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Transitioning to Self-Managing Teams: Coordinating in a Knowledge-Intensive Organization

A qualitative study on the coordination efforts in an organization implementing self-managing teams

Muamera Homoras and Mathilda Lagerkwist

Supervisor: Petra Adolfsson
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Transitioning to Self-Managing Teams: Coordinating in a Knowledge-Intensive Organization

A qualitative study on how coordination is performed in an organization implementing self-managing teams

Muamera Homoras

Master of Science in Management, Graduate School,
School of Business, Economics and Law, University of Gothenburg

Mathilda Lagerkwist

Master of Science in Management, Graduate School,
School of Business, Economics and Law, University of Gothenburg

Abstract

This study investigates the transitioning process, as an organization goes from a hierarchical organizational structure to organizing in self-managing teams, whereby managerial authority has been removed. The paper applies a qualitative method where data has been collected through interviews, observations and documents from a single case organization. Using the lens of boundary work the study finds that the boundary of autonomy and hierarchy plays a great role in the organizational members' coordination efforts. In line with this, the study shows that coordination is conducted emergently, as organizational members encounter meeting points between the previous work structures and new requirements of working autonomously. Additionally, the paper emphasizes the importance of working close to your profession, while at the same time working inter-disciplinarily. Finally, the paper contributes to existing research by showing that changes intended to improve coordination in fact might create coordination issues themselves. In conclusion this study provides new insights to the field by studying an organization that is in a transitioning period and where managerial authority has been formally removed.

Key words

Coordination, inter-disciplinary, self-managing teams, boundary work, transitioning

Introduction

During the course of history, different management and leadership models have been promoted in order to deal with the challenges of those times. Followingly, re-organizing is an ever-present phenomenon in organizations and is often argued to be the solution to existing problems. Looking back managerial hierarchy has dominated the structuring of organizations ever since the industrialization and the rise of corporations. Even today the formal hierarchical organization is as common as is the search for new ways of organizing (Lee & Edmondson, 2017). In today's business environment a great challenge is the fast pacing technological advancement, quickly changing customer needs and the presence of an increasingly information- and knowledge-based economy (Felin, Zenger & Tomsik, 2009). In these times, where there is a great pressure on the adaptability of organizations, some argue that traditional organizational structures are insufficient as organizations need to be able to respond more quickly than these structures allow them to (Bolman & Deal, 2017; Lee & Edmondson, 2017; Rishipal, 2014). As pointed out by several studies, organizations are increasingly redesigning their organizational structures to become flatter, to decentralize authority and to become more adaptable and team centric (Mercer, 2017; Rishipal, 2014). The 2017 Deloitte Global Human Capital Trends report underlines these findings by identifying executives' wishes for redesigning their organization and replace hierarchical structures with networks of teams (Bersin, McDowell, Rahnema & Van Durme, 2017). In light of this search for new organizational designs, the concept of self-managing teams (SMTs) has emerged (Lee & Edmondson, 2017).

The concept of SMTs builds upon the thought that a group of individuals with a diverse set of skills and knowledge should have the autonomy to coordinate work-tasks and responsibilities to achieve a common goal (De Jong, De Ruyter, & Lemmink, 2003; Magpili & Pazos, 2017). This in turn, is argued giving teams the flexibility to organize work and resources in a better way (Jobidon, Turcotte, Aubé, Labrecque, Kelsey & Tremblay, 2017). Despite some of the perceived benefits of self-managing teams, historically not many organizations have chosen to organize in this manner. However, currently a growing number of self-managing organizations can be identified, whereby the need to deepen our knowledge in this area becomes increasingly important (Lee & Edmondson, 2017).

Regardless of the mode of organization, swift changes in organizational structures put great pressure on coordination within the organization. According to the Oxford dictionary co-ordination is defined as "The action of arranging, or condition of being arranged or combined, in due order or proper relation." (Oxford Dictionary, 2018). Consequently, coordination is about allocating and adapting resources, people and responsibilities. The traditional view of coordination of work in organizations emphasizes how this should be conducted through structural arrangements, such as routine descriptions (March & Simon, 1958). However, with the rise of the knowledge economy organizations are to a larger extent dependent on interdisciplinary teams consisting of highly skilled specialists (Marrone, 2010). Because of this, scholars argue that coordination today is less dependent on structural arrangements, instead emphasizing the emergent nature of coordination, by for instance occupational control (Faraj & Xiao, 2006; Bechky & Chung, 2017). Moreover, scholars argue that previous research has tended to neglect the tensions that might arise in today's organizations as occupational communities must work under the control mechanisms of organizations (Bechky & Chung, 2017).

In addition, employees are often not only members of one team, but several team-constellations simultaneously. In combination with this, a lot can happen over a team's lifetime resulting in reconfigurations of the team, which in turn affects team interactions and coordination (Mathieu, Maynard, Rapp & Gilson, 2008). In sum, the necessity of coordinating in organizations becomes highly important because of changing environmental conditions, increased complexity of work tasks and less-hierarchical ways of organizing. Thus, the challenges mentioned above, coupled with the idea of re-organizing as the solution to this, puts great pressures on coordination in organizations.

As self-managing organizations are becoming increasingly prominent it is argued that additional research is needed in this area (Lee & Edmondson, 2017). Scholars claim that more research is needed in two areas. Firstly, we need to broaden our understanding of the different approaches to self-managing organizations, and secondly, further research is needed concerning the relationship between the structure of the organizational system, the organizational setting and the nature of work (Lee & Edmondson, 2017). This lack of research has also been identified by Faraj and Xiao (2006) who call for further studies to better understand which coordination practices become relevant in different settings. Hitherto research of coordination has been conducted emphasizing different coordination mechanisms (Lee & Edmondson, 2017) such as representation and assembly (Kellogg, Orlikowski & Yates, 2006), protocols (Faraj & Xiao, 2006), rotating spokespersons and shared leadership (Ingvaldsen & Rolfsen, 2012). However, research has not been conducted in settings where hierarchical authority is absent (Lee & Edmondson, 2017) and research has yet to study the coordination in a transitioning process from a formal hierarchy to organizing in flatter structures such as SMTs.

Therefore, our study aims to extend current research by addressing how coordination is performed by organizational members, in a knowledge-intensive organization in a transitioning process. This process concerns the transition from a hierarchical structure to organizing in SMTs, where managerial authority formally has been removed. This transitioning process is furthermore characterized by organizational members' efforts to solve coordination issues as the new ways of working meets the previous structures of organizing. To fulfill our aim, we choose to analyze the coordination through the lens of boundary work. This as, boundaries of organizing become subject to negotiation when organizations implement new concepts and practices (Lindberg et al, 2017). Thereby the questions we aim to answer are: *How is coordination conducted when adopting SMTs?* and *What are the implications for coordination when moving from a hierarchical structure to organizing in SMTs?*

The paper is structured as follows, firstly previous research on coordination is presented, followed by a closer examination of the theoretical framework of boundary work. The report then continues with an outline of the methodology of the study. Thereafter empirical findings are disclosed, continuing with a section of discussion, where the theoretical framework is applied to the gathered empirics, ending in a concluding discussion where we aim to answer our research questions. Finally, the paper ends with a section of conclusions, implications and suggestions for future research.

Previous research and theoretical framework

Previous research on coordination have in different ways examined how coordination is accomplished across various boundaries. Many studies have investigated coordination across boundaries in knowledge-based settings. Carlile (2002) investigated knowledge boundaries in product development and how boundary objects were used to resolve the issues stemming from coordinating between different professions. In the same vein, Kellogg et al (2006) investigated coordination across professions in an unpredictable environment. They found that coordination is comprised by practices of display, representation and assembly across community boundaries, which both enable and inhibit coordination. Further, studies on cross-boundary coordination between professions have also highlighted experts' use of boundary objects to facilitate knowledge-sharing, which were supported by three different types of coordinating practices; identifying problem boundaries, orchestrating collective responsibilities, and developing a systemic understanding (Hsiao, Tsai & Lee, 2012). Additionally, Bechky (2003) found that knowledge is shared as occupational communities transform their understandings of their work. Further she found that differences in understandings between occupational groups often originate in differences in language, locus of practice and their understanding of products.

