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How initiatives towards transforming the Role of Controllers play out

– A field study examining the changing role of controllers at Volvo Cars

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Abstract

Background and Purpose: As the digital transformation alters organizations the controlling profession changes and boundaries are blurring. Controllers are moving away from a beancounter image and are evolving into business partners with an organizational value-adding focus. The longevity of development of the role of controllers has its roots in institutional theory where controlling is argued to be an institutionalized profession. Thus, change might not come easily which implies that there is a great need for change initiatives to break the embedded rules and routines. By drawing on the notion institutional entrepreneurship, we aspire to enrich the area of how initiatives are played out to transform the role of controllers. This will be done through performing a field study at a large industrial organization that has close ties to the digital transformation.

Methodology: The initial stage of the research began with an extensive literature review. Afterward, a pre-study was conducted to grasp on the most important aspects. The pre-study consisted of two unstructured interviews and we were provided with material from our supervisor at the case company. The literature review and pre-study laid the foundation for the ten subsequent semi-structured interviews.

Findings and Analysis: Our study shows that there have been a handful of change initiatives in place to transform the role of controllers. The initiatives are categorized based on the approach taken; Blunt intervention or Competence preparation. The former includes Controlling 3.0, an initiative that has disrupted the way of working in a blunt manner and fosters efficiency. In addition, Performance Steering and Ownership changes have also, to some extent, transformed the role of controllers. The latter, i.e. Competence preparation, constitutes initiatives that take time since they are primarily concerned with developing individuals and their capabilities. These initiatives are for example Educational programs, which have slightly improved the technical competences of controllers. Additionally, Soft Initiatives is another dimension of Competence preparation that concerns employing people with other types of work background.

Conclusion: The study brings forth the idea that transforming the role of controllers is a multidimensional work with a mix of radical changes and continuous competence support. Initiatives with characteristics spreading across the two approaches are vital and there needs to be some sort of synchronization and interplay between the initiatives as well as between the internal and external environment. Additionally, there is a great need for having institutional entrepreneurs that champion new ideas which lead to materialization of new rules and routines. Some of the change initiatives are defined as Controlling 3.0, Performance Steering, Educational Programs and Soft Initiatives. Finally, the study highlights the influential role that management has, where their demands could be a starting point for new changes to emerge.

Keywords: *Controllers, Management Accountants/Accounting, Institutional Theory, Institutional Environment, Institutional Entrepreneur/Entrepreneurship, Digital Transformation, Big Data and Business Intelligence/Analytics*

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1. Introduction

1.1 Background

The digital transformation has swept across the world and put it in a constant state of change, bringing both implications and opportunities. Organizations as well as people need to adapt to the newfound circumstances and be dynamic in order to deal with the changes. The digital transformation that we experience could be thought of as a continuous change driven by technology (Ebert & Duarte, 2018), piercing through a wide range of industries, organizations and business units (Lucas, Agarwal, Clemons, El Sawy & Weber, 2013). As the digital transformation alters organizations, new roles and capabilities evolve stemming from the change. This has especially been the case for the role of controllers where multiple researchers have found that the role is changing and boundaries are blurring (Appelbaum, Kogan, Vasarhelyi & Yan, 2017; Caglio, 2003; Cokins, 2016; Graham, Davey-Evans & Toon, 2012). Some researchers have even questioned whether or not the controllers will endure in the digital world and if so, what role they will play (Carlsson-Wall & Strömsten, 2018).

There is a frequently evolving element to the role of controllers (Allot, Weymouth & Claret, 2000) where they are moving beyond their traditional work task of transaction-based accounting towards analyzing and interpreting information in order to supply management with decision making information (Appelbaum et al., 2017; Caglio, 2003; Scapens & Jazayeri 2003). The scope of tasks has broadened and the profession has moved away from a financial control focus towards a strategy formation and organizational value-adding focus (Graham et al., 2012). Graham et al. (2012) illuminate this shift through the following:

> *"[...] improved technology and improvement in business processes has led to less time spent on routine transactional work, allowing more time to be spent on analyzing and interpreting information adding greater value to the organization"*
> *– Graham et al., (2012, p. 74)*

This change stems from organizations being subject to a magnitude of pressures such as globalization, competition and information technology (IT) which, in turn, changes the role of controllers (Zainuddin & Sulaiman, 2016). The shift is further underlined by Appelbaum et al. (2017) who point out that the changing technology equips controllers with tools that could open up for extended analysis. Much of this change in the role stems from Big Data which has caused a shift in what competencies a controller should possess (Oesterreich & Teuteberg, 2019). Thus, competencies in business analytics and IT are deemed as vital for controllers in today's context where a concern is if these expectations can be met (Oesterreich & Teuteberg, 2019). In order for controllers to meet the expectations, organizations have to shoulder responsibility and launch internal actions which then can enable a transformation of the role of controllers.

1.2 Problem Discussion

The discussion of how the role of controllers transforms has been around for a long period. In the early days of research, Sathe (1983) argued that the primary tasks of controllers were to help the management in decision making and to ensure the accuracy of information. Much attention

has been given to the changing environment of the controllers where, for instance, Friedman and Lyne published the article 'Activity-based techniques and the death of the beancounter' in 1997. In the article they conclude that the introduction of a new technique, i.e. activity-based costing, could lead to the typical 'beancounter' image of controllers being weakened (Friedman & Lyne, 1997). Others have continued along the same path, arguing for a change where the 'beancounter' image is replaced and instead the role is associated with a possibility to enhance value creation and becoming a business partner (Appelbaum et al., 2017; Byrne & Pierce, 2007; Goretzki & Messner, 2019; Graham et al., 2012; Zainuddin & Sulaiman, 2016). Besides, connections between the changing role and developments in the digital transformation have started to appear (Appelbaum et al., 2019; Cokins, 2016; Osterreich & Teuteberg, 2019) where it is argued to drive the shift towards value-adding tasks and analytics (Appelbaum et al., 2017; Graham et al., 2012; Zainuddin & Sulaiman, 2016). This further indicates that finance executives must consider making investments into new domains of expertise (Bhimani & Willcocks, 2014), which is in accordance with Scapens and Jazayeri (2003, p. 229) who suggest that the "management accounting bodies need to ensure that management accountants are trained for this broader role".

Nowadays, approximately 37 years after Sathe (1983) first published, the discussion on the role of controllers is still very much alive. The discussion has been altered slightly, due to the digital transformation, but the main and also underlying discussion appears pretty much the same - going from a 'beancounter' to a business partner who creates value (Appelbaum et al., 2017; Goretzki & Messner, 2019; Graham et al., 2012). A possible explanation for the longevity of the discussion has its roots in institutional theory. The environment in which a controller operates is often considered to be institutionalized (Burns & Scapens, 2000; Scapens, 1994) which means that changes are difficult to perform and will most definitely take time. Other signs that the controlling profession is institutionalized is found in the claims that controllers share certain technical knowledge (Ahrens & Chapman, 2000). Thus, since controlling is an institutionalized profession change might not come easily. Additional indications that change is a complex matter for organizations to manage are found in the possible organizational barriers. Olsen and Boxenbaum (2009) argue that if an organization overlooks the organizational barriers during change projects the emergence of cognitive shifts and skills acquisition can be hindered, which is necessary for new routines to materialize.

The institutional element of the controllers' environment could be what makes researchers revisit the same topic over and over again without getting further than to establish that the role is changing. In an institutional environment changes take time and the default is to return to the already embedded rules and routines. It is therefore motivated to investigate further what it is that hinders and what it is that enables the developments of the role of controllers. What we perceive as especially interesting are the initiatives that are in place in order to transform the role and how they play out. We believe that the initiatives often originate from somewhere or someone and it is therefore of interest to further examine the source. Perhaps there are specific agents within the firm that initiate changes necessary to break the institutional environment. To examine such ideas we draw upon a notion that theorizes on the process of change, that concept is institutional entrepreneurship. The notion will be used to look at how initiatives play out in the organization since institutional entrepreneurship is often considered to initiate change and drive transformations which break the already existing institutional environment (Battilana, Leca &

Boxenbaum, 2009). Therefore, we will use the theory as a lens, aiding in investigating initiatives that are aiming to change the established processes. Our standpoint is that institutional entrepreneurs are individuals, groups or organizations however, much attention will be given to the digital transformation since it can be perceived as an essential part of the role of controllers. We aspire to enrich this area by performing a field study at a large industrial organization that has close ties to the digital transformation. An established industrial organization might be more prone to having 'their way of doing' and is therefore often institutionalized. This makes it a suitable setting for our research where initiatives are of utmost importance in order to break the institutional environment. Through an abductive problematization, we have chosen to study the organization Volvo Cars which has signalized that they are undergoing several interventions aiming to enforce a change in the role of controllers. The aim is to investigate and contribute with insightful empirical findings through the following research question:

How do initiatives towards transforming the role of controllers play out in an established industrial organization?

1.3 Important Definitions

Before moving further it is important to define the terminology that is fundamental for the paper. We have noticed that throughout the literature both 'controller' as well as 'management accountant' have been used to describe a role that appears to be quite similar. For instance, Oesterreich and Teuteberg (2019) use the terms interchangeably and describe that both professions assist in the decision-making process. Others argue that the terminology is dependent on the geographical location where German-speaking countries generally use the term 'controller' and English-speaking countries use 'management accountant' (Ahrens & Chapman, 2000). The fact that geographical location could be a determinant for which term to be used indicates that there are similarities between the two, however, some would argue that the 'controller' takes on a broader perspective in an organization and is concerned with both financial and managerial issues (Schäffer, 2013). As for this paper the sole term 'controller' will be used throughout but it is important to declare that in literature the term might vary. Nevertheless, the general perception of controllers is that they provide the management with strategic decision making information and shed light on value-adding activities (Appelbaum et al., 2017; Graham et al., 2012). In addition, controllers are multifaceted and concerned with issues both regarding management and financial accounting (Graham et al., 2012).

1.5 Structure of the Paper

The outline of the report is divided into six chapters, where all chapters reflect different parts of the study. In the introductory chapter the role of controllers and the change they are undergoing are introduced, followed by a problem discussion that conceptualizes the research question. The next chapter, i.e. the conceptual framework, aids to provide the reader with important concepts, theories and information which lays the foundation for the research. Institutional entrepreneurship coupled with the digital transformation will be prominent concepts throughout the report. The subsequent chapter presents the chosen method by first introducing our research design and sociological standpoint. This is of importance as the readers will be made aware of which standpoint we draw upon throughout the research and our viewpoint of how the world is

constructed. Further, the research process is presented, followed by limitations and finally research quality.

In the empirical section the field study organization is briefly described, followed by the information gathered during the pre-study which aids as an abstract that grasps on the surface. The subsequent chapters present the perception of the environment where for instance the Survey 2018 is included. These chapters give a contextual understanding of the primary empirical chapter, i.e. change initiatives, which is of importance as the reader will become aware of the background. The change initiatives are categorized to enable a more easy and structured retelling. In the analysis section the empirical findings are discussed and analyzed together with the conceptual framework. The initiatives are divided into two sections based on the approach used for the initiatives: Disruptive intervention approach and Competence preparation approach. The former approach is a straightforward approach that shakes the institutional environment while the latter relates to initiatives that take time to realize and need to be incorporated in the institutional environment. The last chapter contains the concluding remarks of the study with a summary that presents the key findings. In addition, suggestions for future research are discussed.

2. Conceptual Framework
2.1 Institutional Theory & Institutional Change
Institutional theory is concerned with examining why social structures tend to become stagnant over time as the behavior becomes "institutionalized". The foundation of institutional theory has its emphasis on the taken-for-granted character of institutional rules, myths, and beliefs as shared social reality and on the processes by which organizations tend to become instilled with value and social meaning (Oliver, 1991, p. 145). Furthermore, an institutional environment consists of deeply rooted rules and routines and is often described as "the way of doing things" (Burns & Scapens, 2000. p. 14; Scapens and Jazayeri, 2003). Even though the theory has evolved, it still has its emphasis on the fact that social constructions in society and organizations can become established processes and affect people's mindset. Thus, social institutions can be defined as a combination of rules that influence and structure human behavior (Lichtenstein, 1996). The institutional theory identifies that factors such as cultural values and environmental norms shape organizational actions, rather than economic rationality. The organizational actions can be explained by a strive to achieve legitimacy (Runesson, Samani & Marton, 2018).

