



DYNAMIC CAPABILITIES AS CHANGE CAPABILITIES

seeking concreteness from a different point of view

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Abstract

No business is free of change and in the modern times changing business environment and -technology are more of a rule than an exception. To survive and thrive in changing environments organizations need to be able to change and maintain competitiveness under such conditions. Problem is how to determine the organization's capability to do these. The dynamic capabilities model was developed as response to the question about creating and maintaining competitive advantage under conditions of change, but the model is still lacking with many disagreements in the literature. As maintaining competitive advantage in a changing environment is inherently tied to change in the organization, this thesis sought to utilize and test the usability of the dynamic capabilities as a tool to evaluate organization's change capabilities contributing to both dynamic capabilities literature and change literature. In the process a model of concrete elements of the dynamic capabilities needed to be assembled based on available literature.

This thesis was conducted as a single case study of a single large Finnish cooperative financial group that was engaging in large change initiatives both before and during the study, especially two large and distinctly different kinds of change driven by two separate executive directors. Five employees from one of the firms inside the group were interviewed in addition to the group's public quarterly and annual reporting between 2013 and 2019. Much of the material was analysed using GIOIA method to ensure sufficient rigor in the analysis.

In the end the study could draw a clear connection between some elements of dynamic capabilities, changing environment and organizational changes. Both of the two major groupwide change processes for example were preceded by significant sensing activities both externally and internally. With several other elements the connection could not be demonstrated quite as strongly. They were not a visible key point in a major change effort. There were however many lighter or indirect indications of their value. The ongoing organizational change towards more decentralized power and autonomy, attributes supported by dynamic capabilities literature, has not yet proven itself as key factor of other changes but in interview it was described as speeding development work among other positive expressions. There were similarly suggestions of lacking in a proposed dynamic capability element being a "*braking factor*" when discussing maintaining of technological competences. These findings support the proposal of using dynamic capabilities as identified here as change capabilities, but further research of more organizations and different change situations would be required to consider this proposition proven.

Keywords dynamic capabilities, organizational change, dynamic capabilities as change capabilities, changing business environment

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Tiivistelmä

Mikään liiketoiminta ei ole muuttumaton ja nykyaikana muuttuva liiketoimintaympäristö sekä -teknologia ovat enemmän sääntö kuin poikkeus. Selviytyäkseen ja menestyäkseen muuttuvissa olosuhteissa organisaatioiden täytyy kyetä sopeutumaan ja säilyttämään kilpailukykyä muutoksessa. Ongelma on kuinka määrittää organisaation kyky onnistua näissä. Dynaamisten kyvykkyysmalli kehitettiin vastaukseksi kysymykseen kilpailuedun luomisesta ja säilyttämisestä muuttuvissa olosuhteissa, mutta malli on yhä puutteellinen ja kirjallisuuteen sisältyy paljon erimielisyyttä. Koska kilpailukykyä säilyttäminen muuttuvissa olosuhteissa on läheisesti sidottu muutokseen organisaatiossa, tämä tutkielma pyrkii soveltamaan ja testaamaan dynaamisten kyvykkyysmallin käyttöä työkaluna organisaation muutoskyvykkyuden arviointiin palvelun sekä dynaamisia kyvykkyksiä että muutosta koskevaa kirjallisuutta. Osana työtä kokosin olemassa olevan kirjallisuuden perusteella mallin dynaamisten kyvykkyysmallin konkreettisista elementeistä.

Tämä tutkielma toteutettiin kvalitatiivisena yksittäistapaustutkimuksena suuresta osuustoiminnallisesta finanssiryhmästä, joka on toteuttanut suuria muutoshankkeita sekä ennen tutkimusta että sen aikana. Näihin kuuluvat erityisesti kaksi merkittävää ja huomattavasti erilaista hanketta, joita ajoivat kaksi eri pääjohtajaa. Tutkimuksessa haastateltiin viittä työntekijää yhdestä ryhmän keskusyhteisön yrityksestä. Lisäksi tutkimuksessa käytettiin ryhmän neljännesvuosi- ja vuosikatsauksia ajalta 2013-2019. Materiaalia analysoitiin pääosin soveltaen Gioia metodia riittävän luotettavuuden turvaamiseksi.

Tutkimus löysi selkeitä yhteyksiä joidenkin dynaamisten kyvykkyysmallin elementtien, muuttuvan ympäristön ja organisaation muutosten välillä. Molempia tutkitun ajanjakson suuria ryhmänlaajuisia muutosprosesseja esimerkiksi edelsi merkittäviä ”sensing” toimia, jotka kohdistuivat sekä ulospäin ympäristöön että organisaation sisäisesti. Useiden muiden elementtien kanssa yhteyttä ei voitu näyttää yhtä vahvasti. Ne eivät olleet näkyvissä avainasemissa merkittävässä muutoksissa. Monet kevyemmät ja epäsuorat tekijät kuitenkin viittaavat niiden arvoon. Käynnissä oleva organisaation muutos kohti hajautuneempaa valtaa ja suurempaa autonomiaa, ominaisuuksia joita dynaamisten kyvykkyysmallin kirjallisuus tukee, ei ole vielä osoittanut itseään keskeiseksi muiden muutoksien onnistumiselle, mutta haastattelussa sen ilmaistiin nopeuttavan kehitystyötä muiden positiivisten kuvausten lisäksi. Vastaavasti kirjallisuudessa ehdotetun elementin puutetta kuvattiin jarruttavaksi tekijäksi käsiteltäessä teknologisten kyvykkyysmallin ylläpitoa. Nämä löydökset tukevat ehdotusta soveltaa dynaamisia kyvykkyksiä siten kuin tutkielmassa on kuvattu muutoskyvykkyyksinä, mutta lisätutkimus erilaisissa organisaatioissa ja muutostilanteissa on tarpeen ennen kuin tätä ehdotusta voi pitää todistettuna.

