interviewee made when looking for softer or more acceptable words to describe the manipulation of the information.

department to introduce foremen to the formal MCS. After the meeting, the researcher asked about feelings connected with MCS and rankings of foremen. Foremen I said:

*“I have not been engaged in calculations and numbers. We have a department manager here who prepares the numbers for...I do not know for whom.*

*Researcher: Do you feel that comparing operative-level teams and these reports and figures does not adequately reflect your team results?*

*Foremen I: Yes, that's exactly how I feel! It is not under my control. I did not provide this data, and it is clearly of no interest to me. I do not need these numbers at all.”*

Even if the department manager could share the official MC reports with ground level staff, the formal MCS did not affect actions because as the foreman understood it, this data was not connected with his work. The ground managers did not trust MC information because the data was modified and changed. Foreman I claimed about manipulated data in MCS:

*“The figures from MCS might be of interest for me if I knew that data is mine. Not somehow modified, made more befitting for some reason.”*

#### 4.2.4. Department V

Department V was functional – specializing in large, top-class engineering projects across the country. The employees in this department were well-educated engineers, with the highest-level professional ranking. The department manager was also an engineer with experience of successfully running large, and in engineering terms original, sophisticated projects. He had worked in PPL and in PL since 1984. As for MM's from other high performing (stable) departments MM V was satisfied with the MCS. MM V commented:

*“I get all the information I need. Maybe the problem is that there is too much data, but my controller carries out the technical analyses, and I get information which is really useful.”*

But his opinion to share information with foremen and use MCS for engaging people and manage process was similar to MM IV. He said:

*“I do not share MC information with them (foremen). They are educated people maybe they want to get more information – but what they will do with that? I never gave them any financial information.”*

He explained the reasons for not sharing and using MCS information at the ground level:

*“Compared with other departments my employees are very well-educated. Almost everybody has a university degree in engineering. They are able to think autonomously and differently. If I share the MC information I have to spend more time in terms of handling the information. If I share information with them they will come to the*

*wrong conclusion because they are employees, not employers. I never share financial information with them.*

*If they know that we make a profit, they will want higher salaries. It is like a snowball – it will grow very fast if you let it roll.”*

The MM IV and V evinced different reasons for not sharing MC information with their subordinates. If in one department the reason appeared to be foremen being well-educated, for another manager the explanation was the opposite.

## 5. Findings

At PL five different styles of using MCS may be distinguished: First, applied in department I needed considerable changes to reach economical tasks – official MCS used for dialogue between the senior and the ground level as well as between different ground level teams. Information gathered based on reliable data. MCS data was accessible by ground, middle and senior level managers. Local controllers supported middle and ground level managers with gathering additional data and offering additional analysis. Additionally to that, ground level managers had their own operative data, plans and analyses. Official MCS supported local MCS used for communication, creating changes and guiding employees.

**Table 1.** Using MCS for dialogue between the top and the ground level

		Underperforming Demand for considerable changes		Well performing No demand for changes		
		I	II	III	IV	V
User of MCS	Information of processes					
Top	On the top level	Centralised MCS				
	On the ground level	MCS	MCS	Smoothed	Smoothed, manipulated	MCS
Middle	Top	MCS	MCS	MCS	MCS	MCS
	Ground	MCS + local	MCS + local	MCS + local	MCS + local	MCS + local
Ground	Top	MCS	MCS/not in use	MCS	No access	No access
	Ground	MCS + local	MCS /not in use	MCS + local	No access	No access
Increase/decrease in Return on Sales over research period	points of %	+12.6	+9.7	-2.8	-9.6	-0.5

Source: authors' own research.

Second, very similar but a slight difference can be found in case II. MM II acted the same way as MM I, but some ground level managers were not able to use official or local MCS for management purposes. Those foremen whose results were good (or improved during the research period) accepted MCS as reliable and were able to relate to this information. They perceived no problem in terms of using financial indicators and accounting methods when describing their work. Foremen whose results were poor generally had problems understanding the financial indicators, and did not use the MCS as dialogical instrument for creating innovation and changes. So MCS did not work well on the ground level. Most of these ground managers had to leave the company.

Department I as well as II improved their performances during research period, and the company began to earn a profit from 2008 with senior management seeing that they were getting reliable information about the performance results of these departments.

Departments III, IV and V were different. These departments had performed well and did not feel they needed MCS to motivate of changes for economic reasons. In department III ground managers were very well supported by local MCS but could also use the central MCS. MM III introduced regular meetings to discuss results and analyse processes. Cooperation and commitment in this department was strong. Unfortunately, because of the manipulation of primary data, head office did not have objective information of operative-level processes and activities, i.e. about the best practices used in that department.

Fourth, in department IV ground managers either did not have information about either company or their own team and department performances or were given information manipulated by MM IV or “interpreted as we want it to be.” MM IV cut off access to the official MCS and did not share information he gathered from the local MCS. Although department performances have been good, the last year declined in and it had serious difficulties competing in the construction market. Also MM IV thought his team work well, despite interview data ground level managers were not very enthusiastic. As the MM IV did not need central MCS to support action, he was more interested in improving the data sent to head office to achieve a better picture of his short-term performances. The result was that senior management had reliable information neither about processes in department IV nor about systematic mistakes the overall of organizational processes.