Throughout the social sciences institutional theory has been a popular and influential theory and is applied when it comes to understanding institutions and institutional change (Burns & Scapens, 2000). A dilemma that has figured in institutional theory is how and why institutional change sometimes occurs. This opens up for agency within the institutional theory, where institutional entrepreneurship can be used to explain institutional change (Messeghem & Fourquet-Courbet, 2013). It is also claimed that innovations, such as technologies, products and services, are enablers of institutional change. These innovations often deviate from existing institutionalized norms and practices and thus influence the institutional environment (Garud, Jain & Kumaraswamy, 2002; Pelzer, Frenken & Boon, 2019). Although some researchers direct attention to technology, Battilana et al. (2009) argue that during an extended period, too much attention in research was given to the exogenous factors and not enough was given to the actors in the institutional

environment. From this, institutional entrepreneurship grew as an alternative path in investigating institutional change (Battilana et al., 2009). The notion of institutional entrepreneurship is further explained in the following section.

2.2 Institutional Entrepreneurship

Drawing on new institutional theory, a primary question in organizational theory is how and why new institutions emerge from existing ones, where the questions remain relatively unsolved (Suddaby & Greenwood, 2005; Tracey, Phillips & Jarvis, 2011). Institutional change is a complex process involving different types of forces and agents in order to modify the institutional environment (Battilana et al., 2009, p. 66). The key actors who drive the process of organizational transformation are defined as institutional entrepreneurs (Battilana et al., 2009; Messeghem & Fourquet-Courbet, 2013). Drawing on the presented ideas, we argue that institutional entrepreneurship is an appropriate theoretical lens when examining the initiatives taken to transform the role of controllers. In addition, the theory will assist us in identifying actors who pursue institutional change (Battilana et al., 2009), hence we do not have the intention to test the validity of the theory.

The concept institutional entrepreneurship was first introduced by Paul DiMaggio in 1988 and has been a popular theory applied to the management field ever since (DiMaggio 1988, see Messeghem & Fourquet, 2013, p. 62). Institutional entrepreneurs recognize opportunities, are the most motivated to bring change and influence the organizational environment to pursue transformation (Messeghem & Fourquet-Courbet, 2013). This is highlighted through the following extract:

> *" [...] institutional entrepreneurs as change agents who initiate divergent changes, that is, changes that break the institutional status quo in a field of activity and thereby possibly contribute to transforming existing institutions or creating new ones"*
> *– Battilana et al., (2009, p. 67)*

This is further underlined by Suddaby (2010) who describes that the agent who drives institutional change is considered to be an institutional entrepreneur. However, Battilana et al., (2009, p.68) argue that not all change agents are institutional entrepreneurs. In order to be defined as an institutional entrepreneur you must fulfill two conditions. The first condition is that you must take the initiative to drive change and the second condition is that you must participate in the implementation to pursue the transformation (Battilana et al., 2009). Besides, institutional entrepreneurs play a crucial role in today's businesses as new technologies erupt deeply rooted institutionalized assumptions (Garud et al., 2002), indicating the importance of institutional entrepreneurs for businesses to exploit the opportunities that digitalization brings. In addition, some academicians have highlighted organizational aspects as an important element in regard to change. For example, it is presented that management might have a role to play in the developments where a new management could enforce a change in the organizational structure and information flow (Cloud, 2000, in Zainuddin & Sulaiman, 2016). This showcases that institutional entrepreneurship extends beyond the individual level to also include groups, such as management.

When DiMaggio introduced the concept he criticized the neo-institutional theory where it was claimed that the theory lacks an understanding of agency (DiMaggio 1988 in Suddaby 2010, p. 14). Thus, he argued that researchers should reflect upon in which way organizations instill their institutional environment, a process that DiMaggio defined as institutional entrepreneurship (DiMaggio 1988 see Suddaby 2010, p. 15). The term institutional entrepreneurship is therefore anchored in neo-institutional theory (Messeghem & Fourquet, 2013) which is one of the dominant theories when it comes to understanding organizational behavior (Lounsbury & Yanfei Zhao, 2013). The scope of the neo-institutional theory is quite broad and draws attention to transformations within institutions (Lounsbury & Yanfei Zhao, 2013) and has its emphasis on legitimacy, rules, routines and schemes (Greenwood & Hinings, 1996).

Earlier research on institutional entrepreneurship has reintroduced agency to institutional theory and draws upon an inside-out perspective, thus contributes with an understanding of how actors can shape institutions (Battilana et al., 2009; Garud, Hardy & Maguire, 2007). For example, Munir and Phillips (2005, p. 1682) conducted a study that examines the relationship between the institutionalization of new technology and the actions of an institutional entrepreneur at the company Kodak. By conducting a discourse analysis, the researchers conclude that the institutional change that Kodak was subject to was mostly because of "the intense institutional entrepreneurship of Kodak, as it produced thousands of texts that supported a very different idea of what a camera was, who should use it and for what" (Munir & Phillips, 2005, p.1682). Furthermore, Munir and Phillips (2005, p. 1667) illuminate that organizations seek to develop discourses that suit their particular interests and advance their preferred technologies. This showcases that the technology was perhaps not the primary change factor but rather the efforts made by Kodak in producing the texts. It also highlights that it was the technology that made the organization take the first step in changing their institutional environment, albeit the efforts made to pursue change constitutes the institutional entrepreneurship.

Another study that has contributed to the body of work in institutional entrepreneurship is the work by Garud et al. (2002) which explores challenges that arise when a firm attempts to sponsor its own technology in a network technological field. Garud et al., (2002) illuminate that institutional entrepreneurship is vital when introducing new technologies to avoid tensions stemming from the environment itself. Furthermore, in the paper by Messeghem and Fourquet (2013) it is stated that the mass retail in France was subject to an institutional change when the Dutreil Law was promulgated. This opens up for the idea that the mass retail was influenced by coercive isomorphic pressure, albeit institutional entrepreneurship was used to modify the institutional environment since one specific actor had a vital part in the institutionalization process. This sort of change goes in line with the previously provided definition from Battilana et al. (2009) where institutional entrepreneurs are change agents that break the institutional status quo.

As for criticism towards institutional entrepreneurship the theory has primarily faced backlash for being over-voluntaristic, meaning that the actors who drive change are being shaped by institutional pressures which hint at the fact that the underlying theory is in essence institutional theory (Battilana et al., 2009). This issue is referred to as "paradox of embedded agency" and has been a frequently debated topic (Battilana et al., 2009; Holm 1995; Seo & Creed, 2002), where it is discussed how actors initiate change even though their norms and beliefs are determined by the

institutional system (Holm, 1995; Seo & Creed, 2002). Seo and Creed (2002) further illuminate that if an actor is exposed to multiple institutional systems the likelihood of institutional change will increase, indicating that this paradox can be avoided (Rothenberg, 2007). Dacin, Goodstein and Scott (2002) follow a similar path and argue that the institutional change might be influenced by the differentiation in groups, e.g. workforce diversity. This is further underlined by Battilana et al., (2009) who state that a higher degree of heterogeneity in organizations has an enabling role for institutional entrepreneurs. Even though there exist some criticisms against the concept, Battilana et al., (2009) argue that institutional entrepreneurship is essential in the future developments of institutional theory for the reason that it facilitates investigations of actors' degrees of influence, even though the actors might be influenced by institutional pressures.

2.3 The role of Controllers and its Development

As previously mentioned, the role of controllers has undergone a vast change. The role is argued to be highly dependent on the organizational context which means that the definition could vary (Ahrens & Chapman, 2000; Messner, 2016). This indicates that the role of controllers cannot be studied in isolation but instead it is necessary to consider the surrounding environment. Drawing on Byrne and Pierce's (2007) study in which they address various mechanisms, such as controllers' educational and career background, culture, location and personality, it becomes clear that such factors affect the role. This further verifies that the role of controllers depends on the individuals themselves and also the organizational context in which they act.

In the last couple of decades researchers have recognized that the scope of controllers has broadened (Appelbaum et al., 2017; Scapens & Jazayeri, 2003), where the boundaries are being questioned (Caglio, 2003). Over the time, controllers have improved their technical knowledge (Ahrens & Chapman, 2000) and are nowadays increasingly concerned with analyzing and interpreting information, thereby becoming more involved in value-adding tasks and strategy formation (Appelbaum et al., 2017; Graham et al., 2012; Zainuddin & Sulaiman, 2016). Additionally, the role of controllers is evolving into a type of business partner where they assist management in decision-making (Appelbaum et al., 2017; Graham et al., 2012). The business partner role comes with increased responsibility and when controllers shoulder other tasks higher up in the organization, a likely consequence is that managers will need to allocate power to controllers which could cause some implications (Windeck, Weber & Strauss, et al. 2015). This is highlighted through the following statement:

"Moreover, if management accountants are to become real business partners, managers have to hand over some power to management accountants"
– Windeck et al., 2015, p. 618

Managers will become highly affected by the role transformation and a question that remains relatively unsolved is why managers would reduce their power (Windeck et al. 2015), indicating that managers might not be as positive towards the new role of controllers. Therefore, if managers are not fully convinced and willing to make this type of "sacrifice" the development of the role of controllers could be disrupted (Windeck et al. 2015). This showcases that managers are a crucial factor that influences the role of controllers (Windeck et al. 2015).

Another quite common discussion that academians bring up concerning the new role of controllers is that revolving around the emergence of the "cross-functional" or "hybrid" role. For example, Caglio (2003) illuminates the rise of hybrid positions for controllers and explain it as a consequence of the new requirements companies have on controllers, stemming from the digital transformation. Moreover, a "hybrid" controller takes on a wider range of duties and integrates with non-accountants. This idea is further strengthened by Birnberg (2009) who argues that it is more common nowadays that controllers transgress their typical borders and interact with non-accountants to solve problems. Furthermore, ideas presented by Zainuddin and Sulaiman (2016) are running along the same line and illuminate that controllers are working more cross-functionally nowadays. This opens up for the discussion on whether or not the role of controllers can be classified in such specific terms since it has been shown that the work activities are under continuous change (Ahrens & Chapman, 2000). On the other hand, a general perception is that controlling practices can be considered as institutionalized (Scapens, 1994) characterized by having close relations with the numbers (Cokins, 2016). Caglio (2003) explains that the development of the role of controllers could find its roots in the emergence of technological systems, e.g. Enterprise Resource Planning (ERP) systems. An ERP system is an integrated information system that has the ability to "remove diversity of operations, practices and behaviors and give emphasis to consistency and uniformity across the whole organization" (Caglio, 2003, p. 126). As these systems have the ability to perform controllers' daily tasks, companies require controllers that possess expertise in strategic decision-making, corporate governance and IT. The increased importance of the digital transformation puts pressure on the skills profile of the controllers where perhaps finance or business knowledge is not enough. Instead, the toolbox of abilities needs to be broadened with the help of other fields, such as business analytics (Appelbaum et al., 2017). Along the same line, Caglio (2003) showcases that as an organization implements a new system, e.g. ERP system, the role of controllers as information providers decline which illustrates a change in the role.

Another discussion that has figured in a variety of articles is whether the profession as a controller is being outrivaled by the technology. For example, Caglio (2003) witnessed downsizing in the number of controllers at companies that have implemented various technological systems. This observation is in accordance with the pessimistic scenario presented by Carlsson-Wall and Strömsten (2018) who claim that the profession will sooner or later fade away and be replaced by technological innovations. The idea is to some extent analogous with Anastas' (1997, see Scapens & Jazayeri, 2003) argument that the number of controllers will be reduced, although the role will still be needed. Furthermore, Anastas (1997, see Scapens & Jazayeri 2003) illuminates that the systems could act as an assistant and therefore enhance the role of controllers. This is in line with the optimistic scenario presented by Carlsson-Wall and Strömsten (2018) where they propose that controllers will become trusted partners through the help of Big Data and other tools which will aid in making business decisions. This could further be strengthened by Appelbaum et al. (2017) who claim that controllers will provide more relevant and timely information by utilizing business analytic tools.

2.4 The Digital Transformation

The digital transformation is a significant enabler when it comes to institutional change and will therefore be included in the study, albeit not as an institutional entrepreneur. As presented by Jain (2001, in Garud et al., 2002), technology plays a great role in the institutional environment. The digital transformation opens up for a change where the digital tools allows for a disruption in the already set ways of working. It awakens a feeling of "adapt or die" within the companies and urges them to board the change bandwagon (Brands & Holtzblatt, 2015). Putting an emphasis on institutional change, Caglio (2003) conceptualizes IT as a sort of enabler of change that can transform organizational structures as well as social concepts. It is highlighted that IT as well as systems, e.g. ERP systems, are fundamental catalysts in the development of the role of controllers and their expertise (Caglio, 2003). However, it is also important to note the influence of people in such changes (Caglio, 2003). The technological systems could have other effects where Scapens and Jazayeri (2003) argue that they stimulate a horizontal integration and brings forth the importance of teamwork.