Avainsanat dynaamiset kyvykkyudet, organisaatioiden muutos, dynaamiset kyvykkyudet muutoskyvykkyudet, muuttuva liiketoimintaympäristö

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1. Introduction

No organization exists in an environment completely free of change. As the rate of change in the global economy has increased and consumer demands shift, organizations face new challenges to their success and survival. The changing nature of markets has many reasons. As part of their discussion on dynamic capabilities and the role of managers, Augier and Teece (2009) present some examples of factors that have shaped today's markets. These factors include a more successful creation of level playing fields by governments, which along with more free trade and international investments have, for example, contributed to sharper competition around the world and today firms often need to face competitors globally. In addition to the previous factors the impact from constant development of technology is undeniably important and also contributes to firms more often facing threats from outside their traditional industries/competition. Examples of this are banks facing competition from technology companies offering new payment services or taxis having to compete with ride sharing apps.

Whether the market is experiencing moderate levels of change where frequent change proceeds linearly or the change is much faster in what is called "high velocity market" (Eisenhardt and Martin 2000) the organizations operating in the market must be able to adapt. If they succeed in this, they will survive and may even be able to identify and seize new opportunities for even greater success. While change is risky it does not have to be a problem. Sometimes firms might even completely reinvent themselves such as Netflix going from DVD rental by mail to high tech streaming company or Nokia dropping branches and becoming a mobile phone giant. The changes required in physical assets, employee skills and culture of the organizations with such major change are significant, and even with smaller changes the organization can easily end up with large problems and costs if the change effort fails.

It is then not surprising that organizational change and ability to change are of particular interest to managers and researchers. Development and increasing attention on the dynamic capabilities framework during past decades is a good example of people pursuing research to understand the change and what kind of organizations succeed in it.

With over two decades since Teece, Pisano and Shuen (1997) and Eisenhardt and Martin (2000) the seminal papers on the topic of dynamic capabilities, the model has been increasingly developed and has a growing a body of research. Much of this supports utilizing

the model in analysing how companies adapt to changing environment as it was positioned to do by Teece et. al. (1997) in their definition for dynamic capabilities: *“The firm’s ability to integrate, build and reconfigure internal and external competences to address rapidly changing environments.”* The definition refers to changing the firm and highlights the importance of environmental changes as a motivator of said change. Similar themes can be seen in other definitions as seen in table 1.

There are, however, major challenges in utilizing dynamic capabilities model. The three major challenges of the model are limited empirical evidence Pavlou and El Sawy (2011), a lack of a single universally or even dominantly accepted definition and an internal division within the research stemming from differences in views between Teece et al. (1997) and Eisenhardt and Martin (2000). Many of the differences between authors in the field can be summarised under these two different schools of dynamic capabilities. This division amplifies the previous problem of lacking universally accepted definition.

The purpose of this thesis is to test theory in practice and seek supporting evidence for dynamic capabilities by analysing a case company that has experienced significant amount of change in recent year, sparked by changes and expected changes in the environment and change of leadership in the organization. The aim is to identify elements of change supporting dynamic capabilities discussed in the literature and seek them from the case organization. If the organization exhibits characteristics suggested by the model this would support the theory, especially if these characteristics can be clearly linked to successes in the change efforts.

Which elements of dynamic capabilities, as suggested by literature, can be identified from the organization and its behaviour?

Which of these are linked to organizational change and successes in it and how?

For the purposes of this research both of the previously mentioned schools of dynamic capabilities will be recognized, but this thesis leans more strongly on the views linked to Teece et al. (1997) and dimensions of dynamic capabilities first presented in Teece (2007).

This thesis consists of eight chapters. This introductory chapter has presented the dynamic capabilities as the field of research used as a framework for this case study. Chapter 2 reviews the literature on this topic to determine the elements sought from the case organization to determine if its reality matches the theory. Chapter 3 outlines the methodology for data collection and analysis with findings being presented following this in chapter 4. I discuss these findings in the chapter 6. The final conclusions chapter summarises results of this study. Following conclusions references and appendixes are presented in chapters seven and eight.

2. Literature review

In this chapter I will summarise and draw upon literature on dynamic capabilities framework for 3 purposes. To 1 form a coherent picture of the model despite internal divisions in the literature, 2 justify use of dynamic capabilities as a way to evaluate organization's capability for change and 3 utilize this to develop model for identifying the relevant elements of the capabilities from an organization.

The chapter is divided into three main parts. First, I investigate the dynamic capabilities concept in general and recognise differing views that exist on the concept of dynamic capabilities. Secondly, I justify why dynamic capabilities should be a valid tool to evaluate organizations' capability to change. Thirdly, I will finish the chapter by constructing framework for dynamic capabilities as a basis for identifying and structuring them in the case organization of this study.