Research on coordination in settings with highly-skilled workforces have further emphasized emergent coordination as an important factor for cross boundary coordination. For instance, Faraj and Xiao (2006) investigated how staff facing uncertain coordination challenges not only is dependent on expertise coordination, but also dialogic coordination practices defining emergent actions taken in response to unpredictable events. Bechky & Chung (2017) continued along the same path finding that emergent coordination is achieved through two recursive, mutually constitutive, control processes, namely organizational and occupational control. She found that occupational communities exercise occupational control in order to achieve emergent coordination, which varied depending on the relationship between organizational acknowledgment of occupational control and occupational interdependence. In contrast, Beck and Plowman (2014) studied how emergent coordination was conducted without the existence of structures and designated leadership during an emergency. The study implied that emergent coordination was successful when there were clear goals and an open and collaborative environment allowing for exploration.

Further, Jobidon et al (2016) investigated the impact of role variability on team performance and coordination. They created a metric for coordination based on a time perspective and found that self-organizing teams performed better than functional teams, as they displayed more role flexibility. However, they also found that greater role variability might lead to poorer performance and coordination. In the same vein, Ingvaldsen and Rolfsen, (2012) studied inter-group coordination in autonomous teams which was achieved through rotating spokespersons or shared leadership. The authors concluded that inter-group coordination became a great challenge in autonomous groups with high interdependencies as it was difficult to both execute integral evaluation across the teams as well as proactive non-routine regulations.

In order to provide explanations to how coordination is conducted when adopting SMTs, and what the implications for coordination is when organizing in SMTs where hierarchical authority is removed, boundary work is useful. The theoretical framework of boundary work will be presented below.

Boundary work

Boundary work describes the attempts of actors to purposively construct social boundaries between different groups and activities (Gieryn, 1983; Zietsma & Lawrence, 2010). According to Lamont and Molnár (2002:168) "boundaries result in unequal access to and unequal distribution of resources (material and nonmaterial) and social opportunities". Boundaries stabilize and legitimize practices, at the same time as practices drive changes in boundaries, thus illustrating a recursive relationship between boundaries and practices (Lindberg et al, 2017). Moreover, Persson (2010) argues boundaries, are shaped and reshaped in the ordinary and mundane activities in organizations. In light of this, we chose to follow the same path analyzing the performing of boundary work when transitioning from a hierarchical structure to organizing in SMTs.

Boundary work can be categorized in two dimensions; internal team processes, that is boundary reinforcement and external team processes, consisting of boundary spanning and boundary buffering (Faraj & Yan, 2009). Boundary reinforcement refers to the ways in which team members together create and maintain a clear identity by increasing members' awareness of boundaries, thus this refers to internal boundary work. Depending on the magnitude of this, the boundaries can either be strengthened or weakened. This aspect may be of essence when the organizational environment is highly fluid and conflicting demands are put on members. Therefore, managers are urged to acknowledge the need for supporting the teams in boundary reinforcement (Faraj & Yan, 2009).

Concerning the external processes, boundary buffering (Faraj & Yan, 2009) refers to actions that are taken in response, or in preparation for, disruptive forces in the environment and thereby protecting team core processes. The other external type of boundary work, spanning, concerns actions whereby a team reaches out to its environment to gain resources and support. It is argued that when teams' tasks are undetermined boundary buffering, may support the development of a good intra-team environment. On the other hand, boundary spanning contributes to goal achievement when there are ample resources and hinder it when resources are limited (Faraj & Yan, 2009). It is further argued that when spanning boundaries, these boundaries can be breached, implying another type of boundary work, namely boundary breaching. Boundary breaching involves institutional conflict, which occurs when different boundaries collide and become contested (Zietsma & Lawrence, 2010). Additionally, studies of boundary work have further shown that boundary spanning also can imply blurring of boundaries, meaning established boundaries being transformed into something new (Evans & Scarbrough, 2014; Lindberg et al, 2017; Liberati, 2017).

Moreover, Lindberg et al (2017) argue that it is important to study the very performing of boundary work, instead of treating different types of boundary work as mutually exclusive. The negotiation between different boundaries is highlighted in a study made at hospital which investigated how boundary work was conducted between medical disciplines when moving from a functional structure to organizing in multidisciplinary teams. Boundaries between professionals were argued to be hard to overcome due to professional socialization, whereby boundary disputes and conflicts are likely to happen. The study suggested that effective interdisciplinary work is achieved by bridging boundaries within professions and working on the dynamics of resistance between different disciplines in multidisciplinary teams (Liberati et al, 2016). Following Nicolini's (2012) argument specializing within a discipline means that you internalize certain practices, norms and rules, which in turn, may hinder the adoption of new practices (Liberati et al, 2016). Persson (2010) also made a case study of professional boundaries, examining the role of professional boundaries and gender in the Swedish Armed Forces. She found that metaphors and images were used as rhetorical devices when the respondents conducted boundary work, for example when demarcating core versus support professions. Additionally, an interesting finding was that the respondents used the same metaphors and symbols when working to deconstruct and maintain boundaries, however using different images to describe those. For example, the organizational actors in her study that worked to deconstruct boundaries used metaphors of insiders and outsiders to highlight inequalities. In contrast to those working to maintain these boundaries who instead talked about the natural division between these two, arguing that this is the traditional way of working. In line with this, she found that boundaries of gender and occupation are highly impregnated with these organizational symbols and practices, and that they are very entwined with each other. Finally, Lindberg et al (2017) argue that different types of boundary work may lead to new configurations of boundaries.

Consequently, when transitioning from one organizational structure implying one way of working to another organizational structure implying another way of working, practices change whereby changes in boundaries can be expected. In order to fulfill the aim of this study, we thus choose to apply boundary work as a theoretical framework. This framework allows us to analyze how coordination is affected by organizational members performance of boundary work.

Methodology

To reach the aim of this study, a qualitative method was deemed appropriate. Doing a qualitative study allowed us to explore how the concept of SMTs was implemented in this particular setting and how coordination was performed.

Collection of data

To provide insights in how organizations coordinate when transitioning to an autonomous organizational structure, this study is based on data collected through primary sources from a case organization. The advantages applying a case study approach is that it provides with practical examples from real life experience (Flyvberg, 2006). The case organization conducted a reorganization, six months before this study was made, shifting from a hierarchical structure to organizing in SMTs. Followingly, the case organization was deemed to be specifically interesting for three reasons; it is a knowledge-intensive organization, the teams are interdisciplinary, and the organization is characterized by sales of expensive products and services expanding over a long period of time. Thus, by studying this organization, the purpose of this paper was fulfilled; namely to understand organizational members coordinating efforts in SMTs during a transitioning period where previous hierarchical structures and managerial authority have been removed.

The primary data for this paper was collected through interviews, a document analysis and observations conducted over a three-month period. The document analysis was conducted to get a thorough understanding of the preconditions and ideas that might have led to the decision to adopt the concept of SMTs at the outset. Moreover, by doing interviews researchers are provided with practical examples of daily activities (Silverman, 2013) which for this paper was necessary for understanding how coordination was exercised in this organization. Moreover, each interview was recorded and transcribed in agreement with the interviewees. The interviews ranged between forty-five minutes to one hour and were conducted in a semi-structured manner. The reason for having a semi-structured approach was because it allowed for questions to be added and thereby making it possible to further elaborate on interesting answers (Silverman, 2013). During the interviews, we had help of an interview guide that covered different themes with associated questions that we found particularly interesting for fulfilling the aim of this paper. Additionally, the questions were formulated open-endedly so that the interviewees would be able to speak freely about the subject. The combination of a semi-structured approach and the open-ended questions accommodated an active intercommunication between us and the interviewees, and through this, an in-depth understanding for the subject was gained.

Moreover, the interviews were held with team members and line managers that were part of a sales organization. This organizational entity consisted of sixty people that were divided into seven different teams. In sum, seventeen interviews were held in total with both team members from the different teams and line managers having overall personnel responsibility for these teams. In addition, one of these interviews was held with a consultant that was hired by the company to help them with the implementation of the SMT-concept in their organization.

Furthermore, as Watson (2011) argues that to learn what is going on in organizations one must engage in ethnographic observations. In agreement with this argument, observations were held to get a better understanding for how the teams were working in the new organizational structure. Non-participant observations (Bryman & Bell, 2013) were held at a few meetings extending from half an hour to a couple of hours with various purposes. Some meetings dealt with market- and project activities while others had more of a team building character. By doing observations the researchers acquired enhanced understanding of the everyday practices in the organization and the arguments and language of those being observed (Van Maanen, 2011). During the observation, we made notes about things that we could see and what was said. However, we were observant about not including things that could be regarded as sensitive information, which was specifically important regarding our promise of keeping the participants anonymous. Altogether, the gathering of data was completed when the we felt that saturation was reached, meaning that new data did not add any relevant information to the material (Glaser & Strauss, 1967).

