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Master Degree Project in Management

Engaging the Workforce with Performance Measures

Discussing the effect of the dark side of goal-setting at the factory floor

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Abstract
Most large companies are greatly challenged to succeed at designing performance management systems that support employees in their strategic work. This study uses a qualitative approach and the framework of Strategy As Practice and a Critical Discourse Analysis, to study one manufacturing plant´s efforts to make their employees more dedicated to improving the performance of their daily operations. Using this framework, several factors that prevent the employees from engaging in improvement activities are identified. Among these factors are the KPIs of the plant, which focus almost exclusively on short term performance. These confirm that negative effects that can come from goals if not carefully considered. The study also increases our understanding of the interrelation between practices in strategy research as it investigates goal-setting as a tool in relation to other practices and generates four new discourses that inhibit engagement; *myopia*, *individualization*, *slimming* and *frustration*.

Key Words
Goal-setting, performance management, performance measures, performance indicators, Strategy As Practice, Critical Discourse Analysis

Introduction
Changes in the organizational context include progresses which also challenge the everyday organizing of contemporary firms. Increased competition on the open global market, rapidly changing technology and increased expectations from customers (Saroso & Murthy, 2007) are some of the most visible changes that force companies to continuously improve their performance. At present, these pressures seem more forceful than what previously has been the case. This means that organizational tools and systems, and the strategy overall (Vaara & Whittington, 2012), will become even more complex in the decades to come.

In order to improve performance, organizations need to succeed with their strategy. To develop and implement such strategy, and to increase performance, different tools and systems for monitoring and control, goal-settings and resource allocation have to be designed and used. Together these can be called a performance management system – a system that allegedly "virtually all companies have" (Aguinis *et al.* 2011: 503). Studies of work performance have engaged researchers for a very long time (Boettger & Staw, 1990), and measuring performance as well as goal-setting practices have been a central aspect of them. Even in the 1950s the concept of Management by Objectives had already been popularized (Drucker, 1954). As the case in this paper illustrates, designing and implementing goals is often a difficult task which can contribute

to various negative side effects if not done carefully. Even if goal-setting to some extent is more the rule than the exception in contemporary organizations, and furthermore has been praised as being the most effective tool for creating success (Latham & Locke, 1990), with a strong evidence base supporting its efficiency **(**Latham & Locke, 2013), statistics highlight the difficulties of implementing goals. Only 30% of workers feel that their performance management system actually help them improve their performance and less than 40% of workers feel that their system provides clear goals (Pulakos, 2009). The negative side effects of goal-setting has also been known and debated for a long time within clinical psychology (Hrabluick *et al.* 2012). In management studies, paying attention to the negative side effects seems to be a newer phenomenon (Ordonez *et al.* 2009; Hammer & Hershman, 2009; Jensen 2001, Schweitzer *et al.* 2004; Barsky, 2008). These studies however, report many aspects that can negatively impact performance when implementing goals (Ordonez *et al.* 2009). Goals can for instance be individual or be based on team performance, or they could be too difficult or too easy to live up to (Ibid). Further, companies often measure the wrong things or too much (Neely & Bourne, 2000; Webber, 2006). Measuring something indicates that you prioritize this aspect more than the other areas which are not measured. Hence it is expected that employee performance within other unmeasured areas might decrease (Ordonez *et al.* 2009). The efficiency of goals also depends on a wide range of contextual factors, such as situational constraints, resources, and task complexity (Locke & Latham, 2013). Yet these need more empirical research (Neven & Healey, 2015). Generally speaking, the balance of a mix of goals and taking their context into consideration seems to be pivotal. The implementation has to be done by a careful communication with all the employees because they also need to take part in the design process of the measures.

To understand why goal implementation and performance measures often fail, Ordonez *et al.* (2009) argued that we need more micro studies that investigate what actually takes place at the operational level. They further suggest that scholars need to look at the broader objectives of goal-setting that balances both its positive and negative aspects. In a similar manner, many researchers have highlighted the need for more focus studies to better improve the understanding of such strategic work, for instance, effects of goal failure (Schweitzer *et al.* 2004), to understand the interplay between goal-setting and other strategically important aspects such as cultural aspects and control (Schweitzer *et al.* 2004). Since the performance of this strategic work depends on the skills of the workers which are more or less local (Whittington, 2006), studies have to investigate the practices in organizations more closely in order to understand what actually take place at the operators level and its context (Neven & Healey, 2015).

This focus study was conducted at a large plant. The struggle came out of the situation in which they experienced that most of their pre-set goals were not met. The management had learned that if their Key Performance Indicators (KPIs) were beneficial and effective, their strategy should be successful since they would reach their goal, which in this case was to be a world class plant. Furthermore, the management realized they had somehow failed in their strategic work since their employees were not as engaged in the improvement activities as they needed to be, and the employees did not show trust in the initiatives and in the communication from the management. One of the main concerns from the management was to get the employees

on their side, to get them engaged in strategic work, and to build an organization were the employees took responsibility and engaged in the work by working with continuous improvements instead of doing daily firefighting as currently did.

In this master thesis I have studied the operational level to see the activities and how the operators are working, what they think about the present work situation and how their direct or indirect engagement in strategic work are low or even prevented. Identifying these aspects leading to failure could confirm previous research and come up with new theories and implications as well as suggestions for further research. Hereby, insights will be provided both concerning strategic work and performance management in general, and goal-setting in particular.

Through this case, I will be focusing on the following question:

- How does the design and the continuous work with performance management in general and KPIs in particular, affect engagement at the operational level in a manufacturing company?

By answering this question, the paper aims to contribute to the field of Strategy As Practice by providing a study of aspects that prevent employees from engaging in improvement activities, thereby both confirming but also deepen our understanding of the negative side effects of goal-setting and its relation to other strategic practices.

This article is organized as follows: In the next section, the theoretical framework made out of Strategy As Practice-field and a Critical Discourse Analysis will be presented. Hereupon, the method of how the data was collected and analyzed will be discussed. Based on this, the findings are presented, beginning with an introduction of the plant and its challenge and an explanation of its performance management system, followed by a presentation of the work activities observed and the perspective expressed by the employees. The thesis ends with a discussion of several identified side effects and potential reasons for why these effects arose in relation to the performance management. Finally a conclusion will be presented, including the main limitations of the study as well as several suggestions for further research.

Performance measures and Strategy As Practice

The challenge with designed goals and performance indicators is to adapt the measures to the local context and to get each area in the company to be engaged in its design. Various methods and models of using the right amount and a balanced mix of performance measures, and communicating and developing these measures have been presented. The most widely known, and perhaps most comprehensive model, is probably the Balanced Scorecard (Kaplan & Norton, 1992) which was an effort to highlight the need for non-financial, and long term, measures as well as involving the whole organization in its design. In practice, designing and implementing KPIs is not only an activity for top management but should also include communication and feedback with other participators, such as first line managers and employees. Thereby the Balanced Scorecard should not only work as a tool for implementing the strategy, but also as a tool for developing the strategy from the lower levels and upwards within the organization. However, even if such ideas have been widely spread, it is suggested that as much as 70% of the

organizations implementing a Balanced Scorecard are failing (Neely & Bourne, 2000) and it is still only a broad model which has to be adapted to the local context.

In order to understand the strategy process and how strategy is implemented and developed with performance measures, the goals and measures have to be studied and understood in its context. The SAP framework can help us to understand how people involved in the design of measures and how other practices within the organization interact to affect both performance and engagement. Further, as a tool to study these practices, discourses can be identified and discussed to illustrate how these practices and practitioners take part in the strategic process.