2.1 The dynamic capabilities

The dynamic capabilities model is relatively new development in the management literature. At least under this name the model originates mainly from 1990s. The model's relative newness means it is far from complete or without fault, but it can potentially fill in weaknesses of other models by explaining performance and competitive advantage of firms and other organizations in rapidly changing dynamic environments. The model perhaps most closely related to dynamic capabilities is the older resource-based view (RBV) which could even be considered a predecessor to dynamic capabilities research. This does not mean RBV is wrong or outdated. It simply has limitations that dynamic capabilities model seeks to address. Ambrosini and Bowman (2009) for example describe dynamic capability perspective as extending the resource-based view.

RBV explains performance and competitive advantage of organizations through the resources that it possesses, but the model works best in somewhat stable conditions. It is insufficient to explain performance and competitive advantage in highly dynamic changing environments (Teece et al. 1997). If organization controls a rare resource or asset it has competitive advantage as competing might require said rare resource. This however is insufficient to explain how an advantage might be sustained under conditions of change. If more of the resource becomes available reducing rarity or said resource or if the resource is

replaced, controlling it no longer provides the same competitive advantage. RBV doesn't properly explain how the resources would be changed to sustain advantage or what kind of organizations could adapt to the change.

This limitation of addressing changing conditions is what motivated dynamic capabilities model and the potential to overcome it is a major factor of why the dynamic capabilities model has gained significant amount of attention in the past two decades. For example, in their bibliometric analysis Albort-Morant et. al. (2018) recognised 3852 related studies including 2808 articles between 1991 and 2015. While they include articles from 1991 onwards and relevant material may have existed also before that, the current dynamic capabilities model has been largely defined by two seminal works, Teece Pisano and Shuen (1997) and Eisenhardt and Martin (2000). Teece et. al. (1997) discusses older models of strategy including five forces model, strategic conflict model and above-mentioned resource-based view. Similar to above paragraphs, though more extensively, they propose dynamic capabilities as a model that could explain sustained competitive advantage when the other couldn't, primarily in case of rapid change. Eisenhardt and Martin (2000) then presented an alternative view with several fundamental disagreements beginning a division in the dynamic capabilities literature. The differences between these two works reflect into the two different schools on dynamic capabilities research. While there have been attempts to bring the views together (ie. Peteraf et al. 2013) the two sides have major disagreements from the nature of dynamic capabilities to their effects. They cannot fully agree on how dynamic capabilities work, how environmental dynamisms affects them or whether dynamic capabilities actually provide sustained competitive advantage. This division also contributes to lack of universal definitions for concepts, including the dynamic capabilities themselves.

There are however many commonalities that are often present in these definitions. For this thesis the topic of change in organizations is especially central. As such this topic should be central in dynamic capabilities and their definitions. In their analysis of the literature on dynamic capabilities Albort-Morant et. al. (2018) gathered 15 varying definitions of dynamic capabilities from different authors and papers between 1991 (since Bridges, Coughlan and Kalish (1991) and 2015. These definitions can be found below in table 1. I have highlighted the parts with themes of change. Additionally, Ambrosini and Bowman (2009) in their own evaluation of different definitions concluded that there is consensus between definitions that the role of dynamic capabilities is to change the organization's resource base.

Teece and Pisano (1994, p.537)	Timely responsiveness and rapid and flexible product innovation , along with the management capability to effectively coordinate and redeploy internal and external competences.
Teece et al. (1997, p. 516)	The firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments.
Eisenhardt and Martin (2000, p. 1006)	The firm's processes that use resources- specifically the processes to integrate, reconfigure, gain, and release resources- to match and even create market change; dynamic capabilities thus are the organizational and strategic routines by which firms achieve new resource configurations as markets emerge, collide, split, evolve and die.
Teece (2000, p. 36)	The ability to sense and then seize opportunities quickly and proficiently.
Griffith and Harvey (2001, p. 597)	Dynamic Capabilities is a combination of resources that are difficult-to-imitate, including effective coordination of inter-organizational relationships, on a global basis that can provide a firm competitive advantage.
Zollo and Winter (2002, p. 340)	A dynamic capability is a learned and stable pattern of collective activity through which the organization systematically generates

	and modifies its operating routines in pursuit of improved effectiveness.
Lee, Lee, and Rho (2002, p. 734)	Dynamic capabilities are conceived as a source of sustainable advantage in Schumpeterian regimes of rapid change .
Adner and Helfat (2003, p. 1012)	The capabilities with which managers build, integrate, and reconfigure organizational resources and competences.
Helfat and Peteraf (2003, p. 999)	Dynamic capabilities do not directly affect output for the firm in which they reside, but indirectly contribute to the output of the firm through an impact in operational capabilities
Winter (2003, p. 991)	Those (capabilities) that operate to extend, modify, or create ordinary capabilities.
Zahra et al. (2006, p. 918)	The abilities to reconfigure a firm's resources and routines in the manner envisioned and deemed appropriate by its principal decision-maker(s).
Helfat et al. (2009, p. 4)	The ability to perform a task in least minimally acceptable manner.
Teece (2007, p. 1319)	Dynamic capabilities can be disaggregated in the capacity (a) to sense and shape opportunities and threats, (b) to seize opportunities, and (c) to maintain competitiveness through enhancing, combining, protecting, and, when necessary, reconfiguring the business enterprise's intangible and tangible assets.

Pavlou and El Sawy (2011, p. 239)	Dynamic capabilities have been proposed as a means for addressing turbulent environments by helping managers extend, modify, and reconfigure existing operational capabilities into newness that better match the environment.
Helfat and Martin (2015, p. 1)	The capabilities with which managers create, extend, and modify the ways in which firms make a living-helps to explain the relationship between the quality of managerial decisions, strategic change , and organizational performance.