Ethical considerations

Conducting observations and interviews required us to think about ethical considerations. When doing qualitative research, it is important to convince the studied organization that the researchers will consider their integrity and that efforts to limit the risk for the participating parties will be taken (Silverman, 2013). To deal with the ethical issues in this study, we considered the general principles of Silverman (2013) i.e., voluntary participation, anonymization of participants, risk and benefit assessments, and consent. Therefore, we have not included any names or positions in this paper apart from naming them team members or line managers. Furthermore, prior to each interview or observation we informed the participant about the purpose of our paper and how we aimed to treat the collected data, whereby they gave us their consent before participating. These considerations go in line with the principles of Silverman (2013) and are especially important as the paper is based on a single case study. Therefore, we choose to neither name the participants nor mentioning the name of the case organization, since it might endanger the integrity of individual participants in this study. This being stated, we choose to mention what type of department we have studied. The reason for this was that we found it critical to explain the setting that characterized this study, as it would provide more depth and understanding of the context of the study. However, since this could decrease anonymity, we made sure that the organization consented to this. Additionally, we reflected highly upon the power asymmetry in the interview situations following Kvale's (2006) argument that researchers are in a power position as they get close access to the respondents' thoughts. Thus, we have tried to protect the interviewees personal integrity by treating the collected data carefully and regarding individual consequences before including gathered data in this paper. In one occasion concerning an observation that is included in this paper, we chose to exclude details from the material due to the risk of revealing individuals, as well as to decrease the risk of exposing organizational secrets. This because the collected data included sensitive information, that if mentioned, might lead readers to the conclusion of who the respondents and the organization might be.

Generalizability

Concerning case studies, a well-discussed dilemma is whether one can generalize from a single case study. That is, whether the knowledge gained from the case study can be applied beyond an idiosyncratic context (Silverman, 2013). However, case studies are argued to have important strengths for theory-building due to the close linkage to the empirical material (Eisenhardt, 1989). Since the research question in this study relates to the coordination of SMTs characterized by a transitioning process, access to an organization that is currently applying the concept is required. In line with this Flyvberg (2006) claims that human studies are to a large extent always context dependent, and thus, they cannot produce completely universal results. Therefore, he argues that context-dependent knowledge is always more valuable than the search for predictive and universal theories. Thus, whether one can generalize the results from a case study is dependent on the choice and the context of the particular case. On the other hand, as organizations increasingly find change to be the answer to challenges they face, and an increasing number of organizations are starting to organize in more autonomous manners, the context of our study becomes highly relevant and we further believe this provides opportunities for generalizability.

Analysis of data

The analysis of the data was conducted in three stages. Firstly, we recorded and transcribed relevant parts and elements of the interview material. Thereafter, we coded the collected material, i.e. interviews, observations notes, and obtained documents, according to a grounded theory approach (Martin & Turner, 1986; Silverman, 2013). Thereafter, the collected data was reviewed in two steps. The first step consisted of going through the collected material to find predominating aspects by labeling the material with codes that were prevalent in the collected material. Thus, the labeling was conducted without making theoretical considerations. Followingly, the labeled codes were grouped into larger concepts, and then into overarching categories. These thematizations of the codes aimed at creating a basis for finding the appropriate theoretical framework for analyzing the collected data.

Following this approach, the collected dataset resulted in three themes, i.e. creating SMTs, coordinating within SMTs and coordinating between SMTs, covering aspects concerning coordinating efforts in a transitioning phase. These themes were recurring several times when going through the collected data and became the basis for our analysis. After it became evident that the transitioning from a hierarchical structure to an autonomous organizational design was characterized by organizational members creating and disrupting boundaries, we found concepts from boundary work to be useful for analyzing the gathered material. This approach is in line with the idea of Martin and Turner (1986) who suggest that a higher level of abstraction is reached by connecting the field material with theoretical concepts. Thus, at the first step of the data analysis, we presented the data without any theoretical considerations. However, later in the process we added theoretical aspects to the collected data (Martin & Turner, 1986). Doing this enabled us to understand how coordination was conducted when adopting SMTs in a specific context as well as to understand how boundaries were negotiated resulting in new coordination practices.

Empirical findings

Introduction to the firm

The study was conducted at the sales department in a company that is producing a wide range of highly complex, technical products to customers worldwide. These products require very large investments and have long lifespans, whereby political factors in the environment might have a great impact on the sales of the company. Being that the products require large investments there are a lot of requirements of customization. Additionally, the time from the initial Request for Information (RFI) to the delivery of the final product, and eventually delivery of spare parts, may range from several years to a couple of decades.

The concept of self-managing teams was recently introduced within the department. The department is responsible for sales of the products, contracting, as well as project managing the delivery throughout the products' lifetimes. The sales department had previously been divided into functional groups, whereas it currently is consisting of seven different cross-functional, self-managing teams, based on regional division. Each of the teams in turn consisted of 5-8 people of four various professions, namely marketers, project managers, commercial managers and system specialist engineers. In other words, there is a great heterogeneity within the teams with regards to the team members competences and backgrounds, this to have all competence that is needed, accessible within team, so that they do not need to search for resources elsewhere. Prior to the reorganization the different professions had been separated in different units of the organization, based on functions (*Image 1*) and when a project came along the manager of the professional group assigned the employees a certain project. Contrastingly, the idea now is that the employees within the self-managing teams should assign work assignments themselves (*Image 2*).

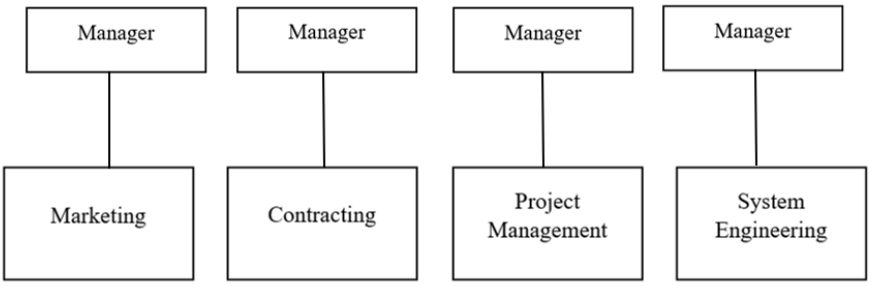

Image 1. Organizational structure prior to the reorganization

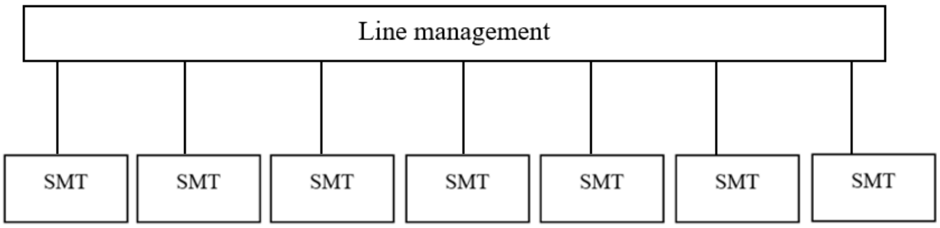

Image 2. Organizational structure after reorganization

The document analysis shows how management presented the reorganization and the purpose of it to the department prior to the reorganization. The documents illustrate seven distinct teams which would be responsible for the customer, from sales campaigns to end of life of the products, thereby including budgetary accountability, project execution and order intake. Followingly the document showed that, the individual SMTs should take decisions regarding their market and its development for example resource allocation of new and existing projects. According to management the budgetary accountability was aimed as being a core for the teams to gather around and to create a common purpose. This because according to the prevailing conceptualization of teams in their organization, a team should work towards a common goal. The document also stated that the purpose of the reorganization was further to achieve a more team-based operations, as this was thought being the most effective way of working. Additionally, it was stated that the teams should be consistent over time, in order to build strong teams where handover between the different competences should flow easier. The document analysis also highlights that as the teams were given increased responsibilities, that the role of management became a support function which should coach the teams and have a personnel responsibility. However, what the coaching role implied was not further specified. Based on the respondents' accounts, the management team will continuingly be referred to as the line management.