Historically within the field of management (Jarzabkowski, 2005) and strategy (Whittington, 2002), research has to some extent (see for instance Mintzberg, 1973; Mintzberg & Waters, 1985) emphasized the importance of human interaction when studying performance. Some studies looking at social aspects of strategy making, micro-economical, and positivist based studies were still very dominant (Jarzabkowski, 2005). Hereby, the field of strategy has paid less attention to the process of strategy (Prahalad and Hamel, 1994). However, with similarities to previous social streams within strategy (Golsorkhi *et al.* 2010; McCabe, 2010), a new direction within strategy research has during the last two decades (Jarzabkowski & Spee, 2009) emphasizing the processes of strategy. This direction is called Strategy As Practice (SAP).

The main difference between traditional research within strategy and SAP is that the latter define strategy as something organizations do, rather than something that organizations have which would be the case in more traditional strategy research (Jarzabkowski, 2005, Whittington 2006?) focusing for instance on a market position or a plan. Jarzabkowski (2005: 3) asserts that SAP thereby focuses on how strategists strategize; how they "think, talk, reflect, act, interact, emote, embellish and politicize, what tools and technologies they use, and the implications of different forms of strategizing for strategy as an organizational activity." To monitor the field of SAP, and to argue for which direction research takes, or areas the research contributes to, there is a framework (Jarzabkowski 2005, Jarzabkowski & Spee, 2009) often referred to which divides strategy into three intertwined areas; Praxis, Practitioners and Practices. *Praxis* refers to the stream of activity in which strategy is accomplished over time and is further divided into three interconnected levels (micro, meso and macro). Jarzabkowski *et al.* (2007) argued that these levels divide what happens at the operational and more individual level (micro) and what is going on in the society (macro). *Practice* refers to the wide range of tools and artifacts that people use in doing strategic work. How these practices influence strategy is however not well understood, according to Jarzabkowski (2005). Furthermore, the practices can be divided into three broad categories. The first is *administrative practices* described as rational tools used to organize and coordinate, such as budgets or performance indicators and targets. Second, *discursive practices* include interactions about strategy by linguistic, cognitive and symbolic resources. So as a part of language itself, tools and techniques such as goal-setting and performance measures can be seen as discourses as well. The issue of discourses is used to inform strategy making is largely underexplored, according to Jarzabkowski (2005). The third and final group of these practices embrace *episodic practices*, which organize and enable interaction between actors participating in strategic work, such as meetings and workshops. Actions and interactions of the *practitioners*

contribute to the strategy of the organization. Practitioners can refer to either individuals or groups. Traditionally those working with strategy, such as top managers, consultants, investors and so on are known as strategists. However it should be noted that most of the stakeholders, such as employees, contribute to strategy in one way or another (Jarzabkowski, 2005, Mantere, 2005). Both scientific research (Floyd and Wooldridge, 2000; Balogun and Johnson 2004) and consulting literature (Kaplan & Norton, 1992, 2008) suggest that strategic work is not entirely a top-down process since the involvement from the employees are necessary when creating a successful strategy. This is also an area where research is missing. Even if research increasingly has focused on middle level and even first line managers, studies of operational workers are still few (see for instance Johnson *et al*, 2003; Jarzabkowski *et al.* 2007; Jarzabkowski, 2009; Vaara and Whittington, 2012). Strategy thus includes a flow of a wide range of different practices which is reciprocal, intertwined and frequently indistinguishable (Jarzabkowski, 2005). Studies of phenomena such as goal-setting and performance measures gain from including the context in which they are situated. In this study, episodic practices (such as meetings), discourses (such as different ways of attempting to lead and communicate) and other technologies (such as the IT-system and visualization of strategy) have to be taken into account as practices which also affect performance and engagement. By studying different practices, such as discourses and technology in its relation, the understanding of engagement can be increased. Additionally, focusing on goal-setting and performance indicators as a technology in a particular setting will simultaneously contribute both to SAP and goal-setting theory.

Strategy from a Critical discourse perspective

Using the Strategy As Practice framework gives this paper one perspective on goal-setting and engagement, but since the SAP framework is broad, many directions within the field have been used (for an overview, see for instance Golsorkhi *et al.* 2010), I choose to use a Critical Discourse Analysis to complement my framework to further delimit the study and to analyze the collected data.

Discourse is often referred to as talks and text, and related to concepts such as communication, power and ideology (Wodak and Meyer, 2001). Discourse is also seen as a practice influencing strategic work within organizations (Jarzabkowski & Whittington 2009) which increasingly has been studied within strategic management (for several examples, see Vaara, 2010:217). From the beginning CDA is an approach that allows the researcher to examine what influence discourses have on contemporary society (Fairclough 2003; Wodak and Meyer, 2001) but more specifically in this paper I refer contemporary society to aspects of strategic importance within an organization. CDA differs from traditional discourse or linguistic methods as it includes social practices in its analysis (Wodak & Meyer, 2001) and thereby makes an effort to understand the social constructions and other contextual factors that might affect the way people use language. Both Wodak and Meyer (2001) and Vaara (2010) further argued that using such an approach mitigates the risk of missing important aspects on how and why the discourses are created. Hence, it is important to include practices, such as goal-setting, meetings and work-methods if the way people talk should be understood. Vaara (2010: 217) also stated that:

It is precisely through such an approach (CDA) that we can better map out and understand the role of discursive practices in the micro-level processes and activities constituting strategies and strategizing in contemporary organizations.

Related to this, I would place this study within this paradigm believing that the everyday work of operational workers is important to study when trying to understand how employees' engagement in strategic issues may be increased.

Within SAP there are still few analyses conducted which consider how practices both constrain and enable organizational actors in strategic work (Vaara, 2010). Studies which can be used as a point of reference have been conducted by Mantere (2005) and Mantere & Vaara (2008) who both were studying participation in strategic work using an interview-based qualitative study at 12 companies. The latter used the CDA approach and presented three discourses that enabled participation: self-actualization, dialogization and concretization and three discourses inhibiting participation: technologization, disciplining and mystification. Studying both discourses is useful as both inhibiting and enabling discourses are present in virtually any organization. But as the company studied was struggling with engagement and believed they had failed with their strategy, it might be difficult to identify how current discourses actually contribute to increasing employees dedication. Therefore this study limits itself from discussing and even identifying discourses that enable participation. Because of this, only the three discourses that impede participation will be presented here. Technologization refers to when a system, typically designed by top managers, is created for the organizational members to follow. The strategic work is linked to these systems and often limits the possibilities that come with other perspectives or issues not supported by the system. Mystification is when the strategy process is driven by strategy statements, such as mission or vision. Top managers typically define these statements in closed workshops and are normally not questioned. Like mystification, disciplining is also about that management's setting the strategy, but this discourse also commands and punishes disobedience. The strategy is thereby linked to discipline and command structures. Using the SAP approach, this paper attempts to closely study how strategic work takes place at an operational level and discuss how a specific strategy practice (goal-setting) affects engagement while interacting with other practices. With the CDA and Mantere & Vaaras inhibitive discourses as a starting point, this paper attempts to increase the understanding of how discourses interact to affect engagement using a method for data collection that goes beyond the interview-based study to catch the "naturally occurring talk" (Mantere & Vaara, 2008:355) of the organization. Using the CDA approach the analysis covers both narratives as well as observations of actions which influence the current way of communicating, such as work activities, goals and goal-setting, meeting structures, and so on. Thereby this paper uses the discourses provided by Mantere & Vaara (2008), but also adds complementary discourses generated from a more richly descriptive, holistic focus study.

Method

As the focus for the data collection is to dig deep into a plant using both interviews and observation, the applied method follows the guidelines for a qualitative case study (Merriam, 2009). This type of study is especially useful when describing a complex situation or phenomena where many people are involved (Yin, 2009; Dahmström, 2011). Since the interest is to describe and analyze how goal-setting is related to other areas within strategic work, and to understand the phenomena of goal-setting with its effects and its context, and since I am going to describe what is taking place at the factory floor, a more in-depth study is best suited and an ethnographic approach was therefore used.