Some would argue that Big Data has impacted, reshaped and revolutionized the world (Zelenyuk, 2020). The changing landscape of information is driven by the development of Big Data (Almqvist, 2018) where the term is used to describe massive data sets generated through a magnitude of sources (Barton, 2016). The Big Data phenomenon will transform work practices across different sectors and bring about new occupations focusing solely on Big Data application (Osterreich & Teuteberg, 2019). The new occupations will primarily stem from a need to transform the data into usable information which, according to Warren et al. (2015), requires a sort of middle layer in which statisticians and data analysts appear. The information would then aid controllers in their work to assist management, however before the controllers are able to use Big Data they would have to understand, mine, transform and analyze the data (Warren et al., 2015). Adoption, interest and awareness of Big Data have seen a fast increase among managers as well as organizations (Madsen & Stenheim, 2016) which has allowed a movement away from historical data and towards real-time processing (Bhimani & Willcocks, 2014; Zainuddin & Sulaiman, 2016). It will change the way data is accumulated and recorded as well as how management chooses to utilize the data (Warren et al., 2015). For instance, Big Data makes it possible for managers to keep fairly broad questions in the search for interrelations and offers organizations the opportunity to perform real-time analysis of total data sets (Bhimani & Willcocks, 2014).

Advances in both Big Data and machine intelligence have resulted in increased importance for the utilization of Business Intelligence (BI) (Trieu, 2017). BI describes the process where raw data is transformed into meaningful information through the help of information systems, where the transformation is meant to reduce uncertainty in decision making (Torres, Sidorova & Jones, 2018; Trieu, 2017). The BI systems are widespread and often used in business circumstances where decisions are focused on creating value (Trieu, 2017). Through adopting analytics it is possible to add value to the organization (Gandomi & Haider, 2015; Marr, 2015), which is an important element in the role of controllers (Zainuddin & Sulaiman, 2016). It should be noted that in more recent years the discussion on BI has expanded to include Business Analytics, henceforth BA. The inclusion of BA is used to highlight the growing importance of incorporating analytics into BI systems as well as the shift from reporting-centric to analysis-centric capabilities (Torres et al.,

2018). Delen and Ram (2018) point out that BA could be viewed as an enabler for decision-making and problem-solving. This is in accordance with Wang and Wang (2015) who mention that the use of BA can enhance the work of controllers as it results in improved decision capabilities. It is also of great importance to incorporate BA in the operation as it is the only sustainable long-term competitive advantage an organization could attain (Cokins, 2016). This idea can be strengthened by one of the key findings of LaVelle, Hopkins, Lesser, Schockley and Kruschwitz (2011) where successful companies use analytics five times more compared to less successful companies. It showcases how essential it is to have BA embedded in the organization and that employees must embrace it to gain a competitive advantage. However, organizations face various challenges when adopting analytics. One of the major obstacles with analytics adoption is highlighted through the following extract:

"The leading obstacle to widespread analytics adoption is lack of understanding of how to use analytics to improve the business"
– LaVelle et al., (2011, p. 23)

This showcases that the greatest obstacles in adopting BA are managerial and cultural, hence getting the data right is not deemed as the main challenge for organizations (LaVelle, 2011). Putting an emphasis on controllers, the scope of controllers has expanded from a type of historical reporting, i.e. descriptive, towards real-time and predictive reporting (Cokins, 2016; Granlund & Lukka, 1997). The backward-looking nature of a financial statement puts information at risk of being rendered less useful, thus historical information for decision making is not as preferred as it might have been in the past (Almqvist, 2018; Appelbaum et al., 2017; Zainuddin & Sulaiman, 2016). As managers want to know information about the future and the underlying logic behind it (Cokins et al., 2016), descriptive reporting could be regarded as less appealing. This indicates that controllers have a challenging time ahead of them were trying to predict the future is a key element. In such a setting the technological capabilities of the controllers are essential in order to utilize the tools in a sufficient manner.

3. Methodology

3.1 Research Design

The ideas that have paved the way for our study can be found in the longevity of the discussions of how controllers are evolving from 'beancounters' to business partners. This feeds into our research where we want to examine the change that controllers are undergoing and what it is that drives the change through adopting the notion of institutional entrepreneurship. The theory allows us to recognize initiatives and at the same time include the interplay with other aspects, such as the digital transformation. In other words, the aim of the paper is to investigate how initiatives are played out in an organization whose intention is to develop the role of controllers and change the institutional environment.

This study follows an abductive approach which means that we use both a deductive approach, i.e. a theory testing approach, and an inductive approach, i.e. a theory constructing approach. These two approaches have been applied iteratively throughout the research process (Eriksson & Kovalainen, 2008; Collis & Hussey, 2011). The reviewed literature and theories that touch upon

the areas we aim to investigate, e.g. the role of controllers and institutional entrepreneurship, are applied to our empirical observations. For example, by drawing on institutional entrepreneurship we intended to detect institutional entrepreneurs and thus examine more in detail how initiatives play out. This accounts for the deductive character of the study. In addition, as the empirical findings are categorized we strove towards developing theory based on the observations. This is done through combining the empirical findings with existing theories in order to extend the body of work in institutional entrepreneurship and developments of the role of controllers. This procedure possess characteristics of an inductive approach (Collis & Hussey, 2011).

Conducting a field study was deemed as suitable as it is focused around exploring the natural setting. Additionally, as we were concerned with the participants' points of view regarding behavior, values and beliefs in relation to the change that controllers are undergoing, a field study with a qualitative substance was favorable (Bryman & Bell, 2011). The nature of the chosen research approach is interwoven with the need to capture the context and thus obtain a deeper understanding of initiatives and how the digital transformation influences the role of controllers. Since we wanted to capture the full picture, conducting research that possesses characteristics of a qualitative method was, again, suitable. A way for us to perform our research and contribute with insights on how initiatives play out was to perform the research at an organization that is subject to the digital transformation and where a great number of initiatives towards transforming the role of controllers can be found. This would allow us to investigate the phenomenon at a closer distance and thereby shed light on how initiatives play out. Volvo Car Corporation (Volvo Cars) has been chosen as the field study company since it is believed to fit with the criterion mentioned above.

To get an idea of previous discussions and findings related to the changing role of controllers, an extensive literature review was conducted. This laid the foundation for our frame of references which was built with the aim to present important concepts deemed necessary to comprehend the empirical findings. Much of the attention was focused around the concept institutional entrepreneurship since it is part of the foundation for the paper. The frame of references was then extended to include the previous literary experiences surrounding the work of controllers but also the influence and connection to the digital transformation. Subsequently, two unstructured interviews alongside continuous meetings with our supervisor at Volvo Cars were conducted, defined as pre-study in this paper. During the meetings our supervisor provided us with documents from a survey that was made at the organization in 2018. Therefore, the pre-study can be viewed as a fusion of both secondary and primary data. The conceptual framework and the pre-study laid the foundation for the ten subsequent semi-structured interviews that were carried out afterwards, indicating that the data collection for the study itself was of the primary kind (Collis & Hussey, 2013). Having gathered the majority of our information from primary sources meant that the gathered data was up to date and processed. It also indicated that we got access to relatively untainted information which was then only subject to our perception.

3.1.1 Sociological Standpoint

To be able to contribute with insightful knowledge in relation to our research question the study will in broad terms draw upon ideas from social constructivism. This means that we shoulder the viewpoints of how the world is constructed through a social constructivist perspective. Social

constructivism is a position within ontology which argues that social entities should be considered as social constructions that are assembled from the perception of the actions of social actors (Bryman & Bell, 2011). We follow the standpoint presented by Bryman and Bell (2011), that social phenomena are produced through social interaction but are at the same time in a constant state of change. In order to help understand the natural and social world people construct categories which in a sense are social products that are formed through interactions (Bryman & Bell, 2011). For our research this means that the role of controllers and the development are constructed through social actions and people's perceptions. Though like many other concepts, there is a sort of reference point when it comes to what a controller is and what they do, however it is also a process that is continuously taking form (Bryman & Bell, 2011).

3.3 Research Process

3.3.1 Building the Frame of References

As qualitative data should be understood within its context it is of great importance to contextualize (Collis & Hussey, 2013). Thus, information about the context, such as social and economic influences are necessary to have in consideration (Collis & Hussey, 2013) in order to interpret the answers as truthfully as possible. Therefore, to gain knowledge and insight on the subject and obtain an understanding of previous research, a fundamental literature review was conducted at an early stage of the research period. Initially the search was quite broad simply because the direction was not narrow enough however, once we had a clearer focus of what to examine the literature search became narrower. The main areas of the search were institutional entrepreneurship, the role of controllers including its development and the digital transformation. This was then set out to be the foundation for the conceptual framework where the majority of gathered papers were collected from electronic databases, in particular from the Gothenburg University Library and Google Scholar. Several suitable keywords that encompassed the subject and chosen theory were used during the literature review. The keywords were:

Controllers, Management Accountants/Accounting, Institutional Theory, Institutional Environment, Institutional Entrepreneur/Entrepreneurship, Digital Transformation, Big Data and Business Intelligence/Analytics.

By conducting a fundamental literature review, we became aware of historical developments and research within the chosen field which is an important element in research (Bryman & Bell, 2011). To ensure that the chosen literature held high standards almost every paper was peer-reviewed and/or cited multiple times, indicating a relevant and quality checked source (Bryman & Bell, 2011). Once the interviews were performed, the conceptual framework was revisited and extended in segments that were deemed necessary. This allowed for a more iterative way of working where theory is developed through observations and general patterns can be identified (Collis & Hussey, 2013).

3.3.2 Pre-study

As we did not have previous experience in the controlling profession we felt a need to perform a pre-study. The pre-study was meant to give general information on the controlling profession as well as provide notions of interesting angels. Additionally, it was used as a way to get insights into

the situation and basic information regarding the digital advancements made by Volvo Cars and the developments of the role of controllers. Partaking in the pre-study were two employees at Volvo Cars which were recommended by the supervisor at Volvo Cars since they both have close relations with the digital transformation and the controlling profession. Additionally, the information provided by our supervisor regarding the current situation has been included in the pre-study since it is deemed as a basis for research.

The structure of the interviews in the pre-study resembled that of unstructured interviews in the sense that there were only a few questions asked (Bryman & Bell, 2011). A specific topic was set at the beginning of the interview in order to determine the general direction of the conversation. Unstructured interviews allow for such a set up where the respondent get much freedom but still allows the interviewer the opportunity to ask follow-up questions (Bryman & Bell, 2011). Using such an approach was beneficial since the participants drove the conversation and thereby shed light on potential problem areas. Neither of the interviews were recorded in order to make the circumstances as relaxed as possible. Notes were taken during the interviews to secure that important and interesting aspects were remembered and available for further discussion once the meeting was over. One of the participants had a PowerPoint presentation which was later received and has been used as another source of discussion, see Graph 1 in section 4.3.1 The Role of Controllers.

3.3.3 Collection of Primary Data

Adopting a method with a qualitative substance allowed us to gain a deeper understanding of how initiatives play out when transforming the role of controllers where several semi-structured interviews were conducted. The qualitative nature of the chosen research method in combination with sources of the primary kind allows for a greater understanding (Collis & Hussey, 2013). In addition, data collected through interviews enables insights into what the respondents do, think or feel regarding a specific topic (Collis & Hussey, 2013). In this context, semi-structured interviews were preferred since it allows for new questions to form as the interview progresses, which showcases the flexibility of the chosen method (Bryman & Bell, 2011). Prior to the interviews several questions were prepared and gathered in an interview guide (Bryman & Bell, 2011), see section 3.3.3.3 Interview Guide. Prior to the interviews it was decided that the respondents were not to be mentioned by name or specific title which arguably could increase the possibility of having respondents answer the questions in a truthful manner. The respondents were provided with the overall topic of the thesis, either in mail form or in the form of a short introduction at the outset of the interview. The questions asked during the interviews did to some extent follow a specific order, albeit the interview guide was not followed in an overly strict manner. For instance, if one question had already been addressed it was not brought up again, given that the respondent had answered in a sufficient manner.