Moreover, as the document analysis showed, the reorganization implied that the teams should work according to agile work methods. The agile tool box consisted of, amongst other things, three-week planning periods called sprints, ending in a sprint demonstration where the SMTs should demonstrate what they had done during the last three weeks. The idea was that the output in one team would become an input somewhere else in the organization, whereby this was a way of consolidating time frames. Moreover, the sprint demonstrations should be used as an information channel between the teams, and to synchronize work tasks within the team. Furthermore, by using backlogs and daily stands, which were also included in the agile toolbox the team members could follow the teams' work progress and update each other on the status of the sprint and to coordinate the team tasks.

Now we are going to present three themes that have been prevalent in our empirical findings, these are: Creating SMTs, Coordinating within the SMT, Coordination challenges due to a lack of overview.

Creating SMTs

By introducing the concept of SMTs into the organization the managers wished to create a closer tie to the different regional markets. Their idea was that by making the teams responsible for a specific region, where they are accountable for their own budget and for the result of that region, they would motivate them. The reason for this, was according to the line managers, to foster a good team environment and to become an attractive employer that follows organizational trends. As one of the line managers point out:

> We have been thinking about how you make people feel enthusiastic and committed, and how to not kill them. A person does not want to feel micromanaged. The people we have here, are people with leadership competences. They are driven. They do not need to be micromanaged. We have personnel that require freedom and expect freedom. They are driven and responsible. That was the starting point for our way of thinking. (Line manager)

Apart from increasing employee motivation, the aim was also to make the teams more autonomous by giving them increased responsibility of different markets. As a line manager expressed:

> The idea is that the teams should be as autonomous as possible. They should almost be like small companies, having a budgetary accountability. As such the aim is that they should feel more responsibility and commitment for the customers in that market. Thereby it is also important to maintain the team boundaries, for the members to feel committed to the market. (Line manager)

Furthermore, they argued that this was important since the company most likely would do business with these customers for many years to come, as the projects span over several years. In addition, management emphasized that the teams should be self-managing and have full responsibility for running that market, i.e. allocating resources and organizing work tasks themselves. In line with this, the role of the line managers was presented to the teams as a coaching role, instead of a decision-making role.

One of the first decisions that every SMT was faced with, was the issue of making a budget for the activities within their region of responsibility. This had previously been a task of the line managers of the different functions. The possibility to make their own budgets was expressed as something positive by several respondents. They felt that they now finally would have the mandate to make the decisions they wanted concerning their own customers and projects, something several respondents stated that they previously lacked. However, several respondents expressed that they after a while realized that they had not been given as free rains as they in the beginning had thought. Starting off, the teams assumed they had the freedom to make their own decisions regarding the budget, following the idea of being self-managing. However, as they started making the team budgets, conditions changed and the old structures of working, where line management took budgeting decisions, became more prominent. Several respondents expressed that they after a while experienced that management did not approve the budget that the teams had decided upon, instead their budgets were reduced.

> In theory we are expected to stay within the budget, but the practical issues we need to solve ourselves. But in real life, our budgets have been reduced. So, the final budget decision is still made by management. (Team member)

This raised the question of what decision-making authority the teams actually had. Did management always have the final say in decisions or did the teams have mandate to take decisions on their own? However, some respondents also stated that they knew management would reclaim authority over the budgets, because they argued that there needs to be someone who has the overview to reallocate resources since circumstances might change. Consequently, when management withdrew authority the teams started to question the autonomy of the SMTs. The question concerning the autonomy of the SMTs, is further exemplified by the following situation where the teams had to realize that some structures in an organization outweigh others. As expressed by a respondent:

> There are certain decision-making steps that a company needs to comply to. For example, who is authorized to make decisions for a company is defined in legislation and in internal organizational processes, which the company cannot disregard. And that is logical because that is legally conditioned, not everyone can sign an offer. (Team member)

When the team members started working in SMTs they realized that there were contradictions between the new work processes and the processes that had been employed previously in the hierarchical structure. As such, the teams had to find ways to integrate the old processes with the new way of working. An example of this is the it-system which is used when working with prospects, that is based on the old processes. Thus, when the teams started working in SMTs, while still using the same it-system, coordination problems arose. This since the it-system was built upon a process where a designated manager was the approving party. Independent of the organizational change the it-system still had this approving function, which needed to be filled. However, now when teams had autonomy over decisions regarding their market, questions arose regarding who the approving party would be. Should a manager still take the final decision, or should they follow the principle of autonomy? A line manager also acknowledged this difficulty the organization faced due to the mismatch between the internal decision-making processes and organizing in SMTs.

> We needed to change all our structures and workflows, our entire internal structure of reporting collapsed. (...) All our systems are built upon the thought that there is a designated boss that is approver. How are we supposed to work with this when the teams decide? We are not free to pick-and-choose our processes, but they do not match anymore. (Line manager)

Because of these issues, the teams have faced many situations that have created coordination problems due to lack of structure for the new organizational processes. Moreover, several respondents expressed that as line management was pushing down decisions and responsibilities on to the teams without giving any directions, they had to find solutions within the teams. Because of management giving the teams instructions to solve issues themselves without turning to them, the teams solved the issue of approving by going around the it-system and approving each other cases.

Coordinating within the SMT

As explained by the consultant, agile work methods were implemented in the organization since it had been shown to be very successful in other settings. However, the agile tool box was in many ways questioned by the organizational members. For example, a line manager explained that in engineering settings the team members typically have same or similar competences and they work in shorter time cycles, which in turn makes it easier for them to both exchange and complete tasks. The line manager further pointed out that the teams' goals in their organization is placed at a strategic level, namely responsibility for a result. As the line manager expressed:

> We have taken a concept and implemented it very differently. Our teams do not work towards a common task in that sense, because they have a budget accountability and an overall responsibility for the result. Which sometimes makes it difficult for the teams to understand the purpose of the team (Line manager).

In line with this, several respondents expressed that they found it difficult to understand what they gathered around on a daily basis, since the they most of the time worked at separate projects outside the SMTs. Therefore, sprint demonstrations were instances when the team gathered and worked together. Thus, management claimed that agile work methods were creating a core for the teams to work around.

> We have emphasized that the teams need to work with daily stands and sprint demonstrations (…) the idea is that these should create a core for them to gather around and to create a good team environment (Line manager).

Moreover, besides questioning what the team was gathering around on a daily basis the teams also started to question the purpose of having different competences within the team. According to management the hope of SMTs was that the team members would be able to switch roles. That is, a project manager should be able to take the role of a marketer and vice versa. By doing this, the hope was to increase the sense of responsibility towards one's market because if a project manager could be part of the customers context already in a marketing stage they might become more customer-oriented. However, the interviewed team members expressed that it is difficult to assume that the different team members can switch roles, e.g. that a marketer can do the work of a system specialist and vice versa. This because the different roles require widely different competences and in-depth knowledge which is not easy to acquire. Moreover, working in a team consisting of different types of competences was further being regarded as difficult due to a lack of understanding of each other's work. This can be exemplified by an observation where team members from different professions had different approaches for solving an issue regarding a customer. Due to their different views they needed to persuade each other of how to proceed appropriately, as they had strongly different views. This in turn made their distinct expertise highly visible and because of their diverging views they did not come to a solution during this observation.

> The team-leader starts the meeting by asking the other team members what is in the news this week.
> TL: What is on the agenda this upcoming week?
> TM1: We have a visit from one of our customers next week and we need to decide the setup for the visit. I have received various information regarding how we should do this.
> TM2: Previously we have done it in this way (suggestion 1).
> TM1: But is it not possible to do like instead because I know that others have done like that in another setting, I think it works better (suggestion 2).
> TM3: Hmm, I am not sure about that.
> (Continuing the discussion of various alternatives).
> TL: Let us decide on this the next time we meet.
> (TL = team leader, TM = team member)

As mentioned above, they did not arrive at a joint decision, but they shared their views and opinions about the subject. This example also illustrates the difficulties the teams had of receiving help from their fellow teammates, as they did not observe situations from the same perspective. The respondents mentioned that in the previous organizational structure, they were divided according to their profession, which made communication and collaboration within the profession a lot easier. Now however, management stated that the employees were supposed to seek help from their fellow teammates, but the employees argued that this was not possible as their teammates do not have the same competence. Many team members stated that the new structure made them feel left on their own, as they now had to turn to the team for help.

The combination of not sharing operative tasks and not understanding why the teams are built up by different competences led to the teams' starting to abandon the agile methods, since they did not see the value of having them.