Ethnography can relate both to the method of collecting the data and the result of it (Spradley, 1979). For this study it was specifically used for collecting the data through close observations, and to some extent also used to describe what happened during the observations. Ethnography has at least been used since the early 20th century as a method within research to study culture and behavior (Spradley, 1979). Within the field of strategy, however, and even within the SAP-field, this method has been scarcely used (Rouleau, 2013; Rasche & Chia, 2009; Van Maanen, 2011a; Watson, 2011).

The company was well suited for studying effects of implementing performance management system since it is a typical manufacturing company and full access was provided to all information, people and places asked for (Stake, 2005). The data collection took place from mid-January to early April 2015 at the plant. The structure of data collection can be described in three phases.

In the f*irst phase* several interviews were conducted with managers from all levels at the plant as well as studying some main secondary data of the company. This gave an overview of the company, its situation with its challenges, organizational structure and an understanding of their goals, strategy and its performance management system in use today **(**See table 1 for scope and overview of data collection). During the *second phase* one area of the plant was chosen and studied more closely. Only one area could be studied since the ethnographic oriented observations are a demanding and time consuming task. Spending more time in only one place gave the opportunity to be more trusted among the employees and to be a more natural part of the workplace, which is often a challenge (Van Maanen, 2011b). The adjustment area were selected because this area was, by some managers, described as the most challenging since it was here many of the most experienced blue collar workers of the plant are working and their work tasks are more challenging to specify, or more challenging for management to understand.

The method of collecting the data was a combination of both observations and interviews, which many researchers seem to recommend (Czarniawska, 2014). The observations provided a deeper insight and helped to explain how the adjusters were working, and such description of the context became useful in the study since it helped to explain why the employees acted and communicated as they did.

14 interviews with 12 people. 7 where recorded and transcribed.	3 Pre-study meetings in 30-60 minutes with 4 different managers. Not recorded
	2 pre-interviews with two managers from the top management team
	One longer interview with the sub-area manager, approximately 1.5 hour
	2 Interviews with main-area manager 30 minutes each
	3 interviews with managers in support functions
	4 follow up interviews with 4 representatives for the top management team, not recorded
Meeting observations	Following the escalating (meeting) system from bottom and up during two days
Ethnographic	Sub-area manager where shadowed during approximately 1.5 days
	Team leader shadowed during half a day
	2 adjusters were shadowed during two work day, including breaks
	During shadowing and during the time spent writing this paper approximately 22 other employees (and managers) where listened to, and talked with (and sometimes observed), regarding issues related to performance and management. These talks varied from a few minutes to more than half an hour. Some of the employees were met several times.
Material studied	KPIs and PIs for all levels
	Strategy documents on strategic initiatives were studied
	Internal database
	Guidelines such as work instructions for the sub-area manager, team leader and operators
	Guidelines such as code of conduct and the production system
	Performance indicators visualized at each work area

Table 1. Scope and overview of data collection

The observations were a combination of both stationary observations and shadowing since the observations took place during meetings, or following employees at their work stations for several hours. During this observations, discussions and observations of colleagues, material, IT-systems and so on, were also an important part of the observations. During the shadowing, the shaded employee or manager was therefore not observed to 100%. Additionally, time was also spent with employees during breaks and in discussions of a wide range of areas. Even if the time span of the study was short, this method gave the opportunity to show interest, to get to know, and to build trust with some of the employees; thereby, they took the time and effort to tell their stories of what had happened at the company and how they were working. Standard workplace attire and equipment, such as jeans, protective shoes, and security vest, were worn while

observing the floor. This allowed the researcher to "blend in" with employees (Czarniawska, 2014). The adjustment area consists of approximately 35 employees which are divided into two teams. One of the team leaders and two employees were chosen to be shadowed using the snowball method (Merriam, 2009). During the time as the observations were conducted or during the breaks from writing and analyzing at my desk at the office landscape, the opportunity also arose to discuss with, and observe, other employees in their work which also contributed to the data collection. This part of the data collection was critical because without it, attitudes and values would be difficult to collect since some of this relaxed talk ended up to be some of the most important findings in the study.

In a *third phase* further interviews were conducted with several other managers and people in the support functions when a better understanding of the production process had been received and many follow up questions could be lifted. The three phases did overlap to some extent since the analysis was an ongoing process. And interviews with some managers were conducted twice. Additionally, various strategic documents were used in the study, especially those summarizing key measures, organizational maps, but documents on some strategic initiatives, work descriptions and guidelines were also looked at.

The interviews (each about 30-60 minutes) had a semi-structured nature, and were recorded and transcribed. All conversations were held in Swedish with a few exceptions where some of the managers did not have Swedish as their mother tongue. Using semi-structured interviews gave the opportunity to fill in with questions as we entered new areas of interest**.** The approach for each employee had to be different since they all had different roles. However, many of the questions remained the same, such as "what are the main challenges in your job right now?", "what do you think about initiatives and management?", "What are your goals and what do you think about them?", "how do you work to increase quality here?" and "could you provide an example?". By using open questions the interlocutor could provide interesting narratives about historical processes which can be valuable for the researcher (Czarniawska, 2014:31).

Analysis

Although the data to some extent were analyzed and sorted out during the data collection phase, the main analysis was not conducted until after most of the transcriptions of the data were categorized (Merriam, 2009). Since the main challenge for the company was to engage the workforce in strategic work and improvement activities, and since studying that phenomenon was the main interest of the study, the final categories turned out to be those describing how employees were impeded by, or even prevented from engagement and participation. Furthermore, since goal-setting was of main interest and also very present phenomena, the discourses on goal-setting were described more in detail. The categories were created mostly inductively, which mean they were developed from the data collection primarily, rather than from theory. The categories were then analyzed and discussed using the CDA approach where several themes could be presented. These were then further discussed in relation to Mantere & Vaaras (2008) three discourses that impedes participation; mystification, disciplining and technologization. The analysis concluded that these three discourses impeded the participation in this case as well, but

also four other discourses were generated. Mantere & Vaara did also come up with three discourses that enabled participation in the same paper. However, although it certainly were discourses enabling participation even at this plant that could be worth considering when analyzing practices (ibid), such as the meeting system and several concepts and ideas such as Kaizen and Gemba (as will be presented in findings), these enablers were yet not seen as sufficiently boosting the engagement at the plant as the result was deficient.

Limitations and ethical issues

There are many challenging areas when doing an ethnographic study. It is important and challenging to argue for how this type of study is useful and could be sensible to study people really close, which is the very nature of the ethnographic study (Van Maanen, 2011b). As for all qualitative studies it is important to be aware that the narratives are not the reality itself, rather a description and interpretation of it (Czarniawska, 2014) and it is easy to get tricked by that, but therefore observations was also conducted in order to studying the reality.

Additionally, it is important to keep the anonymity of the participants and hide their identity in the report and therefore even the precise title of the respondent quoted was to some extent disguised to include only the level (such as top management) instead of which role the person had in the top management team.

Observations had limitations such as the risk for the observer to be unable to exactly indicate what was going on during the observations. A large portion of the notes were written a while after the event took place. The observations could not either be recorded because of both ethical reasons and that is was not practical since I then would have been required to get permission both from the company and from the employees and it would certainly also limit how the employees expressed themselves if they knew they were recorded.

Findings

The plant has a four digit amount of employees and is a part of a large global organization on the fore front in its industry. The company has a long history and has always been profitable. However, since the financial crisis in 2008, the company, like many others, had a tough period of a large drop in sales numbers and an increased competition leading to what is perceived as the largest reorganization and cost cutting program, in the history of the company.

The organizational structure of the plant could be described as having four levels. First comes the top management team, and then the production can be divided into three levels: The Production manager's team as one level, the main-area manager's and the sub-area manager's teams as the other two levels**.** Each sub-area is then further divided into a couple of work teams. The manager for each level has support functions supporting their work, each support functions has their own organization, the quality and the engineering functions are the largest support functions and work very close to the production on a daily basis.