Table 1 definitions of dynamic capabilities.

How dynamic capabilities explain the ability to sustain competitive advantage under dynamic conditions and how they impact change in organizations is perhaps less clear than benefits of controlling a specific resources as with RBV, and there are disagreements in the literature on this. To better conceive dynamic capabilities, it can be helpful to consider them in relation to other capabilities an organization might possess. Winter (2003) discusses zero level capabilities that allow firm to continue doing what they do: *“How we earn a living now.”* He begins using term dynamic capability with so called first order capabilities that can impact zero level capabilities. He gives examples such as new product development and creation of new outlets for restaurant, as these: *“change the product, the production process, the scale, or the customers (markets) served.”* He also discusses higher-order dynamic capabilities. Simpler and common distinction is to simply consider ordinary- and dynamic capabilities separately, where the ordinary capabilities are what Winter (2003) might call zero level capabilities. Dynamic capabilities meanwhile are used to change the current state including ordinary capabilities and the things listed in above quotation. I will use this division of ordinary and dynamic capabilities for rest of this thesis, where applicable.

This separation of ordinary- and dynamic capabilities is also seen by some, such as Laaksonen and Peltoniemi (2018), as an important distinction to avoid tautological arguments in observing performance and allocating that to dynamic capabilities. Which would define dynamic capabilities as what causes good performance. Sustained advantage

through performance or at least explaining how that happens is the goal for dynamic capabilities model and many authors on the topic have discussed connection between dynamic capabilities and firm performance (Pezeshkan et. al. 2016; Ringov (2017) Wilden et. al. 2013;) but many have also warned against identifying dynamic capabilities by the firm performance (Arend and Bromiley 2009; Laaksonen and Peltoniemi 2018). One shouldn't simply look at which firms perform well and declare those to have dynamic capabilities.

Instead dynamic capabilities should be seen as a force that changes ordinary capabilities and resources, which explain the performance at any given time. A suggestion in the literature is to observe changes in firm resources rather than its performance when seeking to observe dynamic capabilities (Eisenhardt and Martin 2000; Teece 2007; Zahra et al. 2006 referenced by Laaksonen and Peltoniemi 2018). This is good as long as observer recognises that not every change is necessarily result of using such capabilities. With such focus on the changes in resources and capabilities the purpose of dynamic capabilities may need to adjust as Laaksonen and Peltoniemi (2018) propose that dynamic capabilities should not be considered as explaining performance, but instead change in that performance. Moreover, that change, and dynamic capabilities should not be compared in a vacuum. The impact of dynamic capabilities should be considered as depending on the context they exist and are used in (Wilden et al. 2013). Wilden et. al. (2013) for example analyse how competitive intensity and organizational structures facilitate the impact dynamic capabilities have on performance.

Additionally, Ambrosini and Bowman (2009) identify several points of what dynamic capabilities are or are not, based on their own evaluation of different definitions some of which do not appear on above table. These points help to narrow down what I consider a dynamic capability for this thesis, even if I do not blindly agree with everything said. First Ambrosini and Bowman (2009) highlight that dynamic capabilities and their use is intentional on the part of the firm and as such luck or effects of random chance should not be mistaken for capabilities. I agree that luck and random change are not capabilities, but whether or not possession or use of capabilities is always conscious, I wouldn't be so absolute. At least whether or not use of capabilities needs to be conscious depends on whose consciousness is discussed. Individuals are likely at least somewhat conscious when taking concrete action to change ordinary capabilities, how things have been done. However, the dynamic capabilities might not always be consciously recognized by people or the organization in general. Structures and processes too could conceivably be supportive of

dynamic capabilities without them being consciously designed for that specifically. These nuances of people's conscious recognition of capabilities are important for research on them. The limitations of human perception are important to note especially when data collection includes interviewing, questionnaires or simply any material where things are described by people based on their perceptions.

In similar vein Ambrosini and Bowman (2009) note that dynamic capabilities should be repeatable with patterned elements. Spontaneous reactions to situations, even if beneficial ones with results that could be achieved through dynamic capabilities, do not indicate, or count as dynamic capability in their eyes. If recognition of dynamic capabilities is restricted to repeated patterns, this should make identifying them easier as individual spontaneous action would be more difficult to identify. This also suggests that in searching for signs of dynamic capabilities in organization's actions a snapshot of certain point in time might not be sufficient and a longer time period of actions should be looked at in research. I must however raise doubt on discarding "*spontaneous reactions*" as unrelated to the dynamic capabilities as it assumes that presence of such capabilities would not influence these reactions. People's and organizations' responses to a situation would be informed and influenced by their history, experiences, skills, structures, and rules, and wouldn't these be also linked to the capabilities of the organization. For my research I would not ignore individual situations and apparent "spontaneous reactions" but consider what informed those responses.

This discussion has already highlighted a strong connection between the dynamic capabilities and change. It is this role of dynamic capabilities for organizational change that this thesis is focused on and the reason this framework is used in the first place. Next, I will review general literature on the dynamic capabilities demonstrating its development over time and evaluate diverging views on the topic to establish basic understanding of the theoretical background and questions that need to be addressed to utilize this model. Following this I discuss the specific change aspect of dynamic capabilities framework in more detail to build a model that a research can be based on.