The MM of department V did not share information with his subordinates, although the reason was opposite. Foremen were very well educated engineers. Researcher did not have information about manipulation of data or smoothing in this department. MM V was very well equipped to information from the official MCS supported by local controller with local MCS.

Senior Manager I concluded situation in using MCS at PL:

*“In this organization we have had a lot of problems with concealing information or distorted information at the middle management level. It depends on the department*

*manager as to whether there is operative-level information about processes or not. We had lots of problems with that and it was one reason why our organization was in such a bad situation.”*

As Corporate Controller stated:

*“Whether the MCS worked or not or how people react to the system is mostly dependent on the department manager. Who the department manager was – how interested he was in the MCS, how he got on with the system himself.”*

## **6. Discussion**

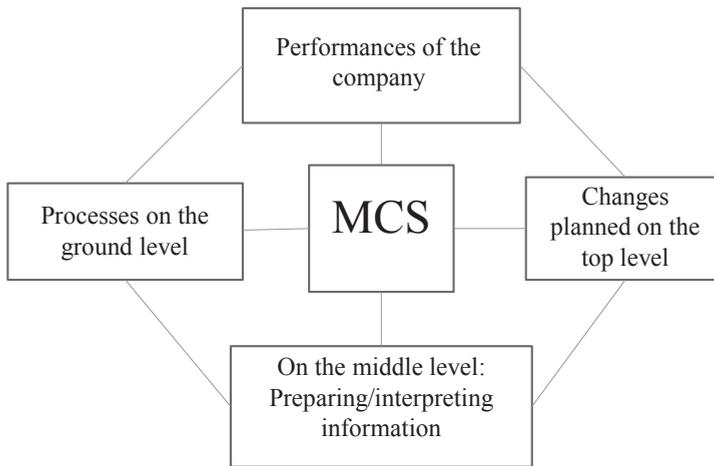
Changes in the business environment have brought the external market place into contact with every level of the organization, to operative level actions. Although senior and ground-level managers have different roles in the organizational processes, they are the people who can make things happen, and change organizational actions and results [Pärl 2014]. Both need a good understanding of the actions and decisions at the other end of the organizational hierarchy. To make strategic decisions at the senior level, management requires an understanding of the external business environment and the internal processes (operative level) of the organization.

Most resources are used and changes put into practice just at the operative level of an organization. In addition to these rapidly changing markets, operative-level employees are directly connected with customers and they are the first to receive information about market changes in the external environment. They are the ones who know best how to serve the customer in the best way. However, control in organizational forms – team-based organizations premised on concepts such as participation and empowerment – must be understood by considering the connections that individuals have with organizations and workgroups, and the influence of these connections on organizational interaction and behaviours. Ground level actors have to act at the local level and understand objectives at a distance.

In order to decide how to act, both senior managers and ground-level employees have to understand each others' processes and thoughts; they have to be in dialogue [Lotman 2001; 2005; Pärl 2014]. This places senior and ground-level managers in a similar situation in terms of using MCS. Both have to take information from the 'other side of the wall' [Hopwood 1990], that is, from the other parts of the company as well as from the commercial environment of the organization, and they have to make decisions on how to act. This means that ground level managers and employees are as important users of MCS as senior management (see Figure 4).

The controllers and MM act as mediators or translators [Lotman 2001; Floyd, Wooldridge 1997; Pärl 2011] by having better understanding of decisions made by senior management and actions taken at the ground level [Woolridge, Schmid, Floyd 2008; Balogun, Johnson 2004], but they cannot make things happen alone [Fauré, Rouleau 2011]. The controller has to develop MCS as a dialogical instrument [Boland

1989; Macintosh, Scapens 1990; Robson 1992; Päril 2011] that is able to generate, transmit and share information from and for different actors of the organization. The MCS's role is to make the 'right' things visible [Hopwood 1990] – to create an instrumental system which produces indicators. The second role is to give enough amplification [Catasus et al. 2007; Torop 2008; Päril 2012] to the message and objectives mediated by MCS – by the formal MCS as well as with informal contacts used [Ahrens, Chapman 2007]. As the case study illustrates, the amplification and translation process in the MCS can play an important role in the implementation process.



**Figure 4.** The mediating role of middle managers

Source: authors' own research.

MMs have a powerful impact on the MCS creation and implementation process [Päril 2014]. In this case study, some managers even cut off access to the MCS at the ground level. At the middle level, we see different ways of amplifying the message coming from senior and ground levels, to talk with people to explain meaning of reports or conversely, no amplifying to 'correct' and 'censor' the information [Hopper, Powell 1985]. As was found in the case study, the amplification and translation process [Päril 2011, 2012] at the middle management level could play an important role in the MCS implementation process.

The MMs are likewise in a key position of in terms of MCS, determining how MCS information travels [Robson 1992] along the organization or how MCS are implemented. The fact that they could significantly support or counteract actions means they affect the implementation of MCS through its mediation. Controllers and MMs act as determinants in the MCS.