As an effect of the reorganization and pressure on increasing performance, the Swedish plant studied had recently gone through several changes; new products had been introduced, the

assembly line had gone through a large reorganization and both the total number of products produced and the workforce had been clearly reduced. Today, the management explained, all the KPIs are red since the goals are not met. The cost for the production is still very high and the most important area is the performance within quality, one of the main-area managers stresses. Most of the products need adjustments and various faults along the process leads to stops at the assembly line and high adjustments costs.

The main goal for the plant was to become a world class manufacturer by improving the efficiency in the production and at the same time having a safe workplace. In order to reach this goal the strategy had been divided into several different areas where the managers meant they had to perform. Each area was divided into KPIs (table 2) and targets for each KPIs had been set. If the plant should reach their long term goals they would reach their goal of becoming a world class manufacturer. In addition to the KPIs for the plant, strategic initiatives or plans were communicated at the plant in order to increase the performance, which were going to be visible in the KPIs. Increasing quality for instance, was described in a manual for the production system used for the company group. At a local level they translated this manual as working with continuous improvements and standardized work. Certain methods were used in order to work with these improvements and to create manuals for the work was to be conducted(as further will be described later). But it was not summarized or illustrated how these initiatives were connected to the KPIs. Instead these methods were communicated in a more unorganized manner within the plant. The plan was that these methods, as one manager explained, "hopefully should be visualized in the quality KPI later on."

In addition to KPIs and plans for improving the efficiency, the management explained they had difficulties to get the employees to engage in these activities, and they believed they had to change the mindset for the whole plant in order to succeed.

This plant has, during a long period of time, not been very efficient. Previously, this plant went so well because the profit margin of this department (One of the main company´s product) *was very good, the best and most profitable part in the organization, so this plant thought it did so well. Self-opinionated. The headquarter simply said how many products they wanted and then they produced that quantity without looking that much on the efficiency. Later, when the organization changed into its new shape, they realized that the plant was not very efficient. I have seen this myself who worked at another plant,* (a competitor) *where the profit margin is clearly better, where the production is much further ahead and more efficient.* (Top manager)

Further, the culture and the attitude of the employee that the plant is a great performer are perceived as deeply rooted within the plant:

The culture (at this plant), has existed "within the walls", they have thought they have been so good and that attitude still exists to some extent. (Top manager)

After the comprehensive reorganization of the plant, with a new production line, the plant were struggling within several areas; especially the quality of their products, with effectiveness, with

the engagement of the employees. “The goal is to make the plant world class, but today it is not. Other plants do a lot better.” says the production manager. Another top manager explains that the challenges for the plant are many, but the toughest is that they need to have the employees with them, which is not the case today. What the manager mean with that they do not have the employees with them will be further explained below, but in order to put it into perspective, the management system of the plant has to be presented. And after that, how the work is conducted at the area in focus.

The KPIs

The company group has a main system for all their plants which divide the KPIs into six areas (see table 2 below); each area has key measures identical across their plants. For instance; how many accidents and incidents are measured in the safety area, how many of the products at the end of line pass the test without quality issues (Quality area) and so on.

Area	description	Type of target	Goal 2014	Goal 2015
Safety	Lost time Accidents	Accidents per period	6	2
Quality - KPI	Product audit points per product	Average full period	X	X
Quality - PI	Percent of products considered "OK"	Average full period	X[1]	X
Delivery - KPI	Delivery precision in percent.	Average full period	90	95
Delivery - PI	Products in process	Average full period	120	120
Cost - KPI	Hours per product	Average full period	108	75
Cost - PI	Line availability in percent	Average full period	97	98
Cost - PI	Variable cost per unit	End of the period	44100	33900
Environment - PI	Energy consumption	Average full period	1.6	-
People - KPI	Index for employee satisfaction	Average full period	-	-
People - PI	Measure for employee engagement	End of period	25	25
People - PI	Kaizen events	End of period	75	75

Table 2. The plants Key Performance Indicators

These KPIs are followed closely by the top management team. The different areas in the factory are supposed to break down these KPIs so that they match the challenges and way of working in

[1] The goals and results for quality is confidential and could therefore not be presented.

each area. When the goals have been broken down and translated to indicators they are called PIs (Performance indicators). The PIs for each area are written down manually at information boards in each area of the plant so that the employees can follow them. Every team has their own information board at their meeting place. In order to monitor the KPIs and to make sure the operations working as they should, and to prioritize how to share the resources at the plant, the plant uses a meeting system which they refer to as an escalating system. This system is considered the most important tool for communication, according to the communication manager, and takes place on a daily basis each morning between approximately 08.00-10.00 where first each team and sub-area have a meeting about the current situation and then the manager brings this information to the next levels. The escalating system has been running for several years but the management is not satisfied with the communication, engagement or with the results. The production manager spoke about his experience of the system, which he found complicated and that the first line managers have difficulties to understand how to work with the meeting system.

"This (the escalating system) should work much better than it does. It should not be as complicated as it is. Neither do I feel that the sub-area managers are pushing and leading the communication very well."(Top manager 1)

The system is the core of the communication and considered important by the top managers. However, they understood the need to get all the sub-area managers and the team leaders to use this system more efficiently. Not everyone seemed dedicated in the meeting system as the top managers. For instance, the main-area manager considered the morning meetings to be very important (with emphasis on "very") but the team manager at the adjustment area could not always see the point of having a meeting every day.

They say we need to have a morning meeting but sometimes we do not have anything to say and then we need to have a meeting anyway. I do not see the point, actually, it happens on Fridays that we skip the meeting. I mean, my guys do not see the point either, they prefer doing their jobs.

The reason he thinks the meetings are not always necessary might be because he describes himself as having good communication with his team members anyway. However, it indicates that the perspectives in the plant sometimes are different.

The adjustment area

The area where this focus study is conducted is called the adjustment area. This is the area where the products arrive before they are shipped to the customer if something on the product needs an adjustment. The complex and sophisticated product consists of hundreds of components[2] where a lot of things can go wrong along the time-pressed assembly line. And as the situation has been, most of the products, have to be adjusted before delivered to customer. The adjustment area is managed by a sub-area manager and the workforce consists of two teams, one for the heavier

[2] Hundreds or even thousands of components, depending on how the definition should quantify components, or variants.

adjustments (about 15 employees) and one for the lighter adjustments and side functions (about 20 employees). Most of the people working in the whole area have been within the company for many years and have a lot of experience, both from the product and from different parts of the plant. In contrast with the ordinary assembly line, the majority of the workers have been adjusters or mechanics for 20, 30 or even 40 years. Even if the adjusters are called blue collar workers and often do not have an academic education, they still have plenty of knowledge and experience "which could not really be gained from the books" as one manager explained. The work often includes a lot of craftwork where tools and hands are used to work with the product. Knowledge is gained from years of learning by doing and by learning from mistakes. When they are working with the product they sometimes go beyond what is written in the manual. This could be, for instance, when the manual does not always tell you what tools to use or in what order to do things. Many of the products come with symptoms, but there is not always an existing manual for all the different faults or indications. So they have to find how to solve these issues by themselves.