2.1.1 Teece's view on dynamic capabilities:

The most cited paper on the topic of dynamic capabilities is the previously referenced seminal paper Teece, Pisano and Shuen (1997) *“Dynamic capabilities and strategic management.”* They address multiple earlier frameworks (competitive forces, strategic conflict and resource-based view) that seek to explain the competitive advantage of firms and present their own offer. An example of need for dynamic capabilities model is presented in the form of well-known companies in rapidly changing high-technology fields which RBV-based strategies weren't enough for *“significant competitive advantage.”* Instead they note that:

“Winners in the global marketplace have been firms that can demonstrate timely responsiveness and rapid and flexible product innovation, coupled with the management capability to effectively coordinate and redeploy internal and external competences.”

The dynamic capabilities model introduced by Teece et. al. (1997) is their way to explain achieving such forms of competitive advantage. They focus on competences, capabilities and organizational- and managerial processes, rather than basing the advantage on static models of competitive positions or specific resources, both of which are central to older frameworks. More specifically they defined the dynamic capabilities as:

“the firm's ability to integrate, build and reconfigure internal and external competences to address rapidly changing environments.”

A key advantage posited for dynamic capabilities by Teece et. al. (1997) and later works involving Teece (such as Teece 2007, Augier & Teece 2009, Katkalo, Pitelis & Teece 2010) is not simply explaining sustained competitive advantage but more precisely explaining it in a rapidly changing environment. In such environment especially sustaining an achieved advantage is a challenge as what works now might not be so beneficial after a short time. A resource that is extremely rare and valuable today, providing advantage as presented by RBV, might have an easily acquired alternative tomorrow eliminating that advantage. The purpose of dynamic capabilities is to allow an organization to change and adapt with the changes in the environment to sustain performance. For that performance to translate into a competitive advantage requires adapting better than the competitors, there needs to be heterogeneity in the dynamic capabilities between firms for one to hold an advantage over another. A key argument of Teece et al. (1997) to explain this heterogeneity concerns the concept of path dependencies.

In their writing Teece et. al. (1997) criticise microeconomic theory for viewing firms to have essentially infinite options and only short term irreversibles. Instead they present the concept of path dependencies, the idea that decisions made by a firm set it along a certain paths. The past experiences and decisions made before, such as developing certain competences or investing in a certain technology, then limit and determine the options that the firm has open to it later. Vergne and Durand (2011) often describe path dependency with the term “*self-reinforcement*” which can take form in positive or negative “*mechanisms*” that make the chosen path more attractive and other alternatives less attractive or completely removed from set of considered alternatives. New things that people are most likely to discover and learn are close to what they have already done.

In summary the key to path dependencies is that history matters, and every organization has a unique history. Capabilities resulting from this history are then difficult to imitate by other organizations according to Teece et al. (1997). Investing in certain technology for example allows the firm to develop certain things that need that knowledge but may set it behind in other aspects. As an example, Teece (2007) discusses the concept of dominant design. If a dominant design emerges those firms who focused on the wrong design are left in a difficult position. The choices they have made and the path they have open to them as a result are more challenging than for those who chose better or did not spend resources before seeing the right path. This is one reason why being the first mover is not always the best strategy.

Being based on the history and actions of the organization capabilities are not something that can't usually be simply bought. They must be created or grown within the organization (Katkalo et. al. 2010).

The capabilities are based on many factors within the organization such as individuals and their skills as well as conditions in which they work. Katkalo et. al. (2010) recognise certain change routines, analysis and more importantly “*creative managerial and entrepreneurial acts*” as possible basis for dynamic capabilities. The human aspect of this, overall knowledge, skill and experience level of employees in general is highly important to development of dynamic capabilities as supported by research by Singh and Rao (2016). Dynamic capabilities can also be based on people's collective learning and for example equipment or other assets the organization possesses (Teece 2012).

The conditions in which individuals work are based on both concrete factors like organizational structure, processes and rules as well as more human factors such as the

culture of an organization. These are linked and affect the people and what they can do. Teece et al. (1997) for example expresses support for decentralization and autonomy. Already before this, Teece (1996) discusses determinants of innovation including those stemming from organization. Considering close ties innovation and dynamic capabilities can have through their change aspects, these discussions can also be relevant for the dynamic capabilities model he presented with Pisano and Shuen a year later. His warnings of hierarchies and bureaucratic decision-making support the previous statement concerning benefits of decentralized organizations with more autonomy. He connects bureaucratic decision making to biases such as favouring status quo and persistence bias which I will consider separately when discussing different dimensions of dynamic capabilities.

Research by Wilden et. al. (2013) seems to support Teece's view on organizational structures and dynamic capabilities as in their study "organic organizational structures" with less formal rules and decentralised decision making seemed to have a moderating effect on connection between dynamic capabilities and performance. Though that doesn't necessarily comment on the presence and creation of dynamic capabilities in such organizational structure. The message seems to be that more rigidity and rules will hinder the dynamic capabilities which is logical since timely adaptation and change are less likely in such environment. The importance of organizational structures to the dynamic capabilities could also be seen as being supportive of Teece et al. (1997) arguments of path dependency. Organizational structure develops over time, based on firm's history, and altering it is a major change that has risks, takes time and likely needs other things to adapt simultaneously. Hence the organizational structure presents a limitation based on history, at least for a short timeframe. One also cannot buy an organizational structure.