Because of the circumstances with COVID-19, all interviews, except for the two in the pre-study and two additional ones, were conducted via voice calls or video calls through the communications platform Microsoft Teams. The respondents decided themselves if they wanted to conduct the interview through video call or voice call since we aimed to make the respondent as comfortable as possible. As for the time frame the interviews varied slightly, where some lasted around 25

minutes and others lasted for about 45 minutes. After having asked for permission, the interviews were tape-recorded and once done they were transcribed in order to reflect the retelling as accurately as possible (Bryman & Bell, 2011). Transcribing the interviews enables a more detailed analysis based on the respondents' own words (Bryman & Bell, 2011). Depending on which language the respondent preferred, the interviews were conducted in either English or Swedish as we wanted to avoid any language barrier which could inhibit the flow of the interview. Allowing the interviews to be performed in Swedish meant that we had to translate the material in the empirical section to English. This sort of approach has received some criticism based on the cultural aspects embedded in language and the fact that translations also mean that we must interpret the data before the analysis can take place (Xian, 2008). We are aware of these issues but believe that the upside of having the respondents answer in an unhindered way is of greater importance.

3.3.3.1 Selection of Company

Quite early on we decided that a large company would be preferable over a small company. This stems from the perception that a larger company would have more resources to allocate towards a change process and make investments into digital transformation. This is in line with ideas presented by Brands and Holtzblatt (2015) who argue that the Big Data phenomenon is outside the scope of smaller companies due to their lack of resources. Volvo Cars is considered to reach the criterion of being a large company since they had approximately 42.000 employees and an operating profit of 14,3 billion SEK in 2019 (Volvo Cars, 2020a). It was also deemed preferable to conduct the study at a company operating in an industrial industry that has existed for a long period of time since this would perhaps mean that rules and routines are deeply engraved in the organization. Taking into consideration that Volvo Cars was founded in 1927 (Volvo Cars, 2020a) and operates in an industrial industry it was perceived to be an ideal choice of company. Besides, an older company might be more prone to having 'their way of doing' and is therefore often institutionalized. Thus, it would be interesting for us to perform our research in such a setting since we aimed to explore initiatives taken to break the institutional environment surrounding the role of controllers. In addition, Volvo Cars is exposed to technological shifts stemming from the digital transformation. For instance, they are continuously in the process of developing and implementing technological innovations in their business. Considering that we decided to include a connection to the digital transformation, the company is much suited for our study. In regard to the departments chosen it was deemed interesting to focus on the finance function since it has been highlighted in research as being subject to influences stemming from the digital transformation (Bhimani & Willcocks, 2014). The relationship between technological systems and controllers has also been described as increasingly intertwined where the controllers cannot perform their tasks without the use of the systems, especially in larger organizations (Newman & Westrup, 2005).

The initial reaction from Volvo Cars was positive and they welcomed the idea to perform a study focused around the development of the role of controllers.

3.3.3.2 Selection of Respondents

In total, there were ten respondents and the majority of them were chosen together with our supervisor at Volvo Cars. Others were selected based on "snowball sampling" which in essence

means that they were recommended by other respondents (Collis & Hussey, 2013). By using Volvo Cars' company portal that provides information and role description of every employee we could ensure that the respondents were relevant for the study. To narrow the scope of our study the chosen respondents had a connection to the controlling profession and digital transformation at Volvo Cars. In addition, we aimed to include controllers at various managerial levels and units in order to obtain information from different perspectives. Another criterium of the sample was to include people with different work experiences and length of employment at Volvo Cars, intending to grasp upon how institutionalized the profession was. All of the respondents were working as a type of controller, however on different levels which can be seen in the table below:

Respondent	Title	Years at Volvo Cars	Date & Duration	Interview style
A1	Top Manager	10+	2020.04.21 25 min	Physical interview at HQ, Face to Face
A2	Top Manager	10+	2020.04.21 25 min	Physical interview at HQ, Face to Face
B1	Manager	0-5	2020.03.27 45 min	Microsoft Teams Voice Call
B2	Manager	0-5	2020.03.30 30 min	Microsoft Teams Voice Call
B3	Manager	10+	2020.04.03 35 min	Microsoft Teams Voice Call
B4	Manager	10+	2020.04.03 45 min	Microsoft Teams Voice Call
B5	Manager	10+	2020.04.16 35 min	Microsoft Teams Voice Call
C1	Team Leader	0-5	2020.04.07 30 min	Microsoft Teams Video Call
C2	Team Leader	0-5	2020.04.07 30 min	Microsoft Teams Voice Call
C3	Team Leader	10+	2020.04.22 45 min	Microsoft Teams Video Call

3.3.3.3 Interview Guide

Two types of interview guides were prepared prior to the interviews, one in Swedish and one in English. The English version can be found in Appendix A. The majority of all questions had an open-ended substance which was favorable in the study because it opened up for more detailed answers and discussions instead of a simple 'yes or no' (Collis & Hussey, 2013). As mentioned earlier, the controlling profession should not be studied in isolation but rather be understood within its context. Therefore, the first introducing questions were focused around gathering information about the respondent, such as current position, how long they had been employed at Volvo Cars and how they defined controllers. The purpose of asking these types of questions was to get an understanding of the defining concepts from the respondents' point of view, thereby avoiding any misinterpretation of answers (Bryman & Bell, 2011). The following questions were based on the literature review and interesting insights that were brought up during the pre-study. Additionally, as we aimed to investigate how initiatives are played out, part of the questions was outlined in a manner that concerned the respondent's action taken to develop the role of controllers. The respondents also got questions that were directed towards identifying important actors and how they interact with the initiatives. The last few questions asked can be viewed as "round-up" questions where the aim was to encourage the respondent to elaborate on the future role of controllers and recommendations for improvements. By having round-up questions, the respondents will enlighten important aspects and put forward his or her personal opinion (Bryman & Bell, 2011). Prior to the interviews the interview guide was sent to our supervisor at the University of Gothenburg, School of Business, Economics and Law to get feedback and comments and thereby amend the guide where deemed necessary. This was done because we aimed to extract as much as possible from the interviews by avoiding any leading or closed questions.

3.3.4 Analysis of Data

Once all interviews were transcribed, the gathered information was compiled and presented in the empirical section. In the empirical section the initiatives were identified and to ensure that relevant information was not neglected we decided to identify the initiatives together. This was because we aimed to reduce the risk of our personal views influencing the analysis in a biased manner. Afterward, the initial stage of the analysis process began where the first step was to categorize initiatives presented in the empirical section. We recognized several patterns and initiatives that were scattered throughout. During the analysis we drew upon the conceptual framework in order to understand how initiatives emerge and how they get a foothold. The context of the respondents' background was taken into consideration and put in relation to their answers. This is of importance as qualitative data should be understood within a context (Collis & Hussey, 2013). The initiatives were categorized based on their characteristics and the approach taken where one approach was Disruptive intervention and the other was Competence preparation. In the analysis process we also identified significant enablers that pushed the development forward, however the principal objective was to identify initiatives and how they played out.

3.4 Limitations

As previously mentioned, the majority of the interviews were conducted through voice calls. A limitation with this type of method is that we did not get to see the respondents' facial expressions

and body language, which is of importance as it helps to better connect to the spoken words (Bryman & Bell, 2011). Additionally, pauses that the respondents took during the interview sessions were not noticed which sometimes resulted in the respondent and interviewer talking at the same time. On such rare occasions it was important that the interviewer did not push the agenda forward but rather let the respondent continue. During the pre-study it was brought up that Volvo Cars would undergo a reconstruction, with the aim to become more efficient and thereby reduce the number of positions. As this could be viewed as a sensitive topic to discuss and since it was not made public at the time of the first two interviews, direct questions about the reconstruction were in great lengths avoided. Once the announcement was made public we got the approval to specify questions in relation to the reconstruction and address the topic more freely in the subsequent eight interviews.

3.5 Research Quality

The performed research was evaluated throughout using the criterion of trustworthiness, which includes: *credibility, transferability, dependability* and *confirmability*. All of which parallels to the criterion used in quantitative research (Bryman & Bell, 2011). The reason for not simply applying quantitative methods for evaluating research quality, i.e. reliability and validity, was because it would not be possible given the way that we see the world. Social constructivism allows for several views of the world and argues that the world is built based on social constructions, i.e. there are several worlds (Bryman & Bell, 2011).

During our research process we had a supervisor at Volvo Cars who could aid in confirming information that was provided to us. This is known as respondent validation where the work of the researchers is examined by "members of the social world " (Bryman & Bell, 2011, p.396) as a way to ensure *credibility*. We also decided to perform a pre-study which included conversations with our supervisor at Volvo Cars and two additional interviews. The pre-study participants were then included in the study as respondents which gave an opportunity to confirm previous statements to validate what was previously stated. In order to heighten the *transferability*, we made a conscious decision to provide rich descriptions of the settings in which the research was performed, see section 4.3 Environment of Controllers. Through providing information regarding the settings we improve the opportunities to learn from our study.

Throughout the research process we also decided to adhere to ideas presented by Lincoln and Guba, i.e. that qualitative researchers should consider taking on a sort of auditing approach (Bryman & Bell, 2011) and achieve *dependability*. We kept close records of gathered material such as field notes, problem formulation, interview transcripts et cetera. Alongside the research process we were in continuous contact with our supervisor at the school and got feedback on the developments of our paper. Throughout the research process our work was also subject to evaluation since we had seminars together with our peers, our supervisor and our seminar leader. In addition, we believed that it was important to recognize that full objectivity in qualitative research is close to impossible. Instead it is important that researchers do not allow personal values to be inserted in their work (Bryman & Bell, 2011, p. 398). As we strived to achieve *confirmability*, we had brainstorming sessions where we discussed our propositions and our values. This sort of

brainstorming was then done throughout the research process and thereby made us more aware of our values which lessened the risk of our values being inserted into the research.

4. Empirical Section

4.1 Field Study Company

The field study was made at the automobile company Volvo Cars which has Scandinavian roots, albeit in 2010 the company was acquired by Zhejiang Geely Holding from Ford Motor Co. (Volvo Cars, 2010). The headquarters are still set in Sweden, Torslanda, and the CEO today is Håkan Samuelsson. Initially, Geely allowed Volvo Cars to operate autonomously but in recent years the two companies have increased cooperation (Gardner, 2019). Volvo Cars is present in the Americas, Europe and the Asia Pacific region and serves customers across the world (Bloomberg, 2020; Volvo Cars, 2020b), which indicates that it is a large multinational company.

4.2 Debut of Initiatives

The pre-study had a specific focus on highlighting efforts and initiatives to transform the organization and especially the role of controllers.

During the pre-study we were informed that Volvo Cars had conducted a survey (henceforth Survey 2018) which highlighted what controllers spent their time on. The Survey 2018 illuminated that too much of the controllers' time was spent on reporting and analyzing and not enough time was spent on contributing with insight, influence and impact. The next stage in Volvo Cars journey was "Controlling 3.0" where the focus is to bring digitization and analytics to the next level. At the time of writing the organization has recently initiated the change which will transform the finance function. The organization has previously had a partition of Financial Controllers and Business Controllers. The former focused on reports and analysis while the latter focused on value-adding and strategic activities. Through Controlling 3.0 the organization will transform and instead have one department called Business Finance. Business Finance will be working closely with Digital Finance which is described as having an enabling role for Business Finance. The Digital Finance department has primary concerns that are closely tied to data, business intelligence and running analytics functions. Respondent B1 highlights additional initiatives that Volvo Cars has taken to transform the role of controllers where one such initiative is the BI Academy that was set up to aid controllers in their digital work. Additionally, we were provided with material that describes controllers' journey towards becoming business partners, see Graph 1. Becoming business partners is described to be the strive for controllers, albeit respondent B1 pinpoints that the controllers are currently at the service provider stage. This further underlines the fact that there is still a large transformation to come where initiatives are imperative.

In sum, the pre-study highlights the journey up until today where some major initiatives have been taken and some are currently ongoing, e.g. Controlling 3.0 and the BI Academy. Additionally, we are aware that when conducting our study the organization has some ongoing processes which will not be completed in the upcoming months.