Daily report for the adjustment area								
TOTAL	**Goal**	**Mon**	**Tue**	**Wed**	**Thu**	**Fri**	**Weekend**	**Weekly**
Incidents and accidents	**1/0**							
Audit points	**0**							
Claims	**0**							
Delivery precision	**90%**	**96%**	**93%**	**70%**	**80%**	**50%**		**85%**
Corrections	**90%**	**83%**	**86%**	**100%**	**91%**	**54%**		**79%**
Products produced daily	**60**	**52**	**38**	**43**	**54**	**22**		**41.8**
Campaigns		**0**	**0**	**0**	**0**	**0**		
Containment		**0**	**0**	**0**	**0**	**0**		
staff situation		**2**	**2**	**0**	**-1**	**-1**		
amount of products with "OK"[3]		**X%**	**X%**	**X%**	**X%**			

Table 3. The Performance indicators followed by management at the adjustment area

[3] The results of the quality is confidential

The adjustment areas metrics follows how many products are in progress at the whole factory and in their sub-area (table 3). They follow statistics on how many products need adjustments and how many of them are adjusted right now in the different areas. They also keep track on which, and how many of the products that take longer time than promised before they can be shipped to the customer, for instance if they need to wait for new parts to be transported to the plant from a supplier they might have to wait. They also keep track of any special campaigns driven by the management, for instance if they found out that something is repeatedly wrong in retrospect and that the adjustment area has to check a larger quantity of the products in process. Finally staffing is important to see if they can make the workload with the current staff. They also follow how many products go through each sub-area in the adjustment. Furthermore, each of the two groups has their own KPIs. However, it is mainly to see how many employees they have and how many products they are adjusting at each function in their teams.

The Concern about quality and the efforts to improve quality

The most important aspect at the plant was to improve the quality of the product during the assembly line as many disorders appeared and many adjustments always had to be done before the product could be delivered to the customer. This was illustrated as the main quality KPI, measured in percentages of products considered "OK" at the end of the assembly line which could be delivered directly to customers without the need of adjustments. Not every product had to be adjusted since a smaller portion of the products passed the test area, which could be a good indicator that at least some products passed. However, in reality it perhaps looked even worse than what was visible in the KPI.

Our quality KPI is not the whole truth because we are adjusting many products along the assembly line also, while the product is moving, so I think we are fiddling on everyone out there (sub-area manager)

Additionally there is a saying used by both managers and employees, that currently they actually build each product twice, since most of them need so many adjustments. It is of highest priority to improve the performance within this area, according to the main-area manager, because this indicator "looks red" and competitors do much better.

The quality measure was broken down into additional KPIs measuring how many improvement events each sub-area manager started. Apart from this, no more goals measuring quality improvement. However, they had a strategy for improving quality which was to improve their processes by doing two types of improvement events called Kaizen and QRQC (Quick Response Quality Control). Kaizen is larger scale improvement often involving changing a whole area. QRQC are smaller events but is still involving people from different functions. The managers are responsible for these events, the quality function and engineers supporting these events and some employees and team leaders who can contribute to the meeting are often participating. Typically when doing these types of events, someone from the adjustment area are often involved as they are often those who have to adjust the product to an accepted condition. In addition to these events the area manager are working on new systems with a purpose of

providing a routine for continuous improvements at each section of the assembly line. All activities on the assembly line are divided into three different activity types. The first type is short term activity with the aim of creating a temporary instruction for a specific activity. The second level is where a complete instruction is created for a specific action or moment within a larger section. The third level consists of continuous improvements of the instructions for the complete sections. The main-area manager is certain it will give positive results "hopefully this will show itself in the quality KPI later on". However, even if the quality circles in some cases seem to contribute to better performance as they find solutions or improve the way of working, the methods are still perceived as difficult as it is hard to get the employees dedicated enough in the circles.

It is very easy for the employees to go back to their functions (when they are working on the improvement circles) because you have so terribly much to do. It is a great challenge for this plant to get everyone to feel that they are a part of the process (Support function manager)

This also got evident during one of the QRQC meetings observed as one of the employees present at the meeting was upset and explained that he could not see the point on going through all the stages in the method in order to visualize the problem, when they had an idea of the problem already. However, the complexity and unfamiliarity with the methods were not the only causes preventing the employees from engaging in the improvement activities.

Concern about the engagement

As described earlier, the escalating system did not encourage commitment among the employees as much as the managers had initially hoped. This opinion could take many shapes, but in general it was a broad phenomenon perceived by managers:

In terms of engagement we are struggling. Engagement is very low… Very low. For sure that is perhaps our greatest challenge at this plant. Today we are not proud of what we do. We wants to be world class but today we are not, this include both top quality and no stops on the line. We have failed to communicate or vision and why we did some of the recent changes. (Top manager 2)

He further explains that the commitments are also indicated by the high absenteeism at the plant:

We can see this when we compare the absenteeism in this plant with other plants. Of course people are sick, it is part of it. But if you feel engaged you will come to the plant more often even if you do not feel very good.

In practice, this can take many shapes but overall engagement in improvement activities, and motivation in general are considered low, especially at the assembly line were the time pressure is always present. In the adjustment area the situation is described as different since they do not have the same time pressure, even though they still have a lot of important work to do as they are adjusting most of the products so that they can be delivered.

Right now they (the adjustment area) *are somewhat the heroes; they are saving the whole results at our plant because they adjust the products to the right condition.* (Main-area manager)

But still, the management are concerned about how they could get them engaged in the improvement work:

It is very difficult for me to get the adjustment workers to log back: What have they actually done? And there could be different reasons for this, and I have been doing some thinking about it. How could I get them to be the heroes, from having adjusted the products correctly to working in a way where they are ultimately not needed anymore? It is not easy to design goals which make them want to do that. (Main-area manager)

The management means that they need the employees to put more effort into log information and to spend time in the improvement activities. Not only doing their adjustment, but also to give feedback to the assembly line so that they can build the product in the right way next time. In order to understand this better, why the adjusters do not log back, the perspectives of the employees has to be added which illustrate their opinion of their work and work environment.

Work methods at the adjustment area

When the products arrive at the adjustment area the adjusters are supposed to fix the problems that are presented in the product card that belongs to the particular product. This card consists of several A4 papers with information about the product including specifications, pages that summarize things that need adjustments and also special attached information about the errors if necessary. There is also an IT system that has the same information so that the adjusters can see the product there together with additional history and when the product is supposed to be delivered and where. The adjusters consequently have to first skim through all the adjustments before quenching them. Many of the adjustments are quick fixes which often are tiny "cosmetic" errors. Other errors are more serious, especially in the heavy adjustment area where the adjustment sometimes could take more than one day to fix. Hence, the adjusters main activity is to make sure all products gets adjusted and delivered in time. This is also what is reflected in their performance indicators used by management (table 2), how the amounts of products which have been adjusted and how many are delivered on time are followed closely.

Problem to log back

When the product has been adjusted it has to be reported twice, one time physically and one digitally. A stamp is needed to be pressed in the product card (physical) so that all faults when entering the adjustment stage are registered as fixed. They also have to do the same procedure in the IT-system (digital). So the checklist is to go through all the things in the product card and make sure that the faults have been quenched. However, another area in the system is that it should not only be used to log quenched faults on a short term basis. It should also be used as a log where new quality issues can be reported and where more information about problems and quality issues can be added. When quenching faults, the adjusters only get information about the

symptoms of a product failure and do not always have or know the solution to the issue. They are supposed to write down important details in the system so that the improvement events, and the support functions, can see trends and solve these problems, by going back to look at older issues registered, they should also log and report what they think could be the root cause of the problem, however, this does not work well as management are facing a great challenge in getting the employees to log their activity and their knowledge more carefully:

We need to get them to report more than they do today, it is a great challenge we have. When the products arrive at the adjustment it is often that it has only symptoms. Often the adjusters need to find and solve the problems themselves. But they are not very good at reporting it, to sufficiently fill out the reports, about what they are doing so we cannot find the root of the problem. And that is a great challenge for us to get them to understand that, to get them engaged. (Employee 1 at the Quality support function)

Hence, it is not only the area manager who explains the general problem of how they can get the adjusters sufficiently engaged in the quality work, so that they are not needed anymore. Several people at the plant states that in a perfect plant the adjustment area is not necessary, and this is a part of the problem. Another employee in the support functions, further explains that

There are even examples of adjusters who express that they purposely avoid giving feedback, so that their value as employees does not decrease, so I have heard.