> We do not see the point in having sprint demonstrations or daily stands or using backlogs etc. partly because we work with so different task due to our different competences, but also because we do not see need to update each other every third week (…) We have realized that it takes more time than it creates value. (Team member)

At the same time as more teams started to abandon the agile work methods because of requests for management to take responsibility of the overview, questions arose around what made the them a team. As expressed by a respondent:

> We are not a team. What am I supposed to put in the backlog and present at the sprint demonstrations? It is ridiculous, we do not share tasks. And what is it then that makes us a team? (Team member)

The confusion about what and how the SMTs could truly become a team is further highlighted in an observation where a team focused on deciding rules and values that should apply within a SMT. At the meeting the team leader often referred to a team development model that was initially elaborated by Wheelan (2016). During the meeting the team was elaborating on where in the model they were located.

> The team-leader starts the meeting by drawing the team development model on the whiteboard.
> TL: We are currently in the second phase.
> TM1: Ahaa...
> TL: I would like you to be open with where we are in this model. I would have preferred if we had had this meeting earlier really, when we were in the first phase. Today we are going to discuss our goals, roles and rules.
> TM1: We are not a team.
> TM2: We are working as separate entities now.
> TL: Yes, we have not yet had a project to work on together.
> (TL = team leader, TM = team member)

As illustrated in this scenario the meeting was based on Wheelan's (2016) model, and the members continuously addressed the framework in their discussion of what a team is and how to become one. As the meeting continued, the team members discussed the team rules and values. The team had at a previous meeting started discussing the rules and had written down a few in a document that was now being displayed on the board in the room. The team members continued adding concepts which the team leader was writing down in the document. After a while they agreed upon that they had created too many concepts and that they needed to go through them, group them and get rid of some. As they were going through the list trying to figure out how to organize the concepts one member voiced that their concepts were a lot similar to the corporate values of their company.

> TM1: It is like we are copying the [corporate] values.
> Others: Yeah, hahaha.
> TM1: Maybe we should just use those.
> TL: No, we are creating the team values now.
> TM2: Yeah, and some things are not included.
> TL: Maybe I should get the poster.
> (TL = team leader, TM = team member)

Followingly, the team leader brought a poster were the corporate values were displayed whereby the team agreed upon that they should start from the corporate values when making their own. Going through the list they made sure that all the rules were agreed upon by everyone in the team, so that they had the rules down as some team members were leaving the team shortly, while new members would enter. This three-hour meeting ended with the team members signing a contract with a set of rules and values that they had agreed upon during the meeting. This was argued being important to move forward in the model and to really become a team.

Coordination challenges due to lack of overview

With time, several team members stated that they started to realize that the information exchange between the teams was incomplete. The line managers also recognized this issue, not only concerning the information flowing between the teams, but also the information exchange between the teams and the line management. Previously, all different competences were part of separate units, which according to some respondents allowed for easier information exchange. As a project manager expressed:

> In this structure you are alone. Before you had meetings with your manager and could discuss. Now I do not have anyone to talk to. Sure, if you have big problems you can find someone, but sometimes you just need someone to toss around some ideas and exchange experience with. This creates a loneliness when it comes to your profession. (Team member)

Furthermore, before the reorganization the different units had formal meetings where information was shared and exchanged, led by management. Thus, management was highly involved in the information exchange. After the reorganization management left the responsibility of information exchange to the teams. They suggested that the sprint demonstrations would be a forum for information exchange between the teams and the line managers, to get an understanding of what everyone is doing. For the teams, this entailed taking time from other work tasks and attending several meetings each week, which many of the respondents argued being too time consuming. In addition, many respondents argued that you could never get enough information from just attending the sprint demonstrations as you often need very specialized knowledge, which you can only obtain through direct communication.

> We are supposed to work with sprint demonstrations, but if you are lucky you will get two minutes of relevant information. If I need information I will rather go and talk to that person directly. (Team member)

Therefore, the sprint demonstrations have not been very well attended and not all teams did hold sprint demonstrations. Because of the lack of information exchange relevant information gets lost, which causes problems. One respondent explained it as follows:

> What previously was handled by the different entities is now given to teams. We have noticed that it has caused problems when receiving request for information. There have been times when several teams have received the same enquiry, but from different regional teams. Thus, several teams have worked on the same proposal. But it is not so easy to do something about it. We just happened to hear it from another team and then we decided to distribute it to one of the teams instead. (Team member)

In this example, several team members became aware of this coordination issue, since some members worked on projects in more than one region. Several of the respondents argued that it was a coincidence that they noticed this, but it could as well had gone by unnoticed since they did not have a good overview of what the other teams were working on at the time.

As the respondents identified a lack of overview across the organization, most of the interviewees emphasized the importance of using their informal networks to get things done. In order to collect the right information, you need to know who to turn to. As one project leader expressed:

> There are formal communication channels, but it is not certain that they lead to effective results. No one really has the aggregated overview. If you want to get things done, you need to ask the right person for help. (Team member)

In line with this, another team member mentioned that when working with a customized solution in one of their projects they realized that there already was an existing solution similar to the one they were working on. It was by coincidence that they found out about this other solution from another team. Thus, the lack of formal information exchange channels was argued often leading to these types of issues where knowledge gets lost and you need to rely on your own informal network to find things out.

As the managers realized that information gets lost they started considering if they should hold regular meetings to provide the teams with general information. However, as a line manager explains, they were reluctant to do this as they were worried that the teams would stop holding sprint demonstrations completely, which is illustrated by the following statement.

> Now we want the teams to go search for the information themselves. We have said that we do not want to have a lot of meetings where the managers just talk, even if I think that a few minutes of general information every other week might be good. The problem is that, if we do this the demonstrations would just die out.
> (Line manager)

The manager pointed out that they in the management team did not hold the answers, they were not the experts, rather the team members themselves were the ones sitting on the expertise. However, in some cases the teams still expected management to help them, for example concerning resource allocation. When receiving a new project or initiating new activities, each team firstly had to allocate resources internally within the team. If this was not possible, the team had to go to the other six teams to ask for additional resources. Some respondents perceived this as difficult due to a lack of overview. As one team member expressed:

> Before the reorganization, when we were divided according to functions the managers could allocate the resources more adequately based on the workload across the markets. Today we are more locked to our region as there are clear borders between the teams. Therefore, I think that there is a great responsibility on management to have an overview, unfortunately today no one copes with having this overview.
> (Team member)

Due to the ineffectiveness of going to all the other teams when asking for resources, the teams continued to turn to the line managers. As an example, one of the interviewed team leaders mentioned that their team had too much to do and instead of going to all the other teams and asking for help, they went directly to the line managers. It resulted in another team taking over the responsibility for a part of their market.

Discussion

Something that can be identified in the empirical findings is that both the line management and team members wish to distinguish the new ways of working autonomously from the previous hierarchical structure. Management believed that as their organization consisted of highly skilled people, giving the employees more autonomy through increased responsibility would boost their motivation. By clarifying the authority of the teams in comparison to management, the boundaries between management and employees became reinforced (Faraj & Yan, 2009). This illustrates a dichotomy between autonomy and hierarchy that throughout the discussion, will be shown to guide the organizational members' performance of boundary work and thus coordination. Moreover, according to Persson (2010) boundary work can be aided by organizational members use of rhetorical devices, such as metaphors. In our case, the organizational members talking about freedom can be seen as such a metaphor. Additionally, we can further identify that the team members and the line managers attached different meanings to this metaphor. As we will show in the discussion, the different interpretations of the metaphor of the line managers and the teams resulted in ongoing negotiations. This leads to the performance of several types of boundary work, to deal with the emerging issues of coordination stemming from the transitioning process.

To make an overview of the discussion we start by presenting the different boundaries that we have identified, and the different types of boundary work we found being performed in relation to these boundaries in the following table (*Table 1*). Thereafter we will go through each of the identified boundaries and provide an analysis of the boundary work that is performed in relation to these. As such, this analysis will be divided into two overarching themes that emphasizes different interesting aspects that highlight coordination efforts in a phase where managerial authority has been removed. Lastly, we will present a general discussion of the coordination efforts, where we aim to answer the research questions.