4.3 Environment of Controllers
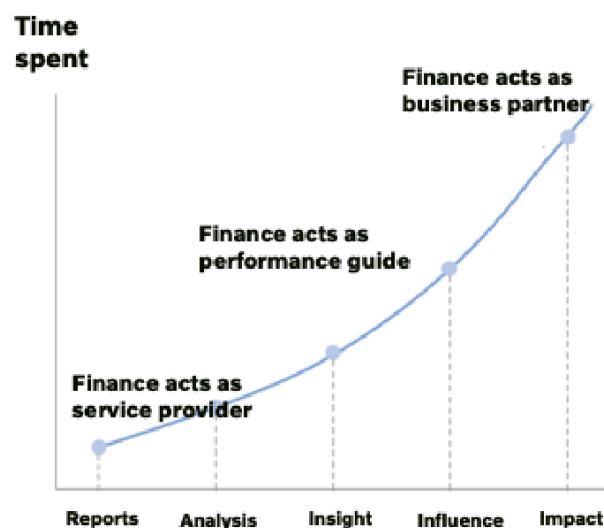### 4.3.1 The Role of Controllers

The general definition of a controller is analogous between the respondents were ties between controllers and the financial perspective are pinpointed by many of the respondents. For example, B3 highlights that the role is focused on bringing a financial perspective where controllers should interact with the organization in order to find the right approach in steering and creating value. B4 expresses similar ideas regarding the role of controllers:

"An important aspect for me as a controller is to recognize that I have one leg in the operations but also that I will always have the other leg in finance"
– B4

In addition, B3 as well as B4 express that controllers bring a holistic perspective and thereby contribute with another point of view. This is described as something which aids in decision making, both at a functional level but also at an organizational level.

When presenting Graph 1, most of the respondents express that controllers act somewhere in between "finance acts as service provider" and "finance acts as performance guide". Acting as a service provider means to provide the management with reports and analysis whilst acting as a business partner means to influence and help the management with decision-making. Even though there is a consensus between the respondents' opinions on where controllers are today, respondent B2 and B3 point out that it varies between different controllers. For example, a handful of controllers can already be viewed as "business partners", while others are in the left-hand corner and therefore act as service providers. Important to mention is that respondent B2 and B3 highlight that controllers are moving towards becoming business partners, albeit it is a process that takes time.

Graph 1
Retrieved during Pre-Study from Volvo Cars: February 2020

4.3.2 Development of the Role of Controller

Throughout the interviews many of the respondents highlight that there have been developments in the role of controllers, but it is still quite noticeable that they have not come as far as they would have liked. During the Ford-era controllers were viewed as 'beancounters', however when Zhejiang Geely Holding acquired Volvo Cars the role of controllers changed where they now have closer ties to the operations in a large-scale manner. The closer connection could stem from some initiatives that played out right after the acquisition. For example, the first step after the acquisition was the "Separation and build-up of in-house capabilities" which ran from 2010 up until 2013. Moreover, it included the separation from Ford and had a strong internal focus on investment control. The next stage in the journey ran from 2013 till 2017 and was named "One Finance". In this stage the spotlight was on acquisitions and joint ventures (JVs) and market earnings were highlighted as especially important. Furthermore, B5 points out that the digital transformation has affected the role of controllers and pinpoints that it has, for example, fostered increased collaboration. In addition, when Volvo Cars became Chinese-owned, a stronger partnership was necessary to exploit synergies. Respondent B2, B3 and B5 believe that the collaboration between departments has increased over the past years.

Respondent C2 accentuates the development of the role and states that controllers are more business-oriented and strive towards becoming business partners, albeit they are not there yet. In this transformation there is a resistance since many of the controllers have been at Volvo Cars for a long time and prefer to follow their already set routines, indicating that the role is institutionalized. B5 elaborates on the idea and declares that being an industrial organization makes them very slow to adapt to the digital tools, which inhibit the development of the role of controllers at Volvo Cars. However, to break the institutional environment other types of controllers are required. Respondent B2 and B5 accentuate that people with different expertise are needed to make a good group, indicating that it is of importance to diversify the type of controllers. This showcases that it is not only the role of controllers that is changing, thus it is also the people who are controllers that are changing. Furthermore, this aspect is quite apparent at Volvo Cars as several of the respondents who are controllers have different work backgrounds. In addition, A1 expresses that there might be a whole new competence for controllers lurking around the corner where a symbiosis of controllers and data analyst is the new reality.

4.3.3 The Digital Transformation

Some of the respondents (A1, B1, B2, C1, C2) express that the digital transformation and the pressure that it brings, in part, stems from the outside environment. For example, C1 explains that it has been the natural progression in society to move towards a digitalized world and that it makes sense for the organization to adapt. Both B3 and C1 express that the transformation is something that is almost forced upon organizations which strengthens the idea that it has its roots in the outside environment where technical changes have a spillover effect on organizations. Furthermore, B3 expresses that the incorporation of tools that the digital transformation awoke at the organization has had an impact on the role of controllers. Additionally, C2 expresses that when data becomes fully available the controllers have to work proactively. A more proactive work approach includes a greater focus on examining trends and what they might come to impact in the future, i.e. a sort of predictive analysis. By doing so the controllers could attempt to mitigate or

find actions in the present. The controllers are not owning and providing data and analysis, rather they are the ones who have to come up with solutions or alternative suggestions.

In the digital transformation journey, B4 pinpoints that the controllers shoulder a sort of ambassador role to drive change. Furthermore, B2 and B3 highlight that there is a greater system focus for controllers where they need to have an active interest in becoming digital. Besides, B1 and B5 express that a greater system focus is hindered by the fact that some of the systems are not sufficient enough, meaning that there are manual tasks inherent in the work. For example, the organization has a few systems that are perceived as outdated which complicates many of the tasks and creates more difficult work paths than necessary. Another attribute that hinders the transformation journey is pointed out by C3 who states that the local solutions are complicating for cooperation.

In terms of which type of analysis is performed, A2 highlights that digital tools have created more efficiency than ever before, both in data gathering and in the way that information is processed. For instance, B3 expresses that the tools have opened the possibility for controllers to go further in their analysis which has allowed for a greater understanding of the operations. This is also accentuated by A1 who expresses that numbers are mere information, in order to gain value the controllers have to go beyond. Controllers have to see what is hidden behind the numbers and examine the information through another set of glasses. In accordance with B3, A1 highlights that such an approach has been made possible through the incorporation of tools. Additionally, there is a fairly widespread consensus on what type of analysis is made where the majority of the respondents state that the controllers perform descriptive reporting. In addition, B2 expresses that the tools enable for other sorts of analysis but that getting there would be a challenge since the systems would have to be able to make greater connections through the data.

4.3.4 Survey 2018
In regard to Survey 2018, respondent C3 expresses that the underlying idea was to examine possible actions to develop the controlling department and thereby meet the digital tomorrow through new business models. Furthermore, B2 and C2 highlight that the Survey 2018 showcased that remarkably much time was spent on validating and collecting data, while slightly less time was spent on driving decisions and influence. Besides, C2 expresses that A1 was the primary initiator of Survey 2018 stemming from the fact that A1 wants to drive change. Additionally, A1 highlights that it came naturally to perform the survey because the tools for controllers to become influencing were available. The Survey 2018 confirmed A1's suspicions that too much time was spent on analysis. Thus, it became obvious that something had to be done. To address this dilemma A1 exemplifies Controlling 3.0 as an initiative to disrupt the institutional environment and the set ways of working. Controlling 3.0 will be further elaborated on in section 4.4.2.

Respondent C3 points out that the Survey 2018 created an awareness, albeit the respondent had other hopes of what the survey could lead to. For example, C3 expresses that there was a wish to further the analysis in Survey 2018 to examine different functions in depth. This could eventually clarify how to step forward to get the employees to work in the desired way, i.e. in a value-adding way. It is expressed that the competencies of the employees could have been an interesting angle

to examine and thereby see how big of a step is necessary. Examples of steps are expressed by C3 who states that the organization could attempt to start rotating the employees. Rotating employees would mean to replace one person with another who has the right competence or at least close to the right competence. Additionally, it is highlighted that this type of initiatives did not happen. Reasons as to why the initiative that C3 expressed as hopes did not happen could be found in the fact that there were different underlying ideas with the Survey 2018. While C3 had other plans, the management saw it as a way to get a clear picture of what the controllers spend their time on and utilize the results as motivation for change. This further accentuates that the managerial level has a role to play in the initiatives launched.

4.4 Change Initiatives

4.4.1 Educational Programs & Steering Initiatives

A great deal of the respondents express several change initiates that have been put in place to transform the role of controllers where one of them is the educational programs. Respondent B1 describes that to transform the organization to work in a digitalized way and initiate change there was a specific strategy in place. The strategy included to build a good data foundation, use the right tools, prepare the organization to support areas undergoing change as well as influence people's attitudes towards the tools. It is further expressed that the most difficult part of the strategy was to change the established ways of thinking.

The strategy included the launch of BI Academy where the majority of the respondents identified that the driving forces behind the initiative were both A1 and B1. In particular, A1, B1, B2 and B3 point out that B1 was a champion for the BI Academy who both drove and implemented the initiative. B1 expresses that working in excel, building charts and creating PowerPoint presentations were familiar and regarded as the old way of doing things. When the organization started adopting new tools like Power BI, which aids in creating valuable insights by computing and connecting reports, there was a necessity to address the fact that not many knew how to use the tools properly. Once management noted the possibilities associated with the capabilities of Power BI, respondent B1 states that there was a noticeable shift where the management pressured for a different work approach, see statement below:

" [...] and then at one point when management saw he capability of what Power BI could do, they decided to say 'I don't want to see excel reports anymore, I want you all to provide me Power BI'"
– B1, 2020

This further underlines the fact that a demand was set at the managerial level to use Power BI. In addition, both A1 and C1 expresses that the pressure put on using digital tools extends beyond simply using them, it also puts pressure on the digital capabilities of controllers. This shift came with the challenge of how to get the teams to learn the tool quickly enough to meet the requirements and at the same time get the readers to understand the reports. Out of this B1 explains that the initiative BI Academy was introduced with the objective to develop the employees' capabilities regarding the fundamentals of how to use the already available tools. At first the BI Academy was intended for the financial department, however as more employees requested access the Academy opened for the entire organization. The BI Academy aids in teaching

the employees how to build standardized reports and how to incorporate complexities. In regard to this, B5 states that the BI Academy has had an impact and improved competence when it comes to the usage of tools, such as Power BI.

What the BI Academy offers is an opportunity to attend classroom training with instructors, online tutorials and drop-in sessions at work. Through the training the employees can access templates and B1 highlights that the initiative has built a community of members. Even though the training improves the technical capabilities, A2 expresses that it is important to recognize that there has to be a sort of exchange in regard to the work in Power BI. The produced reports need to have a counterpart who utilizes them which addresses the issue of having an excessive amount of reports. Furthermore, A2 expresses that BI Academy in itself is a valuable initiative in the sense that it drives efficiency and transparency since data becomes accessible, however, more is needed in order for controllers to contribute with great insight. For instance, A2 expresses that it is imperative to have controllers working in the field and understand the operation.

Another initiative that A1, A2, B1 and C1 identify is the Performance Steering. In this C1 highlights that A1 has had an influential role and A1 describes the initiative as an adjustment of the steering model. In this adjustment A1 explains that there are three parts, the first one being to decentralize the steering to let the functions and operational directors take on more responsibility. The second part is to lessen the steering based on plans and break the pattern of making new plans that have their foundation in the old. Respondent A1 explains that having such a pattern makes it easy to blame inconsistencies on the reality instead of the plan which is something the organization breaks through the second part of Performance Steering. The third part is to increase transparency which is closely related to decentralizing the organization. In order to decentralize the steering model the employees need to know what happens in the organization which is achieved through transparency. To achieve transparency A1 highlights that the digital side is imperative. Respondent C1 describes that when the respondent entered the organization, A1 was pushing for the utilization of both Power BI and other communicative tools as part of the Performance Steering journey. Additionally, B2 highlights the efforts made in Performance Steering and describes that not everyone has a positive attitude towards the changes. There is a type of resistance towards working with moving targets and transparency instead of rigid budgets.

Respondent A1 exemplifies an action that was made in the Performance Steering which began with identifying cost centers. It quickly dawned that there was an excessive amount of cost centers and that it was not sustainable to have such a vast amount. This spurred the idea that it was necessary to cut some of them. Efforts were made during a five-year period where the organization tried to identify what could be cut and what people used in their analysis. When respondent A1 noted that there was little change, Performance Steering became involved. In this A1 expresses that the idea was brought up to initiate a sprint where 50 percent of all the available cost centers were cut. The cost centers that were re-opened were the ones that people asked for, in that way the organization could identify what was used and what was not. In the end, there was a limited amount of people who asked for a cost center to be re-opened. Respondent A1 also highlights that the results were deemed successful. The sprint approach showcases another way of thinking and another way of addressing issues that can be achieved by exposing people to different contexts, i.e. through Performance Steering.