But at the same time, the employees at the adjustment area feel like they are not being listened to by management nor cared when presenting some of the problems. One response from the planner, who work as a coordinator of adjustments, at the adjustment area was aware of the phenomena but also had another perspective:

but it is also that, if they come here and ask us more questions and show us how they want us to report more details, then we will of course provide them with it.

Out in the adjustment area, no clear cases where someone was hiding their knowledge were observed, but it was clear that the adjusters were doing work activities that were not really written in their work instructions or reflected in KPIs or in the goals at the adjustment area. For instance, since the quality of the product was generally considered as very low, the adjustment area had taken their own decision of doing an additional inspection during the time the product was adjusted, and because of this, the adjusters observed took the time to quickly look over the product once they adjusted it and they always did some small adjustments with different cables and pipelines that was not as they said “sufficiently anchored” and thereby it was a risk for the cables to be worn out faster, which might mean additional repairs for the customer in the long run. Something that the adjusters saw as a problem.

The products look terrible as they are, we need to do this. The people at the assembly line does

not know how to fix them properly. We have brought this up to the engineers and to the managers several times. (Adjuster 1)

But there were also other observations when the same adjuster found one-time errors that were never reported. At one occasion when doing the inspection and fixing cables, he found an electric plug that was clearly not connected sufficiently to its socket and pushed it until it "clicked" (the sound of having connected it properly). "You see, this is something that would give a failure later on and because I did this extra inspection I possibly save this product hours of inspection and maintenance work later on when the control system of the product indicates that something is wrong". On the question on whether he does report this extra adjustment he says "well, we cannot report everything and it is time consuming, we have enough to do anyway". Another adjuster, which I call adjuster 2, who was also spending time fixing cables developed the answer and explained how they need to track the adjustment to the area responsible for the assembly in the data base for quality. It was time consuming because it was difficult to keep track of where all parts are assembled. The reason for why the employee did not report this adjustment can depend on a wide range of things. In this case it was directly caused by the employee not feeling he had the time, which could be traced to the focus on getting the products delivered as fast as possible (also measured in the KPIs) so it is not really their responsibility or that they do not get rewarded for it. At least it is not really visible that he had reported it. It is registered but the adjusters do not believe anyone takes the time to look at the information in the system. Other possible reasons for why the employees not always engage in improvement activities could be what were observed at another occasion during a break when the cable issue was discussed. Adjuster 1 explained during the break that they had told the management and the engineers about the cable problems several times and once when they had someone from the technical staff on visit:

Do you know what he said? "Alright, and what am I supposed to do about that?". What bloody kind of answer is that?[4]

Hence, one reason can be that the employees do not feel that they contribute with anything since their reporting is not believed to be considered important, valuable nor taken seriously or being understood by the support function or management. And as the planner explained, someone should follow all the logs, but there is no one doing it. As an answer on his comment the quality support function explain that they simply do not have the time to monitor all logs from the adjustment area.

Priorities

Another aspect of why logs and issues where not always monitored could possibly be that support function and management simply prioritize other more important issues for the moment**.** As the main-area manager explained, "we have many improvements to do, look at it like a large iceberg. We cannot cut it down all at once, we need first to focus on the top of the iceberg and then we

[4] **Translated from** *"aha, å va ska jag göra åt de då?". Va e de för jävla svar!*

have to cut it down, piece by piece." The management wants the employees to be more engaged in the improvement activities. There are also employees who mean that management does not seem to care about the quality of the product, "they just want to rush the product through the assembly line but they do not see how much it costs for the adjustments afterwards". Additionally they mean that they have to take things in their own hands.

We are ashamed if the product leave from here in a poor condition, the management does not seem to care about that, but we do! The management does not care about this issue, and not about us, and we cannot care about them either. (Employer 3 from the lunch break)

The team leader shadowed had a similar expression:

The products sometimes look terrible when they are delivered. We cannot have it like that. We care about the product here.

These opinions stated by the employees show a different side from when management described the employees as not being engaged. This observation indicates that at least some of the employees really care about the products and about the plant. They are worried about the future of the plant and their reputation. As the sub-area manager expressed – "all their experience and their knowledge is their pride, this is what they have been doing almost their entire lives. Even in their spare time, some of the employees are tinkering. They want the products to be good when delivered to the customer, this is indicated by the extra initiatives taken by the employees themselves (the extra inspections of the product).

Low trust in management

Another aspect affecting the engagement is the trust in management. At several observations blue collar workers indicated that they were upset about some of the initiatives taken by management. According to employee nr. 3, the trust in management is lower now than ever. On the question of whether they have seen any improvement lately he insisted on it keeps getting worse. Similarly, one of the managers in one of the smaller support function during another break explained his view during a discussion about the direction of the assembly line which he meant was changing from careful assembly line to a traditional conveyor belt:

Back in the 80s, the people at the assembly line were real mechanics, today they are not. Back then they bent their pipes and cables manually when they had to on odd models. They understood the whole product then, they had to.

Another employee in the lunchroom, whose role was unknown to the observer, at the same time took charge of the discussion by mentioning his experience from a visit to the headquarter recently where he saw the employees there laughing about a movie that seemed to be circulating between employees in the company, showing assembly workers at a car manufacturing plant in

Japan who was running between the stations just like in the classic 1936 movie “Modern times” by Charlie Chaplin. The manager commented on the new direction in the discussion:

Well, they are laughing but that is exactly what is about to happen at our plant as well, we have been going in that direction for several years now and soon, we will be there as well.

The employees and managers seem to have their different views of why the situation has been the way it is. Several employees explained the initiatives on cutting costs, slimming the production line while at the same time reducing the workforce. So automatically it leads to a lot more to do and a lot more stress. Another example of the lack of trust to management initiatives brought forward was a new adjustment of the speed at the production line recently introduced at the plant. The production line is divided into sequences and the operators at each sequence have a certain amount of time to mount their parts on the product. Since all the models produced were different there were models that were less time consuming to produce than others. Previously the assembly line was planned so that the sequence time they had for each model was based on the most time-consuming product model, the one that took most time to mount. Now this has been changed to following a sequence time based on the average model. So according to the employees they do not have the time to mount the parts correctly on the difficult model. Employee 2 explain that we can clearly see that here in the adjustment area because they do not have enough time to work on some of the products which can sometime look terrible when they arrive here. His colleague shook his head and said he had no idea what they are thinking, especially the people at the assembly lined are upset because of this. Another colleague similarly expressed:

Management in this house does not always make bright decisions. I actually think this was the most idiotic decision ever taken in this house, at least during the 20 years I have been working here. (Adjuster 2)

The managers on the other hand believe it will be good once the employees are used to the new way of thinking and working. But as the observation shows, the message was perhaps not translated into the minds of the employees as well as the management had hoped. In addition to the negative attitudes toward management initiatives, the managers themselves was not directly seen as role models by some employees, observed from this conversation during one of the breaks:

Employer 3: *Sometimes the worst people becomes managers at this place.*

Employer 4 lift in: *Yes, people who cannot even drive a forklift.*

Employer 5: *If they are reporting green KPIs they are promoted. Not because they are good managers and help delivering good products.*

Employee 3: *Yes, they are good at presenting good results, as long as the measures looks good, it*

looks good for their managers.

Employer 3 continued: *Experienced and good people here who really know their work can suddenly be removed here to the assembly line because the manager does not get along with them, (*he is laughing ironically*). And they have replaced even whole teams here with new people from the assembly line when managers got upset. One time they switched 8 out of 10 people, and they think it will work.*

Was failing because they pushed the company in the wrong direction trying to be effective, but by cutting costs is got worse.