Boundary	Boundary work performed
The boundary between autonomy and hierarchy	By going around the it-system's approving function the team members practiced boundary breaching of the old boundary of the hierarchical structure. As management withdraws the budget approving authority boundary blurring of the boundary between autonomy and hierarchy is conducted is conducted from the viewpoint of the SMTs. The same situation might from the line management's viewpoint be interpreted as an act of boundary buffering. The SMTs calling for management to take responsibility of the overview in the organization, can be seen as an instance of boundary breaching of the boundary of autonomy vs. hierarchy.
Boundaries when coordinating across the professions	When the teams started working according to agile work methods this could be identified as an instance of boundary reinforcement of the boundary of autonomy vs. hierarchy as this was something that gathered the members of the SMTs. Moreover, the same situation could be seen as a way to span the boundaries between the various professions. When the SMTs started abandoning the agile work methods, they engaged in boundary breaching of the boundary of autonomy. This could also be seen as a way of reinforcing the boundaries between the professions, as the team member started questioning what made them a team. As the team members tried to find something else to gather the members around in order to maintain the boundaries of the SMTs they engaged in boundary reinforcement of the boundary of autonomy. Additionally, the situation illustrated the boundary spanning between the professions. Informal networks working as boundary spanning channels as the teams searched for knowledge beyond the individual team boundaries. While doing this, the boundaries of the SMTs thus became blurred. By negotiating and exchanging experiences to solve upcoming issues the professions within the SMT engaged in boundary breaching of the boundaries between the professions. When having difficulties to exchange specialist knowledge within the professional group coupled with a requirement to exchange tasks across the professions this might be seen as a process of boundary blurring of the professions.

Table 1: The boundary work identified

The boundary between autonomy and control

The first boundary which we discuss below highlights aspects that concern the upcoming coordination issues as the new ways of working autonomously clashes with the previous structures of working in a hierarchical organization. This theme touches upon several interesting aspects where the organizational members, both the teams and the line management, must deal with situations where the new and the old work in the organization creates confusion.

Clashes between the old it-system and the new authorities

When the team members started working in SMTs they realized that there were contradictions between the new ideas of working and the it-system that had been employed previously. Followingly, the teams had to find ways to integrate the old processes with the new ways of working. The teams solved this problem by going around the it-system and approving each other cases within the team. This example illustrates how the boundary between the responsibilities of management and employees become visible as they are confronted with new practices (Zietsma & Lawrence, 2010; Lindberg et al, 2017). Thus, by going around the system, the team members practiced boundary breaching since they delegitimize the practices associated with the boundary of the old processes building upon a hierarchical structure (Zietsma & Lawrence, 2010) by approving new cases themselves. This example further outlines the team members interpretation of the metaphor of freedom (Persson, 2010).

They believed that as they now belonged to SMTs, they should by themselves make decisions regarding their market, without the involvement of the line managers. In addition, this example further highlights the clashes between the new and the former organizational work processes that in this transitioning period gave rise to boundary work to solve upcoming coordination issues.

Boundary work around budget responsibility

Another instance that demonstrates how practices drove changes in boundaries i.e. when the new work practices were confronted with the old work practices, was when the teams faced a situation where their budgets did not get approved.

Starting off, the teams assumed they had the freedom to make their own decisions regarding the budget, following their interpretation of the metaphor of freedom which emphasized that the teams should be self-managing. However, as they started making the team budgets, conditions changed and the old structures of working, became more prominent as the teams' budgets needed to be approved by line management. Consequently, when management withdrew authority the teams started to question the SMTs, since the actions by the line management went against their interpretation of the metaphor of freedom. Moreover, as the line management withdrew some of the authority of the SMTs the boundaries between the teams and the line management became somewhat blurred (Evans & Scarbrough, 2014). This, since some authority was moved back to management. At the same time as the SMTs began to question their freedom, as Persson (2010) argues, metaphors can be subject to several interpretations. Therefore, one could argue that the line management's interpretation of the metaphor of freedom might as well have left room for them to regain some of the control they initially gave to the SMTs. Followingly, while team members interpreted this situation as their authority becoming blurred, management on the other hand interpreted the same situation as a manner of regaining control and overview of the organization. This because they discovered issues of coordinating resources concerning the budget. Moreover, from their perspective this can be analyzed as process of boundary buffering, that is efforts to act in preparation for possible disruptive forces in the future (Faraj & Yan, 2009). Thus, indicating their concerns for the coordination issues regarding resource allocation.

Lack of overview

When giving the SMTs autonomy of managing the resource allocation of tasks and resources between the teams, coordination problems arose due to a lack of overview, resulting in several teams starting to work separately on the same assignment. Due to the lack of overview, the line management suggested to us that a solution could be that they instead would hold regular meetings to update the teams with general information. The opposing views of the SMTs and management, regarding who of the two parties should have the responsibility of having a general overview, can be explained by their different interpretations of the metaphor of freedom (Persson, 2010). On the one hand, the line management emphasized that the teams should be autonomous as they are specialist, meaning that the teams themselves should coordinate tasks and resources between each other. The SMTs on the other hand, emphasized that even though they are self-managing they cannot be responsible for having the general overview as it is beyond the reach of any individual team. Thus, the teams abandoning sprint demonstrations, as well as going to the line management when failing to allocate resources between the SMTs themselves, illustrates the team members performance of boundary breaching (Zietsma & Lawrence, 2010). This boundary work was based on the team members' understanding of the metaphor of freedom. By breaching the boundary (Zietsma & Lawrence, 2010) of autonomy and hierarchy, the SMTs call for the line management to take responsibility, for the general overview of allocating resources effectively between the teams. Thus, the SMTs intentionally breached the boundary, as their understanding of freedom did not imply them having all the responsibility for the overview.

Hence, the discussion above illustrates the team members and the line managers conflicting views of the metaphor of freedom, where the boundary of autonomy and hierarchy is constantly subject for negotiation due to various types of boundary work.

Boundaries between the different professions

The second theme discussed below highlights aspects that concern the upcoming coordination issues due to the principles of the new ways of working. In brief, this theme illustrates situations where both the teams and the line management faces issues of coordination as the practices of autonomy created confusion about what to coordinate within the teams and how to work in a team comprised of different professions.

Changing the core of team boundaries

Something that became a center of discussion within the SMTs, was the introduction of agile work methods in this new organizational structure. According to the line management, agile methods were introduced in the new organizational structure with the purpose of gathering the team around something as they were consisted of different professions. However, the agile tool box was in many ways questioned by the team members as they had difficulties understanding what they gathered around daily. Looking at this situation through the lens of boundary work, the agile tool box can be viewed as something that was both creating the team and reinforcing its boundaries. This in turn could be an example of boundary reinforcement of the boundary of autonomy versus hierarchy (Faraj & Yan, 2009) as the teams by themselves should allocate tasks. In addition, this could be an example of boundary spanning (Faraj & Yan, 2009) of the professional boundaries as they agile tool box becomes a way to gather the various professions.

However, after a while the team members realized that the agile work methods did not create as much value in comparison to the time it consumed, therefore they started to abandon them. Consequently, this example further highlights how the new practices of working agile, collided with the previous practices relating to the former projects. Because of the practices not matching, the team members intentionally abandoned the agile work methods, which in turn highlights a process of boundary breaching (Zietsma & Lawrence, 2010). This in turn reinforced the boundaries of the professions, as questions arose of what made the team members, with various professions a team after abandoning the agile tool box. One of the observations that was conducted highlights how a team tried to find something new to gather around by setting down rules and values to replace the agile methods. By doing this the teams engaged in boundary reinforcement (Faraj & Yan, 2009) where the concept of SMTs, as autonomous units, was being defended, even though it was questioned. Similarly, to the initial purpose of employing the agile work methods, rules and values became tools for reinforcing the team boundaries. Additionally, they became tools for spanning the boundaries between the professions. Nevertheless, one should not forget that the teams formally were hindered by the organizational structure, which implied that they should work within the framework of SMTs. Thus, by deciding upon values and rules the team tried to influence team practices, within the given boundaries, of working in SMTs. Examining this through the lens of boundary work, the team's efforts to reinforce the team boundaries by establishing certain practices that the team members should conform to, illustrates how boundaries stabilize and legitimize practices (Lindberg et al, 2017).