4.4.2 Controlling 3.0

As mentioned in section 4.2 Debut of Initiatives, Volvo Cars is undergoing a reconstruction, defined as Controlling 3.0. Controlling 3.0 entails a fusion between Financial Controllers and Business Controllers to represent one department: Business Finance. Additionally, Business Finance is combined with Digital Finance which acts as a type of enabler for the financial department since they focus on pushing digital development further. As Controlling 3.0 is happening during spring 2020 it is difficult to analyze the final outcome. However, all of the respondents appear to be optimistic towards Controlling 3.0 and understand the underlying objectives. For example, C2 states that Controlling 3.0 will foster efficiency as the controllers will become more business oriented. The business finance will result in the fact that everyone drives the same agenda which C2 expresses as crucial for the efficiency in the organization.

The reconstruction includes a reduction of 25 percent of the positions for the financial department. This means that the department will have to either cut down on 25 percent of what they are doing or the controllers need to become efficient enough to shoulder the work by adopting a digital way of working. The general perception is that the respondents view the change as the natural progression where it is highlighted that the large reduction did not come as a surprise. In addition, there were no explicit statements that were negative in relation to the large reduction of employees. Respondent A1 states that digital tools could aid in the process by automating certain tasks. In addition, A1 expresses that an organization that has been quite static over a long period creates work for itself where excessively many reports are produced. This thought is also shared with respondent B2 and C2 who states that there are almost too many controllers which unfortunately results in that they create additional work for each other. Respondent C2 further underlines this by stating that "too many cooks spoil the broth". Thus, fewer controllers will lead to more efficiency. In addition, B5 points out that the respondent itself has been involved in Controlling 3.0 and describes that the reduction will lead to people allocating their time in a more efficient way instead of clinging to things that belong to the history.

During the interviews, a handful of respondents highlight that there were several other objectives behind the reconstruction. One of the objectives is expressed by A1 who states that the organization needed to prepare for the changes that the digital transformation entails. For example, the digital transformation changes the consumption patterns of the customers which then affects the organization. The respondent further describes that Controlling 3.0 will prepare the employees to address the digital tools better in their work and that reports as well as analysis will become automatized. This is analogous with ideas presented by C1 who states that digital tools require fewer people which in essence drove the reconstruction. The underlying objectives are further illustrated in the following extract:

"There are two reasons, partly because we need to force the organization to think how we should work differently because now we are not that many. [...]The other reason is that we need to prepare our structure so that once we become more digital it will be more easy to connect to it [...].
Sometimes you need to jump before you know exactly how far it is to the water"
– A1, 2020

Respondent A1 explains that Controlling 3.0 can be viewed as a type of initiative aiming towards controllers becoming more value-adding. In addition, B4 and C3 point out that Volvo Cars needs to be better at working with their processes, systems and employees' competences. Hence, Controlling 3.0 pays attention to developing areas of expertise and organizational systems which is one step in that direction.

Why Controlling 3.0 is happening now and not earlier is partly because of the new management. Respondent A1, A2 and C3 point out that three years ago there was a change in management and that the new management has driven Controlling 3.0. The previous management had another mindset and priorities compared to the new management. However, respondent A2 believes that this reconstruction could have been put in motion earlier when the new management first came into place. Besides, A2 continues by stating that the organization can, at times, be quite slow-moving which leads to the fact that the reconstructing was initiated only when it became inevitable. Respondent A1, who is highly involved with Controlling 3.0, expresses that it became necessary to adapt the organization to the prevailing digital circumstances, as the technology at this point in time was deemed as mature enough. The controllers have come as far as they can and now it is up to the digital transformation to open up for further developments.

In sum, all respondents are optimistic towards Controlling 3.0 where their opinions are consistent. The objectives are to foster efficiency and break the institutional way of doing things. It is also clarified that the digital transformation and the "new" management are the two major elements that have driven Controlling 3.0. In addition, it becomes clear that the respondents share a mindset where it is recognized that a change is needed and that the change needs to happen now.

4.4.3 Soft Initiatives
Volvo Cars organizational culture is described by respondent B3 and C2 to be very positive to change where the organization encourages people to question their way of working. In this, respondent C2 highlights that many managers are humble and encourages people to drive change, meaning that the journey is more important than the result and that it is acceptable to fail. The managers' attitude as well as the culture is something C2 is proud to be a part of. B3 stresses the importance of taking risks and thereby drive change through the following statement:

"I believe that as a leader you need to dare, dare to fail. I believe that if we will accomplish to drive this transformation we need to cut off some things. If we continue to work as we always have done, with the same reports, same structure, same meeting or same approach, we will not drive change"
– B3, 2020

Respondents B3 and B4 further express that as a leader it is important to push the employees and encourage them to think differently and take on other perspectives. A leader should ask other questions in order to get new insights. For example, B3 expresses that the respondent has redirected the aim of the questions asked where the underlying factors explaining the results are in

focus. The need for new questions to be asked is also expressed by B4 who states that if not, then the organization will continue to provide the same answers.

Another view of the organizational culture is expressed by C3 who states that the organization is not very open to change and that there is a large gap between strategic ideas and the realization of them. Respondent C3 further highlights that the task of setting priorities for the organization is part of management's responsibilities. Thus, the responsibility for the developments lies on the top management since the matters are highly related to strategic competence development. This constitutes a challenge for management, albeit the new CFO of Volvo Cars is driving the forward-looking competence-questions in a strict manner and highlights the importance of value creation. Respondent C3 further expresses that the new CFO has had a positive effect on other managers to think differently. Moreover, by putting an emphasis on value creation, the CFO steers the controllers to strive for long term profitability, creation of equity as well as internal investment ability. In more explicit terms, various models such as the EVA (Economic Value Added) are utilized in order to recognize what it is that creates value. In this type of work, the CFO is pinpointed as a driver who targets the identification of value and how to further the analysis to improve the profitability and transform observations into plans. Further confirmation that the CFO, as well as A1, are change initiators who prioritize the transformation of the financial department is provided by B1 who states:

"I think form the Performance Steering world, from the changes of what finance is doing, from our new CFO and A1, changing finance has always been on the agenda. It has been the agenda for quite some time now. So they are driving this because there is a need now from all our partners, from all the other functions, looking towards finance today to be the business partner that they have been waiting for, so the buy-in at the top management level is most definitely there.
– B1, 2020

Additionally, B1 stresses the importance of buy-in and accentuates that the CFO and A1 do this through engaging people they connect with. In addition, respondent C2 points out that A1 has taken initiatives that will evolve controllers into business partners. A1 further expresses that the respondent itself strives for a decentralized steering model which will be achieved by giving more responsibility to controllers and enable transparency. In order to behave and think differently, A1 was partaking in introducing a travel-app which consist of greater responsibility and transparency. This is highlighted through the following extract:

"The travel-app connects all the external travel information [...] and makes the data available for everyone. [...] For example, if I choose to travel business class everyone will see it - how can I motivate it? Could the money have been spent in a better way? It is a small thing in the context but important when it comes to changing behavior"
– B2, 2020

Furthermore, respondent B2 further accentuates that this type of system has, in part, changed people's behavior and mindset due to greater responsibility. The fact that B2 perceives the tool as something that triggers another way of thinking, showcasing that the initiative got the response that was intended.

Respondent B2, B3, B5 and C1 point out that many people in the financial department have been there for ages, which leads to homogenous behavior and being slow to change. Therefore, it is extremely important to hire people from the outside environment in order to break the pattern of thoughts and display the opportunities that wait around the corner. In addition, B2, B4 and B5 stress the importance of diversity in workforce background as it stimulates change since these people might bring other perspectives and be willing to drive initiatives. This could in turn foster innovation and develop the role of controllers. Influences can also stem from other organizations and benchmarks which might act as an inspirational source. It is further clarified that these sorts of influences are vital when it comes to changing routines and the set way of working as they are usually not part of the institutionalized environment. B2 further states that the respondent has taken initiatives to change the role of controllers, such as hiring a consultant with expertise in business analytics and data. Furthermore, this consultant has had a great impact on the entire team and is an asset for the team. Along the same line, B1 expresses that the transformation could not only come from one department, but it also needs to come from the whole group where everyone contributes to the journey. Respondent B2, B3 and C2 express that A1 has been the most influential person when it comes to breaking the set ways of working and thinking. For example, A1 has strived to employ people with different work experiences and influenced people to work differently by utilizing other systems and asking other questions.

In conclusion, the majority of the respondents view Volvo Cars' corporate culture as positive towards change where much resides in the hands of the management. To be able to change the existing patterns many of the respondents highlight that there is a need to include a diverse set of influences, both in terms of expertise but also through benchmarks. Several respondents pinpoint A1 as a change initiator - both when it comes to change the mindset and behavior but also employ people with different work experiences.

5. Analysis

To address the dilemma of how and why institutional change sometimes occurs we have noticed that the initiatives can be sorted based on specific approaches regarding how they play out. One approach is Disruptive intervention and the other approach is Competence preparation. The Disruptive intervention approach shakes the already existing institutional environment and has the potential to disrupt the current state in favor of a new way of working. In addition, the approach can be seen as forceful actions that happen at a high speed. The Competence preparation approach instead focuses on enhancing the competence profile which takes time since it is primarily concerned with developing the individuals and their capabilities.

5.1 Disruptive Intervention
5.1.1 Controlling 3.0
Throughout our empirical section it becomes noticeable that the Disruptive intervention approach is, in great lengths, used at Volvo Cars. To begin with, Controlling 3.0 is a clear example of how the management and in particular A1 change the current ways of working in a disruptive manner. The fact that the respondent expresses that it is sometimes necessary to: "jump before you know

exactly how far it is to the water" both underlines that the change approach was disruptive and it also sheds light on the fact that A1 can be seen as an institutional entrepreneur. The respondent both drove the initiative and participated in the implementation which are the identifying factors of an institutional entrepreneur (Battilana et al., 2009; Suddaby, 2010).

Part of Controlling 3.0 includes cutting 25 percent of the controlling workforce which is a strong change commitment. As expressed by A1, the change will either result in a cut of 25 percent of what is done or in a more efficient work approach by controllers. A potential way to become more efficient is to utilize the digital tools where automation is essential which showcases that the digital transformation has a great role to play in their changes. In essence, the downsizing appears to stem from the technological developments which is in line with ideas presented by other researchers (Anastas, 1997, see Scapens & Jazayeri, 2003; Caglio, 2003; Carlsson-Wall & Strömsten, 2018). As the organization highlights IT as a way to become more efficient and also something which has allowed for a reconstruction, the idea of viewing IT as an enabler is further strengthened (Caglio, 2003). In a way IT could be seen as the enabler of Controlling 3.0 where the systems are expected to aid in achieving an efficient work approach. In addition, some researchers would go as far as to state that the controlling profession will fade away (Carlsson-Wall & Strömsten, 2018), however, this does not appear to be the case for the controllers at Volvo Cars. The changes made are meant to drive their development where they eventually become business partners which showcases that the systems could also enhance the role of controllers (Anastas 1997, see Scapens & Jazayeri 2003; Carlsson-Wall & Strömsten, 2018). Besides, many of the respondents express an optimistic view of the developments where the digital tools are viewed as something that can enhance their position. They also express a willingness to change the current structures which partially goes against the picture of controllers being rigid 'beancounters'. Aside from a reduction, the Controlling 3.0 initiative includes a restructuring of the entire financial department which once again is a forceful change commitment. The department will merge two functions (Financial Controllers and Business Controllers) into one function (Business Finance) where Digital Finance will act as an enabler for the whole department. This means that controllers will interact more with each other as well as with the digital tools. It is perceived that, the Controlling 3.0 initiative opens up a larger playroom where controllers interact with other types of professions. This observation is in accordance with arguments presented by Birnberg (2009) where controllers transgress their typical borders to solve problems. The changes also highlight a transformation similar to the one presented by Osterreich and Teuteberg (2019) who argue work practices will be transformed due to the emergence of Big Data. In a sense, this has happened at Volvo Cars where the entire controlling department has seen a change in structure. Perhaps it has not created entirely new occupations but rather it has enabled a development in regards to specialization of occupations. The controllers are gathered under one department, Business Finance, but the Digital Finance is accentuated and will enable greater value.