The attitude and beliefs among some employees was that the management was failing because they pushed the company in the wrong direction trying to be effective, but by cutting costs it got worse. However, the management gave another view, of a plant that is going in the right direction but only recently begun the journey toward its goal. But this opinion from some of the employees certainly affect their engagement and motivation, both to cooperate and communicate with the management and between the different functions of the plant.

Other Challenges

Besides the effort to implement methods for quality improvement, the managers have stated a concern about how the current KPIs at the plant punish the managers and this is something described as something they are working on. The top management is certain that they have some work to do.

We need to break down the KPIs and create smaller teams so that all team members do not become so anonymous (Top manager 1).

There is also one indication that the current KPIs might even inhibit the employees from engaging in the improvement activities. One of the managers in one of the support functions explains her thoughts of why the plant possibly fails to get the high level of engagement they want:

Previously I was working at another profitable plant at one of our competitors where we got an appreciative pat on the back when we came with a problem. This is not how things work here where the KPIs are punishing us rather than contribute to the desirable behavior.

In this she referred to the situations in which faults on the product is caused by an area in the production line or when the production process stops for some reason, this is highlighted in the KPI system for the area causing the fault. She uses the audit-system as an example to explain what she meant. An internal audit makes a random selection and investigates 2% of the products when they are finished. The audit function then distributes scores for each fault found on the products. These points are then distributed to the area at the plant that is responsible for the cause. And when scores are achieved, an investigation of why the points are attained has to be

conducted. Besides punishing the area, the attitude is also to blame each other in an attempt not to be displayed negatively:

When a sub-area manager gets audit-scores his KPIs directly gets punished for it. This might be intelligent, you have done wrong and you get shit for it. But it is not exactly that the managers precisely thinks that "yes, lovely, I take these defects that the audit function and my colleagues have found". It is not exactly that people stand there saying "Yes, I want these scores!", it is rather "Its him or her". Because your KPIs are punished.

Additionally, it is also necessary to understand that it is not always easy to distribute the scores since it can be difficult to track the root of the problem and the root is often cross functional where more than one area has to be involved in order to find the root to the cause and solve it.

Cross functionality and Gemba

Another aspect which seem to contribute to the individualistic behavior, and is thereby also important to consider when assessing the current KPIs and engagement, is that cross functional team work does not seem to have been working well previously. This was both vertically and horizontally. Vertically as management and support functions had to work closer to the operators, as one of the top manager explained:

Previously all other functions gave clear requirements to the employees.

He illustrated by slamming a paper on the table, pointed at it (as if it was filled with various instructions) and continued:

They said "do this, do this and then… Do this". This was the same for engineering, for quality, HR etc. Now we want more team based approach where we go through the target and discuss how we can solve it together. All the ideas, improvement ideas now come from the shop floor. I want both myself and my managers to be most of the time at the shop floor.

They highlighted this ambition by using the Japanese concept "Gemba" which mean "where it happens" and by ordering managers to spend more time at the floor. Horizontal teamwork was highlighted by the importance of more cooperation between responsible areas and functions (cross-functionality) and it was a clear distance between functions at the plant since quality staff had their office, engineers had theirs and it was located sometimes with a large distance from the production. This process of working more cross functional seemed to go slowly:

At this plant for sure we need more cross-functionality. We say we want cross-functionality and people say yes - of course. But what does it mean in day to day activities? For example, today we have an office for quality people, one for engineering and one for production. But these people need to work together. It could be to have common office for example and that different teams need to work together. We explained this six months ago but it is not implemented yet. As it is now, I cannot see them to really think serious about cross-functionality. (Top manager)

What could be observed at the plant was that the members of different groups were closely tied to each other. And each function was sitting on their own, and sometimes two hundred meters from the production. The distance between the functions was one of the main concerns of the engineering manager. Another manager in the support function expressed herself with how this was organized better at one of her old workplaces at the competitors place:

We were sitting only two meters from the production line, the whole team, the engineers, the quality function, the planners, the sub-area manager. At this place we need to work more cross functional and we are working on shifting from focus on functions to processes (Support function manager)

As the findings indicate there seems to be several dimensions important to consider when assessing the relation between goal-setting and engagement or performance. And the relation is not always clear.

Discussion

These findings describe the current situation of the plant, how the strategy had been divided into six areas with KPIs but that the plant had difficulties to get the employees engaged in, and to prioritize the work with improvements. In this discussion, the findings will be summarized as six aspects that seem to inhibit engagement. Where one of these aspects is the KPIs of the plant. The KPIs as a practice will then be discussed in relation to previous research on the topic. From a SAP perspective it shows how several practices contributes to engagement and performance and thus explain how the effect of one strategic tool or discourse, such as goal-setting, are affected by other practices.

As research shows, goals tend to move the attention so that people overlook other important areas, but it is still important to further investigate these effects in order to get maximum value out of our targets (Ordonez *et al.* 2009). It was clear that the management wanted employees and first line managers to prioritize improvement work but it was evident that the message about prioritizing improvement activities and standardized work disappeared or was disturbed along the way, and several aspects seem to symbolize how they failed. To begin with, the current KPIs at the plant studied focused almost exclusively on short term performance such as stops on the line, cost of productivity, amount of products produced, works in process and delivery on time. Quality was measured with two KPIs but no KPI highlighted/visualized activities or efforts contributing to quality improvement, such as how many problems were found and solved or any performance in improvement activities, such as the result from follow ups to evaluate if Kaizen events was successful or not. It was also clear from the employees perspective and opinions that management prioritized the wrong things, such as management believed they were being short term focused, only wanting the products delivered on time and focusing on cutting costs. The observation of how the employees were working did also indicate that the adjusters often had to deliver the products even if they were not always satisfied with its condition. This is also in line with research (Ordnoez *et al.* 2009) since goals and KPIs can make

the employees and managers overlook other important areas which are not covered by the goals. However, although the KPIs used in the production are somewhat short term based, and therefore can draw attention from employees so that they miss out engaging in improvement activities (Ordonez *et al.* 2009), it is important to emphasize that goal-setting is not the only factor affecting engagement. As research suggest, goals can be both positive and negative (Ordonez *et al.* 2009; Neven & Healey, 2015), depending on the individuals involved (Neven & Healey, 2015) or the context (Schweitzer *et al.* 2004). This study has identified several other obstacles and factors which seem to prevent the employees to some extent from engaging in improvement activities. These factors should be important to bring forward in order to assess what influence the current goal-setting has on the engagement at the plant. I have summarized these factors into five areas.

First, as argued above, the current KPIs seem to demand more attention than it should, however, KPIs are not the only way to communicate the strategy. One reason for why the employees did not prioritize logging and providing feedback could therefore be simply due to unclear communication. One indication of this was that the employees seemed to care a lot about the product and often seemed to communicate disorders. They also seemed to want to engage in improving quality but they were prevented from doing so in their daily practice. Yet they saw the suggested standardized methods for improvement activities as complicated and they seemed to prefer going back to their daily work instead since they perceived it as more important. One example of how such strategy set by the top management can be communicated is that during the fine tuning of this paper, the new plant manager symbolized how important it was for the production leader to work with improvements instead of doing fire-fighting that he commanded all managers to take two hours every day to spend on logging deviations in production and to spend time in the improvement activities.

Second, the employees seemed to hesitate due to their unfamiliarity with the methods. The time-consuming and uncertainness of how to log the deviations in the IT-system, and the techniques by themselves could be seen as another obstacle that also affect the engagement.

Third, although both the quality support function, the management and the employees wanted to spend more time improving processes than they did, the quality support group could not prioritize it. They did not have the staff and the employees and the managers did not have the time because they had so many deviations and faults to adjust.