Informal networks as boundary spanners when coordinating across professions

Another aspect which made it difficult for the members of the SMTs to understand the purpose of why they were put together, was the team consisting of members from different professions. Management stated that the employees were supposed to seek help from their fellow teammates, but the employees argued that this was not possible as their teammates do not have the same competences. Instead they argued that to get something done in this organization you need to turn to the ones you know possess the right competence and knowledge as this organization deals with highly complex products. For this reason, since the organization is highly dependent on expertise knowledge, informal networks, in terms of turning to the one you know possess the right knowledge, functioned as a boundary spanning channel (Faraj & Yan, 2009). In addition, as team members spanned the team boundaries to gain the information needed to coordinate efficiently the boundaries of the SMTs became blurred (Evan & Scarbrough, 2014). Henceforth, the idea behind SMTs being self-sustaining and autonomous is not supported, since all competences cannot be found within the team boundaries at any given moment. Furthermore, this depicts the different interpretations of the metaphor of freedom. That is where management's ideas of the SMTs being self-sufficient, meet practical issues, as the team members found it necessary to go outside the team boundaries to manage their work tasks. Thus, the metaphor of freedom is according to their perspective more about having the freedom to work close to your professional community. Consequently, organizing in SMTs comprised of different professions became a challenge for them.

Moreover, the idea that the different professions within the team should switch roles and exchange tasks, implied that the different professions had to convince the other professions within the team, of what the correct approach to an issue should be. This is exemplified by an observation where team members from different professions had different approaches for solving an issue regarding a customer. As Lindberg et al (2017) argues, the encounter of different professions, makes the boundaries of the various professions explicit. The members' discussion regarding a customer made their distinct expertise highly visible, because of their diverging views. As Liberati et al (2016) state, you internalize certain norms and practices connected to your profession, which may hinder the adoption of new practices. As the different team members were placed in teams consisting of different professions, the team members themselves must solve upcoming issues whereby they have to breach the boundaries (Zietsma & Lawrence, 2010) of their professions. In fact, the example above demonstrates how coordination is affected by the boundaries of the different professions, where the teams have difficulties to overcome the obstacle stemming from the professions having different perspectives.

Moreover, the team members argued that working in teams consisting of different competences, makes you become isolated from your professional community. In other words, it becomes difficult to exchange specialist knowledge. In line with this, a line manager further recognized that there is a risk that these professions lose their edge when they are extracted from their professional group and placed in these teams with different professions. Under these circumstances the boundaries of each profession become slightly blurred (Evan & Scarbrough, 2014) as they are removed from their professional group and encouraged to acquire other competences.

With this in mind, questions concerning what it means to be autonomous arise. As the discussion above shows, working in SMTs does not necessary imply that the employees feel free. It might as well result in a feeling of loneliness as the employees see themselves and their expertise as closely linked to their professional group. Moreover, as the discussion highlights, the transitioning from a hierarchical structure to organizing in SMTs created some confusion about what and how to coordinate when the team members have brought in already existing work tasks. Since they work on tasks separately, confusion of what makes them a team arise, which in turn guide them to search for other tools to gather around.

Concluding discussion

As shown throughout the discussion, coordination is conducted in an emergent manner when faced with challenges of coordination. This due to the transitioning process from a hierarchical manner of organizing, to organizing in self-managing teams. When starting this transitioning process, the case organization formally removed the managerial authority. By doing this, the previous practices of coordinating with the help of managerial authority were removed.

The analysis further demonstrates how coordination is being influenced by the dichotomy of hierarchy and autonomy, reflecting the old and new ways of organizing. This dichotomy is strongly associated with the metaphor of freedom, which is continuously guiding the coordination efforts of the organizational members (both the team members and line managers). This is highlighted in the example illustrating the teams' call for the line managers to take on the responsibility for the general overview regarding resource allocation between the SMTs. The metaphor of freedom guided the team members performance of boundary work. This is shown in the situation where the SMTs chose to abandon the agile work methods, since they believed that these neither fulfilled the purpose of providing an overview nor the purpose of providing with the expertise knowledge, needed to coordinate effectively. Because according to them, freedom did not imply that they should have the overall responsibility of having an overview, as it was beyond their reach. This mirrors that even though autonomy is wished for, the teams still required guidance and formal arrangements to coordinate effectively. Consequently, at the same time as emergent coordination is shown to be important for the team members, for example when coordinating through informal network, managerial authority is still asked for. This since, the transitioning process creates confusion for how to coordinate, when managerial authority has been completely withdrawn. Thus, managerial authority is needed for gaining a general overview and helping the SMTs to coordinate successfully. All in all, this implies that while the team members need to be able to coordinate emergently, they also strive for structural arrangements to guide coordination as coordination become difficult when SMTs are given complete autonomy.

Transitioning from a hierarchical organizational structure to organizing in SMTs where managerial authority has been removed, entails that organizational members must deal with upcoming coordination issues due to new practices colliding with the boundaries of the previous practices. Thus, emergent coordination becomes highly present as organizational members must find ways to align and support the new ideas of coordinating through boundary work. This in turn leads new configurations of boundaries, and thereby new coordination practices (Lindberg et al, 2017). Furthermore, our findings shed light on the importance of recognizing the need for structures, at the same time as emergent coordination is highlighted. The transitioning from hierarchy to autonomy is characterized by the SMTs' struggle and search for formal guidance, as coordination becomes a challenge when they are left without managerial guidance. Thus, while the SMTs call for autonomy, they also call for managerial overview, when moving from a hierarchical structure to organizing in SMTs. This in turn, extends the understanding of previous research that explains the need for emergent coordination in knowledge intensive organizations (Bechky & Chung, 2017; Faraj & Xiao, 2006). Moreover, in contrast to the study by Beck and Plowman (2014) our study shows, that in situations which are not characterized by emergency and instead span over a long time period, a need of managerial authority, especially regarding overview, can be identified. Concerning the need of overview, our study further develops on the study by Ingvaldsen and Rolfsen (2012) by identifying that coordinating across autonomous teams becomes difficult when there is an interdependency, as resources need to be shifted from one team to another. Thus, our study shows that managerial authority might be a solution to these issues, as this is what the team members call for.

Additionally, the analysis demonstrates that both informal networks and working close to your profession can be identified as important coordination mechanisms in knowledge intensive organizations. This is in line with previous research, which emphasizes the need of giving space for professional groups to coordinate emergently (Bechky & Chung, 2017). As shown in our study, organizing in cross-functional teams sometimes creates a loneliness within professions, whereby issues of knowledge coordination become highlighted. The reason for this, is that information might not reach everyone and that as knowledge exchange becomes difficult within the professions, they might lose some of their specialty. As cross-functional teams become more prominent in organizations today, due to the knowledge economy, this raises questions regarding how not to diminish the knowledge within competences, while at the same time becoming more adaptable and customer oriented. In addition to this, our study sheds light upon the issue of working in interdisciplinary teams, where tasks should be exchanged between team members of different competences, finding that because of strong connections to one's profession, it might be difficult to adopt practices of different professions. This moreover, goes in line with the view of Jobidon et al (2016) who claim that greater role variability might create coordination problems.

Thus, the practical implications of this study highlight the importance of considering that coordination issues will arise, when transitioning to an autonomous organization. This as the previous structures of organizing often must be incorporated with new ways of working. As this move implies a transitioning process, coordination issues need to be solved emergently as they continuously arise. Additionally, our study highlights that managers and consultants must consider the issue of lack of overview when completely removing managerial authority. This because, it is difficult for the SMTs to gain a holistic overview, thereby making it difficult to coordinate effectively between the teams. Furthermore, even though multidisciplinary teams may be seen as a way to become more flexible and adaptable to changing customer needs, knowledge-intensive organizations with highly skilled employees must consider the importance of working close to one's profession. This since, these organizations are highly dependent on their expertise knowledge, and as such managers must make sure that they do not lose their specialty.

Conclusions

Research on coordination have called for additional studies of different approaches to SMTs and the coordination mechanisms when removing managerial authority (Lee & Edmondson, 2017; Faraj & Xiao, 2006). Moreover, research has not been conducted during transitioning periods from a hierarchical organization structure to organizing in SMTs. Our study contributes to these aspects in three ways; firstly, by showing that although emergent coordination is emphasized, SMTs call for managerial overview. Secondly, the paper emphasizes the importance of working close to your profession, to not diminish the expertise within the profession while at the same time working inter-disciplinarily. Finally, we contribute to existing research by showing that changes intended to improve coordination in fact might create coordination issues themselves. When organizations adopt new concepts such as SMTs, the transitioning journey from the previous structure to the new way of organizing just starts. The new organizational design will continuously be negotiated when faced with practical issues of coordination due to the coalition of the former organizational processes and the new way of organizing. This in turn, leads to new configurations of coordination practices. Thus, this shows how the solution might be part of the problem itself. Therefore, practitioners need to be aware of these issues and acknowledge them as they arise.