The change initiative appears to come partly from the enabling nature of the current technological prerequisites and partly from the top management. Management in particular appears to have a distinct role in driving the change initiative since A1 and B5 (top manager and manager) both expressed that they were highly involved in the initiative. This further stresses the idea that managers are a crucial and influencing factor in changing the role of controllers, as presented by Windeck et al. (2015). Something which has become obvious to us is that for initiatives to get a

foothold they need to have managerial involvement which is manifested in the Controlling 3.0 initiative. It had a great deal of managerial involvement where both A1 and B5 who have higher managerial positions were champions for the initiative. Additional indicators that the management had a considerable role to play in the initiative is the fact that multiple respondents point at the change in management as a sort of starting point or initiator of Controlling 3.0. The fact that the management has driven the Disruptive intervention of the controller role is a clear example of how the management acts as an institutional entrepreneur.

Furthermore, A2 expresses that the changes could have happened immediately after the new management was appointed which showcases that the slow-moving nature of the organization might have had something to do with it. Nevertheless, the new management is considered to be the definitive factor that launched the change initiative. The role that management played in the changes is following the perception of Zainuddin and Sulaiman (2016) who argue that the management can be crucial in the enforcement of changes. As mentioned above, technology had a role to play in it all where some respondents, A1 in particular, expressed that it was necessary to adapt to the circumstances and that the technology is now mature enough to make such adaptations. This showcases the enabling nature of the technology where it presents an opportunity to change the institutional environment, given that there is a dose of institutional entrepreneurship that drives the change.

5.1.2 Performance Steering, Travel-app & Ownership Changes

Another clear illustration of times when the organization shouldered a Disruptive intervention approach is in their Performance Steering initiative. As mentioned by A1, the Performance Steering was an initiative that intended to adjust their prevalent steering model. The organization made attempts to reduce their excessive amount of cost centers during a five-year period but the results were not sufficient. Once Performance Steering was initiated the idea was brought up to simply cut half of the cost centers and then re-open the cost centers that the employees asked for. Once again this highlights a sort of "jump first" approach where something bold was needed to get results and break the existing pattern. Another approach taken in order to change the mindset and behavior of the controllers is found in the travel-app that was introduced by A1. By introducing such a technique the organization goes from monitoring what people spend their money on to managing through transparency where the employees keep track of each other. For example, the travel-app enables a change that transform people's mindset and social concepts. This awakens the reasoning that different versions of new technique triggers change (Caglio, 2003; Jain, 2001, in Garud et al., 2002). Additionally, the fact that respondents B2 and C1 highlight A1 as an influential actor in the Performance Steering and travel-app further accentuates that A1 is an institutional entrepreneur.

In the empirical material a great deal of the respondents express that the management has a positive attitude towards developments. Respondent B3 highlights that in change transformations it is essential to "dare, dare to fail". Something which further established the idea that Volvo Cars has an approach that in many ways assimilates a Disruptive intervention approach. In addition, it is noticeable that since the ownership change, where Zhejiang Geely Holding acquired Volvo Cars, more efforts have been made to transform the role of controllers. For instance, the "Separation

and build-up of in-house capabilities" had a strong investment control focus and "One Finance" included initiatives that were put in place to transform the financial department. This point towards the fact that the organization as a whole has adopted more of a Disruptive intervention throughout and that it might stem from the ownership changes.

A final note to the Disruptive intervention is found in the reaction towards the initiatives. The development of the role of controllers has been known for decades which could be an explanation as to why the reaction towards the changes is not extreme. Controllers are familiar with the necessity to change the role which has enabled a realization of initiatives that actually penetrate the institutionalized environment. For example, it would be expected that a large reduction of employees would cause a negative reaction amongst the employees but it was not the case here. This could be due to the fact that a change has been on the agenda for an extended period which indicates that the controllers were expecting something to happen and therefore acknowledge the reduction as a natural progression. From an institutional perspective, the idea of changing the role of controllers has been around for an extended period and thus, the idea has become established which means that the Disruptive intervention is not viewed as something frightening. The discourse around the changing role of controllers could have laid the foundation for why Disruptive intervention approaches achieved success in this setting. If the idea had not been established in the institutional environment then the Disruptive initiatives could have been seen as both frightening and as a threat.

5.2 Competence Preparation

5.2.1 Educational Efforts

Through our empirical material it has become evident that the financial department has been subject to the digital transformation for an extended period. This observation is in line with ideas presented by Bhimani and Willcocks (2014) who highlight the finance function as especially subject to digital changes. Via our study it has become clear that the digital transformation acts as an enabler that allows for the emergence of new ideas and initiatives. Many of the respondents regard the digital transformation as something which has been forced upon the organization where several initiatives act as a response to the digital transformation. For example, the implementation of Power BI, as well as the current buildup of the Finance Data Analytics Cloud Platform, stem from the digital transformation.

A great deal of the respondents express that they have noticed a direct effect on the competence profile for controllers where a greater inclusion of digital skills is favorable. In addition, the respondents express the belief that these changes stem from the digital transformation, indicating that the digital transformation can be deemed as a substantial enabler that influences the role of controllers at Volvo Cars. This is in accordance with Oesterreich and Teuteberg (2019) as well as Appelbaum (2017) who argue that digital skills, such as skills in BA and information technology, are crucial for controllers in today's context. The observation is analogous with ideas presented by Ahrens and Chapman (2000) who claim that controllers have developed technical knowledge. Interestingly enough, Ahrens and Chapman (2000) made this claim 20 years ago and it is still on the agenda today. In addition, the developments in technical knowledge appear to be something

that has been relevant and is still of high relevance for Volvo Cars today which hints at the fact that competence building takes time.

Another idea that has become clear through our empirical findings is that even though controllers are exposed to a technological shift, it is up to the organization and management to adapt controllers in order to exploit what the digital transformation brings. Many of the respondents argue that change takes time and is often a slow-moving process, which could be an indicator that the environment and profession are institutionalized. Therefore, institutional entrepreneurs that trigger change through initiatives are vital to develop the role of controllers. Many of the respondents pinpoint two change agents at Volvo Cars, A1 and B1, who have played an important role in Volvo Cars' operation. Besides, we believe that these two agents are great assets for Volvo Cars. This is based on ideas from Garud et al. (2002) who state that change agents play a crucial role since new technologies erupt deeply rooted institutionalized routines and thinking patterns. Therefore, agents are vital in order to introduce new technologies and thereby avoid tensions. Many of the respondents, such as A1, B1, B2 and B3, pinpoint that B1 has driven and participated in the implementation of the educational programs which has, to some extent, shattered the institutional environment and transformed the traditional role of controller. The educational programs, such as BI Academy, have improved the digital capabilities for controllers and thereby transformed the institutional profession at Volvo Cars. The efforts can be viewed as a type of Competence preparation and an initiative that takes time to realize. Improvement in technical capabilities is part of the journey of transforming the role of controllers which highlights that the initiative to introduce educational programs drives a change.

Emphasizing other forces and agents that have indirectly or directly driven BI Academy, it is clear that respondent A1, who is a top manager, has played an important role. As B1 stated, when the management saw what Power BI could do, they requested that controllers should use the tool. This request initiated a change in the capabilities of controllers where more focus would be around comprehending and utilizing tools, thus catalyzing a change in the role of controllers (Caglio, 2003). As the management enforced a change in the information flow the institutional environment was challenged (Cloud, 2000, see Zainuddin & Sulaiman, 2016) Additionally, Big Data is identified as something which increases the importance of utilization of BI (Trieu, 2017) which in turn could be seen as the basis for the tool Power BI. The incorporation of Big Data application and BI has driven the development of the BI Academy which in turn has driven a change in the social concepts (Caglio, 2003) in the sense that the controllers adopt a different approach towards data. This further transforms the work practices (Osterreich & Teuteberg, 2019) where controllers are required to understand, mine, transform as well as analyze data (Warren et al., 2015) which could be made easier through the BI Academy.

Based on the empirical findings it becomes obvious that the requests, i.e. utilization of Power BI, have put pressure on the controllers' competence which in turn has propelled the role transformation forward. In addition, the request brought up the challenge of how to use the tool which can be viewed as the seed which grew to become BI Academy. However, important to mention is that B1 did not perceive the implementation of the educational program as the most difficult part when it comes to transforming the role of controllers, it was rather changing people's attitudes and their already established ways of thinking. Since changing behavior is a slow process

this also sheds light on the fact that initiatives need time before they can break the institutional environment and that there is a great need for a fusion of Disruptive intervention and Competence Preparation. The Disruptive intervention initiatives trigger a crack in the institutional environment which opens up for change and allows the Competence Preparation to materialize. Drawing on ideas from Lavelle et al (2011), the major challenge is to understand how BA is used which showcases that BI Academy was a necessary initiative. In addition, these findings are in line with Munir and Phillips's (2005) study where technology was perhaps not the primary change factor, it was rather the efforts made by the organization that drove the change through initiatives. In more explicit terms, our empirical findings showcase that it was the demand from management in combination with the initiative to launch the BI Academy that drove the change in the role of controllers.

Based on ideas presented by Appelbaum et al. (2017), Carlsson-Wall and Strömsten (2018) as well as Wang and Wang (2015), digital tools enhance the work of controllers as they will have the ability to provide more relevant information and guide management in decision making. Considering that BI Academy is an initiative that aims to educate controllers in using digital tools it should result in more timely information which then would aid the decision making. As presented by Trieu (2017), the BI systems are focused around creating value which showcases that in the future, controllers might evolve into business partners who pay attention to value-adding activities. We believe that, to get to the point where controllers act as business partners, the BI Academy initiative is imperative since it prepares and educates the controllers in using the tools. If no initiative would have been taken, then the controllers might not know how to use the tools efficiently. Hence, an institutional entrepreneur like B1 was necessary as the respondent recognized what was missing and took a concrete action to change that. Drawing on propositions from Cokins (2016), we believe that these educational programs are of great importance since it will aid in creating a competitive advantage.

As the BI Academy was established less than two years ago it is still too early to determine how large the effect will be. At the time of writing, the majority of the respondents highlight that they perform analysis on a descriptive level. Although there is a great desire to enhance the level of analysis and perform more predictive analysis. This showcases that the BI Academy has not yet affected the controllers' approach to performing analysis in a larger manner. However, the BI Academy has started to improve the technical capabilities as well as the way of working and thinking, which showcases that this type of initiative is something that could break the institutional environment.

5.2.2 Expanding the Competence Profile & Managerial Actions

Putting an emphasis on the management, it is clear that some managers have been taking actions that further the development of the role of controllers. This is of great importance since, according to Windeck et al. (2015), managers are a crucial factor when it comes to realizing changes. Except for Controlling 3.0, Performance steering and Educational training, some managers have tried to break the institutional environment by employing people with other work backgrounds which is a type of Soft Initiative. For example, A1 and B2 have driven this type of initiative which has had a positive impact on the role of controllers. Through our empirical material, it became quite obvious

that some employees at Volvo Cars might have been there for a long period of time which increases the risk of getting stuck in old habits and thereby becoming institutionalized. Therefore, a possible outcome of employing other types of people could be in accordance with previous research (Battilana et al., 2009; Dacin et al., (2002); Seo & Creed, 2002) where it is presented that differentiation in groups enables institutional change. Hence, employing other types of controllers might break the pattern of thinking. For instance, when B2 employed a consultant with expertise in digital tools the consultant became a great asset for the team even though the person did not have the whole competence profile of a controller. Through increasing the variety of competence profiles for controllers the controlling profession might in itself be transformed. As presented by some academicians (Caglio, 2003; Zainuddin & Sulaiman, 2016) controllers take on a hybrid role. This is not something that is distinct, albeit by employing people with other types of expertise the controllers at Volvo Cars could evolve into hybrid controllers that interact with other departments. In addition, this displays that it is not only the role that is changing, it is also the people who are controllers that are changing. Additionally, the management appears to have a desire to evolve the role of controllers into business partners. This brings forth the idea that they are also willing to allocate power which is a necessary criterion for the role to evolve (Windeck et al., 2015).