Fourth, the issue of cross functionality was present in the case and management was aware of it. Teams and managers had the ability to defend themselves and blame others. For instance, the responsibility to follow up the logs in the adjustment area seemed to land between the adjustment area and the quality function, since no one took responsibility, none of the two areas and individual behavior rather than cooperation as teams and managers had the ability to defend themselves by blaming others, as one manager explained. This is related to negative sides of goal-setting and in line with current research that individual KPIs foster an individualistic behavior (Ordonez *et al.* 2009). But it is difficult to understand how much of this behavior that is an effect of the KPIs as other aspects did also seem to affect this behavior, as a culture of the functions working on their own, rather than being mixed up, and as they were located at a

distance from each other.

Fifth, cultural and historical values do also seem to influence the engagement. The trust towards management seems lower than ever because of some historical initiatives which do not seem to have been anchored at the operational level, and the belief among some employees was that the old way of working was better.

Discourses influencing engagement

Looking at all these six aspects which seem to inhibit the engagement (The KPIs and the other five aspects) there are some similarities with the three discourses suggested by Mantere & Vaara (2008). *Technologization* is clearly visible in this case since both the perceived difficulty to log back deficiencies and the uncertainty with the methods for the improvement events (methods designed and implemented by top management) can be seen as aspects impeding engagement. *Mystification* and *Disciplining* was also present in this case but not all aspects of those discourses are evident in this case. Mantere & Vaara (2008) refer to mystification as when strategy process is driven by strategy statements (such as mission, vision). Top managers typically define these statements in closed workshops with partly hidden information and the decisions taken are normally not to be questioned. The overall strategic objectives were definately set by top management, however, these were questioned since employees did not fear to say what they were thinking about management and their decisions, and they did it now and then directly to top managers, and they seemed to be aware of it. Neither was it difficult to get access to strategy as full access were given to most documents and the plant was working a lot with visualization to increase transparency. Like mystification, disciplining is also about that management setting the strategies but is also seen as a commander who punishes disobedience. The strategy is linked to discipline and command structures. While it seems to be that discipline was more present in the old way of managing when orders more often came from above, it was still present and seem to impede participation to some extent. Especially the current KPIs punished managers and were ordering them how they should work so that they kept doing fire-fighting rather than improving the business. Even if management did not punish employees who came with criticism, the employees felt they were not listened to, hence a culture was created in which employees balked for giving feedback to managers and support functions. Relating to both these discourses was that the grand strategy was clear. The plant with its people should work in a certain way, with certain methods toward a more standardized work and the change initiatives with the new production lines, workforce reduction and going from maximum to average balances was definitely a top management initiative and in that sense the employees could not change that. But on the micro-level, as one manager explained, the ideas were supposed to come from the floor which created a new situation of how things used to be done within the plant. The employees did also explain when management sometimes took wrong decisions without taking the employees opinions and ideas into consideration. In that sense the way to manage had been commanding even at an operational level, which definitively impeded participation and engagement according to both employees and current managers.

In addition to these three discourses, based on the findings a fourth can be added. The

communication with or without KPIs as presented above can be looked at as *myopia* as it contributes to giving the staff a short term focus in their everyday work. Further, the KPIs punished managers individually and praised the daily work rather than long term improvements, which contributed to *individualization* which seemed to decrease cooperation even though the management wanted to increase their cooperation and cross functional work. *Slimming* is another discourse that was present all the time as everyone said they did not have the time or enough staff and the employees blamed the management for the fact that they suddenly had to work faster with fewer people. Finally, *frustration* were always present and took many shapes. Some managers were hardly seen as role models and some of their initiatives were not understood by employees and its poor results did hardly increased their trust in management, it even went as far as the employees taking initiatives on their own which were even perceived as "saving the plant", such as extra inspections and adjustments that was neither logged nor always observed and thereby management or support function did not understand the scope of it, both according to employees and support functions. It is difficult to assess which of these discourses that most clearly was impeding engagement and participation. Similar to what Mantere & Vaara (2008) said about the six discourses they presented, it does not cover all aspects impeding participation or engagement, but it shows some examples of what it could be. And this is also perhaps a case where many discourses is easier to find, when the organization are in a sort of urgency or chaos.

Conclusion

Contemporary research advocates the usefulness of goal-setting to motivate performance but also points out its challenge, to avoid its side effects (Ordonez, 2009; Neven & Healey, 2015). This study has confirmed and contributed to the understanding within goal-setting and performance regarding many of the negative effects associated with goal-setting, even if it simultaneously is a useful tool which might contribute to better performance. This paper brings forward a set of important dimensions to consider when assessing the performance management and engagement, such as KPIs which brings too much attention to short term performance, wrong focus communicated, unfamiliarity of technology or concepts in use, lack of resources and cooperation and historical events. Especially, this study contributes to the understanding of goal-setting as one factor out of many that affect the employee's level of engagement by applying three impeding discourses by Mantere & Vaaras (2008). *Technologization*, *disciplining* and *mystification* were related to categories of the outstanding aspects presented in the case but did also generate four other discourses; *myopia, individualization*, *slimming* and *frustration*.

Theoretically these discourses contribute to Mantere & Vaaras suggested discourses that impedes participation. By studying activities (such as how employees work), tools (such as KPIs and improvement activities) and "naturally occurring talk" (Mantere & Vaara, 2008: 355) these new discourses contribute with more perspectives into impeding effects in the literature. In this case these generated discourses contribute both to the goal-setting theory and to understanding how strategic practices such as tools and discourses are interrelated.

This paper also contributes to the field of SAP by analyzing what role operational workers have in the strategic process and how their contribution can be impeded by various obstacles in

the context. It also illustrate how many different practices are interrelated to each other since goal-setting is not the only aspect affecting the engagement.

Practical implications contribute especially to the work of implementing performance management systems. It shows that a narrow, short term set of visualized goals might turns focus from other important areas not covered in the KPIs. Yet there are also several other dimensions necessary to consider when trying to increase engagement in improvement activities and therefore goals should be carefully implemented.

Suggestions for further research

With this conclusion, several areas for further research can be suggested. Firstly, there seems to be no concrete general suggestions within research for how manufacturing firms should work, or set goals for, improvement activities. Even if goals have two sides, research could be done on a larger scale how manufacturing firms design goals or guidelines for work in quality improvements. By looking at other successful companies to see what they are doing differently within improvement areas specifically, it could give valuable ideas in order to create general goals in performance management for continuous improvements. Is it possible to quantify improvement events and its results and effects? And how could a Quality KPI be broken down? If at all? And should all employees have goals related to how many activities they engage in and how many contributions they make? It could be nagging, but it is also a good tool for motivating the workforce. Another method that was not used at this plant, but which would be interesting to study, is regarding whether Success maps (Neely & Bourne, 2000) or Strategic maps (Kaplan & Norton, 2008) could actually support the implementation of goals.

During this study, other research areas were superficially considered. Such as cross-functionality, historical aspects, culture, communication and practical methods and many concepts for improvement activities widely used in manufacturing companies for World Class Manufacturing. Such as Kaizen events, PDCA, 5 why´s, Lean and TQM. These areas however, which are all different sub-fields in research, were never closely investigated because of the limited scope of this research. However, this paper warrants more research in how such tools are related to goal-setting and Performance Management.

Finally, I will take up the cudgel for more studies of obstacles from an operational level using ethnographic method and Critical Discourse Analysis as effective methods to study why strategic initiatives, such as in this case various changes and cost reduction programs, fail.

Limitations

This study and conclusion is developed from analyzing a case from only one plant and one area. The main area for this focus study was conducted in the adjustment area where the workers possess considerable knowledge and experience, which might differ from other areas in the manufacturing process or from other production processes. The product itself should also be taken into consideration, since it is of a complex sort assembled with a huge amount of

components or variants[5] and is therefore supposed to be difficult (Locke & Latham, 2013). Finally, it is important to highlight that the discourses brought forward in this paper is not by any means the only discourses, influencing engagement (Mantere & Vaara, 2008).

[5] Hundreds or even thousands of components, depending on how the definition should quantify components, or variants.

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