Following Teece et. al. (1997) Teece himself has further developed and structured the dynamic capabilities framework. Major development come from Teece (2007) which also divides dynamic capabilities into three distinct dimensions: "*sensing and shaping opportunities, seizing opportunities and maintaining competitiveness through enhancing, combining, protecting and when necessary reconfiguring the business enterprise's intangible and audible assets.*" The last dimension is in later works also described as transforming (Katkalo et al. 2010). Going forward I will express this division as sensing, seizing and reconfiguration. This model gives needed structure for using the dynamic capabilities concept beyond defining them as things that let firm do these other things. In

terms of organizational actions such as an organizational change there is also some extend of order in which order the capabilities impact the organization.

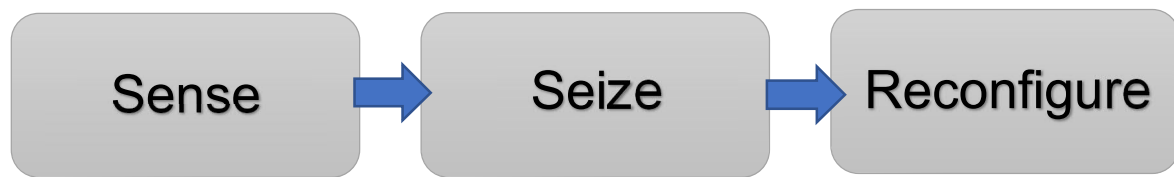


Figure 1. the three dimensions of dynamic capabilities (Teece 2007)

In this thesis these dimensions will act as a key model for both identifying and classifying dynamic capabilities as well as a framework of change. I treat them as a framework for change, expressing capabilities and actions that are involved in successful organizational change based on theory of dynamic capabilities. I will provide more detailed view of these dimensions later in this literature review when constructing a more concrete operationalizations of the dynamic capabilities and their links to change.

Along the three dimensions Teece (2007) also discusses microfoundations of dynamic capabilities. By these Teece refers to “*organizational and managerial processes, procedures, systems and structures that undergird each class of capability.*” Later with Teece (2012) he describes microfoundations as building blocks. The term microfoundation has been used also by other authors on the topic of dynamic capabilities (Helfat and Peteraf 2015) discussing elements that dynamic capabilities in their opinion are at least partially based on. Teece (2007) seeks to separate these microfoundations from the capabilities themselves. Though if these elements, such as procedures and structures, determine how firm is able to achieve things dynamic capabilities are supposed to achieve, the line between microfoundation and capability could be blurry and its importance questionable.

Moreover, identifying dynamic capabilities as suggested by theory in a real context, is likely to focus on recognising and evaluating the basic elements that could be termed as microfoundations.

The role of managers too has received some attention from Teece (Teece 2012) who recognises that some dynamic capabilities may depend on a single or few individuals within the organization rather than wider organizational routines. He promotes here what he describes as “*entrepreneurial management*”.

2.1.2 Alternative Approach by Eisenhardt and Martin

The previous discussion is based largely on the works of and school of dynamic capabilities supporting David J. Teece and his co-authors. David J. Teece is one of if not the most influential author on the topic, but his views have not gone uncontested. Following publication of the seminal paper Teece et. al. (1997) a paper by Eisenhardt and Martin (2000) “*Dynamic Capabilities: What Are They?*” laid foundation for alternative view of dynamic capabilities. Although both views originate from and are built upon the resource-based view, to this day significant division exists in the field between views represented by these two works. This division is clearly detectable in the literature as highlighted by bibliometric analysis by Peteraf et. al. (2013) before their attempt to reconcile the two views.

Eisenhardt and Martin (2000) criticize RBV and earlier descriptions of dynamic capabilities as tautological and vague, with views presented by them supposed to be not that. An example of how dynamic capabilities research could slip to tautology, as warned by Arend and Bromiley (2009), is by defining, or identifying, them based on outcomes on organizational performance. I have already discussed this aspect of dynamic capabilities above in general discussion of the topic.

To Eisenhardt and Martin (2000) dynamic capabilities are in fact specific and identifiable processes, such as research and development. They also see firms as having greater commonalities in dynamic capabilities even using term “*best practice*” to describe them. This suggests that organizations on market would be expected to converge towards the best practice over some time despite path dependencies, leading to direct competitive advantage from them to be temporary. Eisenhardt and Martin (2000) also question the nature and utility of dynamic capabilities at different levels of dynamism in the environment a firm exists in.

To them dynamic capabilities on moderately dynamic markets are close to traditional idea of routines: “*detailed analytic stable processes with predictable outcomes.*” Here moderately dynamic market is a market where change is frequent but follows linear somewhat predictable paths. The industry structure and market boundaries remain clear and dynamic capabilities can be quite reliant on existing knowledge. Examples of dynamic capabilities under such condition are product development and strategic decision-making (which integrate resources), transfer processes and routines for replication (which reconfigure resources) as well as alliance, acquisition and exit routines (which gain and release resources). These examples also show three ways in which dynamic capabilities

contribute to the organization by influencing its resources: integrating, reconfiguring and gaining and releasing resources. In some ways Eisenhardt and Martin (2000) approach to dynamic capabilities is closer to the resource-based view especially as seen below in discussion of differences between Teece's view as opposed to Eisenhardt's and Martin's view.

According to Eisenhardt and Martin (2000) the dynamic capabilities described above however aren't such always and according to them the nature of dynamic capabilities changes in highly dynamic high velocity markets. This kind of market environment is described as having nonlinear unpredictable change, blurred boundaries and unclear industry structure. Under such conditions existing knowledge can lose its usefulness and even be counterproductive. For these conditions, authors don't give such detailed types of dynamic capabilities but describe them as simple routines with few rules to keep managers focused on what is important. This concept of different effective dynamic capabilities under different environmental dynamism is a rather significant change to older views of Teece et. al. (1997), who present dynamic capabilities as solution to competitive advantage specifically on highly dynamic markets. It is not the only difference.