The misunderstanding and understanding [Lotman 2001; Kull 2005; Päril 2012] of organizational aims and economic actions is largely dependent on how MMs mediate

information in the MCS. To decrease misunderstanding and increase understanding in the company, it is important to understand the processes of the entire company to support actions at senior and ground levels.

To conclude, we can say that MCS work as a chain. Every part is equally important. As a chain, if one link does not work or it is too weak, it can cause break of the whole system. Based on that we argue that in innovation environment to answer the call to increased managerial attention to coordination and control to guarantee alignment between innovation activities and performance goals – we have to look at MCS as chain with strictly organized links between different levels of hierarchy of the company. Additionally, based on this research analysis, we can conclude that to understand how and why MCS works as it does in a given part of the organization we have to understand the processes of the entire company. The way MCS are used at ground or senior level depends on the functioning of every MCS chain links. It accentuates the importance of the MMs' role of information-based innovative environment.

The theoretical and empirical analyses allow the following conclusions:

- To make an organization more flexible and at same time guided by strategy and organizational aims it is necessary to decrease misunderstanding at both ends of the organizational hierarchy regarding processes and thoughts at the opposite end of the organizational hierarchy.
- The misunderstanding and understanding about organizational aims and economic actions is largely dependent on how MMs mediate information in the MCS. To decrease misunderstanding and increase understanding in a company, it is important that MMs are supported by a strong amplification of the MCS.
- Changes in organizational financial results are dependent on actions which are driven by information mediated by MCS as dialogical process. This makes MMs mediation role in the future even more important.

To sum up, the study makes the following theoretical contributions. First, the study extends a communication theory of MCS based on Lotman's cultural semiotics. Next, the findings of the study extend our understanding of the role of communication in implementing MCS in affecting behaviour and in achieving objectives. Third, the contribution of the study lies in investigating communication as an action-generating process from an epistemological perspective.

Every study has its limitations and therefore, the findings of the present study should be considered carefully. Firstly, the findings of any study are subject to the inherent limitations of the method selected. Conducting field research cannot be considered as an entirely independent and objective act of investigation. A researcher must always be aware of the risk associated with selective perception in collecting and analysing the empirical material. The researcher's background and prior experience influence the process of empirical material collection, documentation and interpretation. Possible researcher bias can, however, be carefully considered during the research process, and in this study, the collection, documenting and analysis of empirical material were carefully conducted and several methods applied to address possible

bias. Nevertheless, the problem of observer bias cannot be entirely eliminated since an individual researcher can never be separated from his or her background, philosophical views and experiences [McKinnon 1988].

The MMs' role in MCS is a particularly promising area for further research. This study does reveal the important role of MMs in the implementation of MCS – they can mediate or cut off the MCS in the company. Could we generalise a similar effect elsewhere in companies?

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## Appendix 1. Recorded and transcribed interviews

	Position	Duration
1	CEO I	35 min
2	Controller I	43 min
3	Top management I	63 min
4	Area manager I	40 min
5	Area manager II	66 min
6	Area manager III	100 min
7	Lower-level manager I	33 min
8	Lower-level manager II	55 min
9	Area manager IV	66 min
10	Top management II	39 min
11	Lower-level manager III; Specialist (logistic)	78 min
12	Lower-level manager IV	83 min
13	Lower-level manager V	54 min
14	Area manager V	92 min
15	Lower-level manager VI	44 min
16	Controller II	38 min
17	Accountant I	15 min
18	Accountant II	89 min
19	CEO II	95 min
20	Controller I	82 min
		20 hours 10 min

## Appendix 2. Observations

	Type of observation	No of observations	Total in hours
Briefings of “third floor”	Participant	25	38
Meetings of senior and middle managers	Active participant	33	122.5
Workshops of senior and middle managers	Chair, lecturer	3	8
Workshop of ground level managers	Chair, lecturer	2	3
Meetings of ground level managers	Active participant	8	22
Meeting of CM financial division	Participant	1	6
Total		72	199.5

### Appendix 3. Meetings of senior and middle management

Duration (in hours)	Topic
6	Strategy of PL
3	Workshop, brain storming
6	Budgeting, incentive system
4	Budgeting, prognosis for 6 months
4	Financial results, sales prognosis
4	Investments
4	Incentive system
4	Incentive system
2	Financial results, sales prognosis
6	Financial results, sales prognosis
3	Sale prognosis of March, prognosis of I quarter
3	Management accounting, corrections
2	Financial results, sales prognosis
5	Financial results, sales invoices
3	Annual report of previous year
3	Understanding of incentive system
2	Problems in implementing of incentive system
2	Incentive system for extra-workers
8	Strategy meeting
3	General meeting, workshop
9	Strategy meeting
3	Financial results, sales prognosis
6	Financial results, sales prognosis
3	Financial results, sales prognosis
3	Prognosis of II quarter, results
3	Organisational structure, incentive system
3	Financial results, sales prognosis
3	Incentive system
2	Incentive system
2	Financial results, sales prognosis
3.5	Financial results, sales prognosis
3	Results, sales prognosis
2	Financial results of 7 months
122.5	