Future research and limitations

This study investigates coordination in a transitioning period, when moving from a hierarchical structure to organizing in SMTs. Since organizations increasingly find reorganization to be the answer to challenges they face, the context of our study which is highlighting a transitioning period, becomes highly relevant. As such, we believe that our findings can be generalized to other settings as well. In addition, as this study is based in a setting consisting of multidisciplinary teams, it would be interesting for future research to study an organization that is comprised of teams from the same discipline. Moreover, a limitation of our study is that the number of observations was limited due to restrictions in the case organization. As such, we suggest that future research should conduct more observations to examine how coordination plays out in practice, as well as conducting the study in a longitudinal manner. This to get a better understanding of the transitioning phase the organization goes through, for example to shed light on how new and old structures are being merged over time. Moreover, our case organization is characterized by long customer relationships as they deal with highly complex products that span over several years, thereby it might be interesting to make the same study in another context, characterized by shorter time spans. Finally, future research might extend this study by examining how coordination is conducted in settings with other products and services.

References

Beck, T. E. & Plowman, D. A. (2014). Temporary, emergent interorganizational collaboration in unexpected circumstances: a study of the Columbia space shuttle response effort. *Organization Science*, 25(4), pp.1234–1252.

Bechky, B.A., (2003). Sharing Meaning across Occupational Communities: The Transformation of Understanding on a Production Floor. *Organization Science*, 14(3), pp.312–330.

Bechky, B.A. & Chung, D.E., (2017). Latitude or Latent Control? How Occupational Embeddedness and Control Shape Emergent Coordination. *Administrative Science Quarterly*, pp.1-30

Bersin, J., McDowell, T., Rahnema, A. & Van Durme Y. (2017). The organization of the future: Arriving now. *Deloitte Insight.* February 28. https://www2.deloitte.com/insights/us/en/focus/human-capital-trends/2017/organization-of-the-future.html (Retrieved: 2018-03-26).

Bryman, A. & Bell, E., (2013). *Företagsekonomiska forskningsmetoder 2.*, [rev.] uppl., Stockholm: Liber.

Bolman, L.G. and Deal, T.E. (2017). *Reframing organizations: Artistry, choice, and leadership*. John Wiley & Sons.

Carlile, P.R., (2002). A Pragmatic View of Knowledge and Boundaries: Boundary Objects in New Product Development. *Organization Science*, 13(4), pp.442–455.

De Jong, A., de Ruyter, K. & Lemmink, J. (2003). The Adoption of Information Technology by Self-Managing Service Teams. *Journal of Service Research*, 6(2), pp.162–179.

Eisenhardt, K.N. (1989b), Building theories from case study research, *Academy of Management Review*, 14(4): pp.532-550.

Evans, & Scarbrough. (2014). Supporting knowledge translation through collaborative translational research initiatives: 'Bridging' versus 'blurring' boundary-spanning approaches in the UK CLAHRC initiative. *Social Science & Medicine*, 106, pp. 119-127.

Faraj, S. & Xiao, Y. (2006). Coordination in fast-response organizations. *Management Science*, 52(8), pp.1155–1169.

Faraj, S. & Yan, A. (2009). Boundary Work in Knowledge Teams. *Journal of Applied Psychology*, 94(3), pp.604–617.

Flyvberg, B. (2006) Five Misunderstandings About Case-Study Research. *Qualitative Inquiry*, 12, pp. 219-245.

Gieryn, T., (1983). Boundary-work and the demarcation of science from non-science: strains and interests in professional ideologies of scientists. *American Sociological Review*, 48(6), pp.781–795.

Glaser, B.G., Strauss, A., (1967). *The Discovery of Grounded Theory*. *Strategies for Qualitative Research*. Aldine, Chicago.

Hsiao, R., Tsai, D., & Lee, C. (2012). Collaborative Knowing: The Adaptive Nature of Cross-Boundary Spanning. *Journal of Management Studies*, 49(3), pp. 463-491.

Ingvaldsen, J., & Rolfsen, M. (2012). Autonomous work groups and the challenge of inter-group coordination. *Human Relations*, 65(7), pp.861-881.

Jobidon, M., Turcotte, I., Aubé, C., Labrecque, A., Kelsey, S., & Tremblay, S. (2017). Role Variability in Self-Organizing Teams Working in Crisis Management. *Small Group Research*, 48(1), pp. 62-92.

Kellogg, K., Orlikowski, W., & Yates, J. (2006). Life in the Trading Zone: Structuring Coordination Across Boundaries in Postbureaucratic Organizations. *Organization Science,* 17(1), pp.22-44.

Kvale, S. (2006). Dominance Through Interviews and Dialogues, *Qualitative Inquiry*, 12(3): pp.480-500.

Lamont, M. & Molnar, V. (2002). The study of boundaries in the social sciences. *Annual Review of Sociology*, 28 pp.167-195.

Lee, M. Y. & Edmondson, A. C. (2017). Self-managing organizations: Exploring the limits of less-hierarchical organizing. *Research in Organizational Behavior*, 37, pp.35–58.

Liberati, E.G., (2017). Separating, replacing, intersecting: The influence of context on the construction of the medical-nursing boundary. *Social Science & Medicine*, 172, p.135.

Liberati, E.G. Gorli, M. & Scaratti, G. (2016). Invisible walls within multidisciplinary teams: Disciplinary boundaries and their effects on integrated care. *Social Science & Medicine,* 150, pp.31–39.

Lindberg, K. Walter, L. & Raviola, E. (2017). Performing boundary work: The emergence of a new practice in a hybrid operating room. *Social Science & Medicine*, 182, pp.81–88.

Magpili, N., & Pazos, P. (2017). Self-Managing Team Performance: A Systematic Review of Multilevel Input Factors. *Small Group Research*, 49(1), pp.3-33.

March, J.G., Simon, H.A. & Guetzkow, H., (1993). *Organizations* 2. ed., Oxford: Blackwell Business.

Marrone, J.A., (2010). Team boundary spanning: a multilevel review of past research and proposals for the future. *Journal of Management*: JOM, 36(4), pp.911–940.

Martin, P. Y. and B. A. Turner (1986) Grounded theory and organizational research. *The Journal of Applied Behavioural Science*, 2, pp.141-157.

Mathieu, J., Maynard, M., Rapp, T., & Gilson, L. (2008). Team Effectiveness 1997-2007: A Review of Recent Advancements and a Glimpse Into the Future. *Journal of Management*, 34(3), 410-476.

Mercer. (2017). *Global Talent Trends Study*. https://www.mercer.com/content/dam/mercer/attachments/global/webcasts/global-talent-trends-2017-europe.pdf (Retrieved: 2018-03-23)

Mineev, A., & Bourmistrov, A. (2015). Social Capital at Work: A Case of Adapting a Norwegian Cooperation Model in Russia. *Journal of East-West Business*, 21(2), pp.129-155.

Nicolini, D., (2012). *Practice Theory, Work and Organization: An Introduction*. Oxford *Qualitative Research*. Aldine, Chicago.

Oxford Dictionary (2018). *Co-ordination*. http://www.oed.com.ezproxy.ub.gu.se/view/Entry/41066?redirectedFrom=coordination#eid (Retrieved: 2018-05-25)

Persson, A. (2010). Soldiers and secretaries: Gendered boundary work in the Swedish Armed Forces. *Scandinavian Journal of Management*, 26, pp. 166-175.

Rishipal, D. (2014). Analytical Comparison of Flat and Vertical Organizational Structures. *European Journal of Business and Management*, 6(36), pp.56-66.

Silverman, David (2013) *Doing Qualitative Research*, 4th edition. London: SAGE. ISBN: 978-4462-6015-9

Suarez, D., & Bromley, P. (2015). Institutional Theories and Levels of Analysis: History, Diffusion, and Translation. In *World Culture Recontextualized*. Routledge. pp. 139-159 University Press, Oxford.

Van Maanen, J. (2011) Ethnography as Work: Some Rules of Engagement. *Journal of Management Studies*, 1, pp.217-234.

Watson, T.J. (2011) Ethnography, Reality, and Truth: The Vital Need for Studies of ‘How Things Work’ in Organizations and Management. *Journal of Management Studies*, 1, pp.202-217.

Wheelan, S. (2016). *Creating effective teams: A guide for members and leaders* (5.th ed.). Thousand Oaks: SAGE.

Zietsma, C. & Lawrence, T.B., 2010. Institutional Work in the Transformation of an Organizational Field: The Interplay of Boundary Work and Practice Work. *Administrative Science Quarterly*, 55(2), pp.189–221.