2.1.3 Differences between the Dynamic Capability views

Peteraf et. al. (2013) identifies three central issues separating the two frameworks of dynamic capabilities: "*differences over boundary conditions*", "*differences over sustainability*" and "*differences over competitive advantage.*" This order of the issues also reflects authors' views on their relative importance.

The first issue "*differences over boundary conditions*" relates closely to the difference they see in dynamic capabilities under different levels of environmental change. The view of dynamic capabilities by Teece (Teece et. al. 1997; Teece 2007; Augier & Teece 2009; Katkalo et. al. 2010) from the beginning present dynamic capabilities specifically as a means to explain sustained competitive advantage in conditions of change. The work by Eisenhardt and Martin (2000) on the other hand doesn't just suggest change in nature of dynamic capabilities at higher levels of change but they also propose a boundary condition where dynamic capabilities break down in sufficiently high velocity environment. Like competitive advantage, dynamic capabilities become more difficult to sustain in high-velocity markets. Part of this is due to a balancing act between too much structure that wouldn't adapt well

enough to market conditions and too little structure that would be inefficient and processes might “*fly out of control*” (Eisenhardt and Martin 2000). Dynamic capabilities under these conditions are described as requiring constant energy to upkeep. Presumably this need for “energy” increases as the rate of change in the environment does. The routinised nature Eisenhardt and Martin (2000) relate to dynamic capabilities will not sustain in case of rapid change. This is in stark contradiction with Teece et al. (1997) who present dynamic capabilities as specifically a way to explain sustained performance and competitive advantage in rapidly changing environments. The idea of dynamic capabilities breaking down at higher levels of environmental dynamism raises questions about what then allows organization to compete in rapidly changing environment, explaining which is foundational to the initial conceptualization of dynamic capabilities since Teece et al. (1997). This thesis also approaches dynamic capabilities as or closely linked to change capability and it does not seem likely that rapidly changing environment would cause organization’s ability to change and adapt “*fly out of control*”.

The second issue: “*differences over sustainability*”, is based on a significant difference in the nature, and especially heterogeneity between the two views on dynamic capabilities. While Teece et al. (1997) suggest that there can be sufficient and sufficiently inimitable differences in capabilities between firms to allow even sustained advantage, Eisenhardt’s and Martin’s (2000) characterization of dynamic capabilities in moderately dynamic environment as “*best practices*”, suggests far easier and faster imitation by other actors in the market. As such both accept dynamic capabilities as sources of competitive advantage, but to Eisenhardt and Martin (2000) it is not sustainable advantage.

Moreover, there is the third issue: “*differences over competitive advantage*” which closely relates to the sustainability question, stemming from how Eisenhardt and Martin (2000) characterize dynamic capabilities as best practices. This implies lack of scarcity and heterogeneity which would be necessary for capability to offer meaningful advantage over others, which would mean that possible advantages would be small.

There have been attempts to reconcile the two views: Peteraf et al. (2013) consider what Eisenhardt and Martin (2000) called “*idiosyncratic detail*” essentially noting that not every organization is equally capable or experienced in a best practice while considering different levels of dynamic capabilities for high velocity markets. Wohlgemuth and Wenzel (2016) suggest that firms could routinize at the strategic level but leave operational level less

routinized and able to adjust. For question of dynamic capabilities' effect on performance Ringov (2017) asserts formerly unaccounted internal factors. Even Teece in his work seems to indicate some fit. During discussion of dynamic capabilities in Teece (2018) he refers to things like new product development and expansion to new sales regions as second order dynamic capabilities. These are close to Eisenhardt's and Martin's (2000) view on dynamic capabilities as "*specific and identifiable processes*". In fact, new product development is the first example they give of dynamic capability. In Teece (2018) the sensing, seizing, transforming/reconfiguration dimensions on the other hand are treated as higher order dynamic capabilities. Here Teece (2018) clearly doesn't accept that dynamic capabilities would be limited to what Eisenhardt and Martin school suggests, and despite attempts to bring the diverging views together, significant division between the two research streams remains.

For the purposes of this thesis the surface questions of sustainability and competitive advantage are not central questions as the purpose is to investigate dynamic capabilities' role in change, and organization's ability to engage in it. As such I won't consider these differences in following analysis.

The division in more fundamental questions of the nature of dynamic capabilities is meaningful however as the intent is to identify the capabilities in a case firm. This requires definition of at least the basic nature of what is being sought. As Arend and Bromiley (2009) state:

"If researchers do not roughly agree on the place of dynamic capabilities in their models, they may be giving the dynamic capability label to very different constructs."

They also warn against identifying dynamic capabilities or firms with dynamic capabilities based on their current success as this causes definitional problems. This thesis however is intended to seek dynamic capabilities already identified and operationalized based on the existing theory, to see if the theory used is comparable to reality.

2.1.4 Overall limitations of the framework:

The dynamic capabilities framework still has its weaknesses despite extensive literature over the past two decades, starting with lack of coherent theoretical foundation (Arend and Bromiley 2009). This literature review and recognition of the different views on the matter

exists partially due to this concern to recognize different views before determining the approach to base research on. It still won't be a basis universally agreed upon.