As stated earlier, there has been a discussion between academicians regarding whether or not actors have the ability to initiate change when they are institutionalized. When taking the "paradox of embedded agency" into account (Seo & Creed, 2002), it is apparent that actors who could be deemed as "institutionalized" can bring about change. For example, respondent A1 who has been at Volvo Cars for a long time is seen as an institutional entrepreneur since the respondent has driven many initiatives. A1 has been highly involved in Controlling 3.0, hiring other types of controllers and Performance Steering where it is obvious that the respondent is inclined to pursue changes. Moreover, even though A1's beliefs and actions are determined by existing institutions, the respondent has the ability to break these institutions which relates to the "paradox of embedded agency". Furthermore, the respondent B1 who has a work background that goes beyond the scope of Volvo Cars has also initiated change. Drawing on previous research (Battilana et al., 2009; Dacin et al., 2002; Seo & Creed, 2002), it is argued that being exposed to multiple institutional systems will increase the likelihood of institutional entrepreneurship to emerge, which indicates that B1 being an institutional entrepreneur could stem from the fact that the respondent has been exposed to several institutional systems.

As the Disruptive interventions shakes the institutional environment the Competence Preparation can be viewed as a counterpart. The interaction between the approaches is what matters when it comes to the success or failure of trying to achieve institutional change. This is clearly showcased in the interplay between Controlling 3.0 and the BI Academy. When the organization initiated a Disruptive intervention they had already begun to prepare the controllers in terms of data capabilities. Preparing the controllers to become more efficient through BI Academy could have been a reason as to why the Disruptive initiatives was not seen as daunting. It brings forth the importance of the Competence preparation, albeit it is incredibly important to recognize the Disruptive intervention as it thoroughly uproots rules and routines. Without the Disruptive intervention the change necessary to break the institutional environment would have a difficult time to ever become realized.

6. Conclusion

6.1 Concluding Remarks

We have aimed to shed light on how initiatives towards transforming the role of controllers play out through the following research question:

How do initiatives towards transforming the role of controllers play out in an established industrial organization?

The conducted study brings forth the idea that transforming the role of controllers is a multidimensional work that relies on a vast amount of coordination in order to have a chance to penetrate the organization. There is no doubt in the fact that the digital transformation has had an important part in the changes. It acts as an enabler that opens doors to new ideas and visions that were previously out of reach. Importantly enough it is not a force that initiates change, but rather the tipping point that gets people thinking in new patterns which in turn challenges the already established ways. This sheds light on the fact that more than technology is needed in transforming the role of controllers. There is a great need for having institutional entrepreneurs who champion new ideas and changes which leads to the materialization of new rules and routines. Many of these new ideas and changes are identified in our empirical section where initiatives are identified, e.g. Controlling 3.0, Performance Steering, Educational Programs and other Soft Initiatives.

How the initiatives play out is determined by their characteristics where we have identified that there are two approaches. One being the Disruptive intervention approach which uproots the deeply set ways of working and the other being the Competence preparation approach. They are contrasting approaches that address change in different ways and at different speeds. The Disruptive intervention approach moves at a fast pace and the Competence preparation approach has a somewhat slower pace. While initiatives in the Disruptive intervention approach include radical changes in structure the Competence preparation approach prepares the organization for a shift in competence which stems from the enabling nature of the digital transformation. Even though the approaches are quite opposite to each other, we believe that they are equally important. The positive attitude towards the Disruptive intervention initiatives could stem from the fact that the controllers have awaited a change. This is illustrated in the reaction towards Controlling 3.0 where a large reduction was included. Such a reduction might be expected to attain backlash but it is not the picture portrayed through our study. Instead, the controllers were seen as fairly positive towards such a change which could be due to the familiarity with the transformation in combination with the Competence preparation efforts. The BI Academy initiative was launched in advance to the Controlling 3.0 initiative and even though the two initiatives have been assigned to different approaches they are still showcasing a sort of connectivity. The large reduction in available positions for the controllers that is part of Controlling 3.0 is expected to foster efficiency and change the set ways of working. As pinpointed by A1 and C2, technology can allow the organization to reach efficiency. Education would be a way to enhance the technical skills which then could aid in the efficiency journey, showcasing the embedded connectedness of initiatives. This indicates that for changes in the role of controllers to occur there needs to be an interplay of initiatives from both approaches. It is also important to note that even though the Disruptive initiatives that have been carried out were met with positivity there will still be a degree of insecurity

surrounding such large changes. It would only be natural for a sense of insecurity to arise when the deeply rooted rules and routines are challenged with new approaches. A way to deal with the insecurities and possibly reduce them is through incorporating and synchronize the Disruptive interventions with Competence preparation initiatives.

Another noticeable idea is the influence that both internal actors and external enablers have on initiatives. In terms of internal actors, it is obvious that once management made a push to request different approaches as well as tools it had a spillover effect throughout the organization. For instance, the request to use Power BI was identified as the starting point for the BI Academy initiative which highlights the influential power of management. In addition, many of the respondents highlighted that people working at the managerial level were drivers for a great deal of the changes which showcases the involvement and institutional entrepreneurship attributes of the management. Besides, the study sheds light on the relation between the external environment and the internal environment where the work of transforming the role of controllers is a complex task that is partly synchronized and partly not synchronized. Controlling 3.0 and the BI Academy are examples of when synchronization has occurred. The digital transformation enabled a change in the tools available to make analysis and a request was made which then initiated the BI Academy. After the implementation of the BI Academy the organization decided to launch Controlling 3.0 where part of the initiative was to become more efficient or at least spend less time on inconsequential tasks. Importantly enough, the changes were and still are dependent on the institutional entrepreneurs' push for a change in the institutionalized environment. Evidence that it is the case is found in the fact that the digital transformation has been on the agenda for many years but changes were primarily made in more recent years. This showcases that there needs to be more than technology for a change to materialize. There needs to be a combination of Disruptive initiatives that upset the institutional environment and Competence preparation efforts that prepare the controllers for changes and makes the change less daunting.

As a final note, we argue that transforming the role of controllers is a multifaceted endeavor with a mix of radical changes and continuous competence support. Initiatives with characteristics spreading across the two approaches are vital and there is a need for synchronization between the initiatives as well as between the internal and external environment. The study also highlights the influential role that management has where their demands could be a starting point for new changes, such as in the case with the request for more BI reports. In addition, as many of the controllers identify that they are working as service providers, in relation to Graph 1, it highlights that even if there has been initiatives in place to transform the role it is a great endeavor that takes time and need the support of the digital transformation. It might even be that the digital transformation is the determining enabler for moving further, towards becoming a business partner. In conclusion, we believe that Volo Cars has come far in their transformation of the role of controllers. The organization has developed the role to move beyond the "traditional work tasks" through the help of the launched initiatives.

6.2 Contribution

Our study brings forth the importance of interplay among different initiatives and interaction between the contrasting approaches. Furthermore, it highlights that various initiatives play out

differently when it comes to changing an institutionalized profession and that such changes takes time. The interplay between the initiatives is what makes the change successful as they support one another. If the initiatives had been played out in silos, they would not have been that impactful as these initiatives raise each other. Several authors have discussed the changing role of controllers for decades but our study enrichens this area through adopting another perspective. It focuses on how change in an established organization materialize through several initiatives and thus affect employees mindset and behavior. Our study brings forth the idea that the digital transformation can be seen as an enabler that propel developments. It also sheds light on the fact that initiatives driven by institutional entrepreneurs are vital when is comes to changing the set ways of working. For example, since the introduction of the travel-app the controllers have taken on another mindset and behavior which stem from greater transparency and responsibility. It is also clear that the digital transformation enables the transformation of the role of controllers. The utilization of digital tools increase the value-creation which further puts pressure on the competence profiles of controllers. For example, once management noted the possibilities associated with the capabilities of Power BI and only requested Power BI reports it had a spillover effects onto other facets of the organization. It was a sort of starting point for the BI Academy which in a way prepared the organization for the changes that are currently happening with Controlling 3.0. This sort of domino effect where one initiative has an effect on the future initiatives also highlight the interconnectedness as well as the role that the digital transformation has in the changes. The change in Big Data and its impact on BI is what enabled the development of Power BI.

From a practitioner's perspective, our study showcases that various types of initiatives need to play out in an interactive way in order to accomplish a successful transformation. In addition, changing people's behavior is something that takes time which calls for Competence preparation approaches, albeit Disruptive intervention approaches is deemed as the essential part that shakes the institutional environment. Disruptive approaches, such as a restructurings, are of importance in order to accelerate change. Thus, to change the set ways of working the interplay between the initiatives is crucial. In addition, employing people with other types of work background increases the likelihood of institutional entrepreneurship, which is the case with B1. Having a differentiation in work force enables institutional change and is something that organizations should strive for. As a final note, it is of great importance that the management is inclined to changes as they are the one setting the requirements which eventuate in a change in the role of controllers.

6.3 Future Research

All in all, our research has contributed insights in regard to how the role of controllers is transformed through initiatives. It has supported previous ideas of the controlling environment being rather institutionalized (Burns & Scapens, 2000) and identified the digital transformation as an enabler in the change initiatives aspiring to transform the role of controllers. An alternative route for future research would then be to perform a similar study in another context where the organization has other characteristics, e.g. a younger company or a different industry. In such a context the environment might not be as institutionalized meaning that initiatives could play out differently. Another possible path for future research, which has been accentuated by Suddaby (2010) as an area that lacked attention, is that which focuses on how agency and individuals

influence institutions. Our research focuses the attention around the role transformation and initiatives taken but a way to further the field could be to focus on the institution itself.

It would also be interesting to further examine the power attribute which has been briefly touched upon in this study. Controllers shouldering the role of business partners mean that they would have increased responsibility and tackle more complex questions that usually belong at a higher level. As presented by Windeck et al. (2015), a consequence would be that managers have to allocate more power to controllers. We believe that it would be interesting to focus a study around this since it has been noticed that when managers are unwilling to make such changes it has the potential to disrupt the developments (Windeck et al., 2015). Furthermore, in our study we have examined how the initiatives play out through interviewing people from three different levels, albeit it would be of interest to expand the levels. This has the potential to further touch upon whether or not there are inconsistencies spreading across the levels. It might also present initiatives that grew from a lower level but did not have an effective outcome.

As a final note, it could be of interest to further examine the institutional entrepreneurs and their characteristics to examine the correlation between the characteristics and initiatives that get a foothold. For instance, our study has briefly touched upon the fact that initiatives that get support from an institutional entrepreneur at managerial level do get a foothold, although we would suggest to further examine the connection

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Appendix

Appendix A – Interview Guide

1. Could you tell us a little bit about yourself, your role at Volvo and for how long you have been working at the company?
2. How would you go about defining the role of controllers?
   a. What are the main tasks?
3. Has the role of a controller changed during the last years? If so in what way and through which initiatives?
   a. Why do you think this change happens now? Why do you think it is that it has not happened sooner?
   b. Do you believe that there has been a specific person or a specific group of people that has initiated the initiative to drive change, if so who?
   c. Have you taken any initiative to affect the role/change the role in any way? Or have you supported the journey?
   d. Do you experience that there has been any sort of resistance/slowness in the change and if so, how?
   e. How would you describe the cooperation with other departments?
4. You will now receive a graph [see Graph 1]. Where would you describe that the controllers at Volvo are currently acting?
   a. Which initiatives are needed to reach higher and become a "business partner"?
   b. Which initiatives are needed to be able to get a response throughout the organization?
   c. Do you experience that there is any sort of resistance towards this journey that hinders the controllers from becoming "business partners"?
5. Have you perceived that there has been any kind of support in the initiatives to get controllers to work in digital tools, such as Power BI?
   a. Have the initiatives been driven by a specific person or a specific group of people?
   b. How have digital tools affected the way you analyze the data and process the information? What type of analysis would you say that you are currently performing?
   c. Descriptive, predictive or prescriptive
   d. We have been made aware that the controllers work in Power BI and that you have an internal education program, BI Academy, is that something that you use? How does it develop your digital skills?
6. Do you experience that the demands on the types of capabilities a controller should have, has changed during the last couple of years if so, how?
7. Do you believe that the controllers live up to the demands? Why/why not?
   a. Is there a proactive approach in trying to live up to the demands? If so, could you give an example?
8. Do you feel like there is anyone in the organization that is more or less driving when it comes to the development/implementation when it comes to changing the role of controllers?

9. How would you describe the attitude towards change at Volvo Cars, especially in relation to role and work approach changes?
10. When you think of the work teams, is there a disparity in the work backgrounds and do you believe that such things matter for the development of the role of controllers?
11. If you were to give recommendations to Volvo for new initiatives, what are the main improvements that you would recommend, i.e. how do you think Volvo should work in order to reach their goals related to the role of controllers?
12. As a final question, what do you think the future for controllers will look like?