2.2 Using dynamic capabilities to explain change capability

Similar to dynamic capability, the term change capability is not clearly and universally defined. The lack of universal definition affects the terms used in following analysis. Soparnot (2011) for example discusses "*change capacity*" and sometimes even "*dynamic capacity*" rather than –capability which is used by others such as Oxtoby, McGuinness and Morgan (2002). For this thesis I use the term change capability for consistency and because this thesis views dynamic capabilities as also change capabilities. Supporting this approach Soparnot (2011) also indicates the way he sees the change capacity could be classified as a dynamic capability.

This thesis is based on the idea of dynamic capabilities as change capabilities. While previous discussion also considered the dynamic capabilities framework on a more general level, it also links the framework to organizational change. I will now focus on that link. Besides Soparnot's (2011) support for classifying change "*capacity*" as dynamic capability Andreeva and Ritala (2016) explicitly treat it as an important generic dynamic capability in the centre of their own paper. Interestingly both of these papers present models or dimensions of organizational change that are comparable with the sense, seize, reconfigure dimensions of dynamic capabilities of Teece (2007).

Andreeva and Ritala (2016) recognise this as they present elements of organizational change capability as including: "*capability of an organization as a whole to see new opportunities for development, to realize what internal changes are needed, and to implement them successfully.*" Dimensions of change capacity by Soparnot (2011), context, process and learning have a less obvious connection and he doesn't address the similarity specifically. Similarity of the dimensions is still notable. This supports the dynamic capabilities and Teece's model to be used in evaluating organization's capabilities for change.

These dimensions help to structure process of change, the capabilities influencing it and concrete actions behind these capabilities. Teece's dimensions (Teece 2007) are quite influential at least for the school of dynamic capabilities supporting his views over Eisenhardt and Martin (2000). They cover the process of change from recognising the need

to implementing change and adapting routines. Treating Teece's (2007) dimensions as a process of change like this is however rather focused on the current change process.

To better consider longer term development I have chosen to include learning, described by Soparnot (2011) as tackling "*introspective capability of the organization*" separately as a dimension of dynamic- and change capability for this study as it is with Soparnot's (2011) model. Though learning has a role in Teece's (2007) reconfiguration dimension, the added attention to it better accounts for its role in building, improving and renewing of capabilities.

For the purposes of this study the focus of this dimension is in organization's learning that develops or adapts the dynamic capabilities, especially learning that happens during a change process. The inclusion of learning dimension is supported by Zollo and Winter (2002) who discuss development of dynamic capabilities through learning and present three organizational learning mechanisms: "*(1) experience accumulation, (2) knowledge articulation, and (3) knowledge codification.*" Romme et al. (2010) further discuss role and effects of these (positive and negative) in development of dynamic capabilities.

Thereby the dynamic capabilities sought in this study will be structured under sensing, seizing, reconfiguring and learning. Identifying the capabilities under these dimensions still remains. As I have shown before there are many views on the definition of dynamic capabilities and some are criticized as vague and tautological. The literature does however include suggestions of operationalizations, routines and even structures that are part of or support dynamic capabilities in organizations as well as biases and challenges that can hinder them. The research for this thesis focuses on these more specific processes and elements of an organization to identify those linked to dynamic capabilities and change in existing literature.

These processes and elements of capability operationalizations can roughly be divided to those based on individuals and their skills and those based on the conditions these individuals work in, which are easier to evaluate organization wide. These conditions consist of both softer or more human factors like the culture of an organization, as well as harder concrete factors such as rules processes and organizational structure. Hence the operationalizations can be analysed and identified from the points of views that I term: individuals, soft organizational factors and concrete organizational factors.

I will next discuss and identify the operationalizations for each of the dimensions for dynamic capabilities and change as identified above.

2.3 Framework for research

While earlier sections of this literature review discuss the definitions and goals offered to dynamic capabilities and how those link to the ability to change, these descriptions do not provide enough detail to concretely determine if and how a capability or part of it might exist in an organization. Additionally, the literature on the matter is not necessarily unanimous or complete on the matter. Next, I assemble more concrete operationalizations of these capabilities from the currently existing literature and develop a framework of their different proposed elements that can be sought in the research. This framework is structured based on Teece's (2007) division of sensing, seizing and reconfiguring with learning elevated to be analysed separately from reconfiguring.

2.3.1 Sensing

“To identify and shape opportunities, enterprises must constantly scan, search, and explore across technologies and markets, both 'local' and 'distant'” -Teece (2007)

In order to respond to market changes, to grasp at an opportunity, or to counter a threat, one must first know of the them. To do this requires what Teece (2007) classifies as sensing capabilities. An organization with superior capabilities can then identify those opportunities and threats more reliably and earlier and disseminate this information across the organization better than those with lesser capabilities giving the organization an advantage, especially in fast paced environments.

The literature gives ideas on the necessary extent of search and things organizations should know about their environment. This is a necessary basis to determine if sensing capabilities are applied to gain the necessary information and discover opportunities. Teece (2007) indicates at least following areas of information that an organization should be aware of.

- consumer needs
- technology possibilities
- structure and evolution of the industry
- supplier responses
- competitor responses
- rules and constraints the organization faces (also how they will be in future)

The sensing capabilities needed for this can be grounded and originate from both organizational processes, such as R&D activity, as well as from skills and knowledge of individuals (Teece 2007) especially ones practicing “entrepreneurial management” (Teece 2012). In Andreeva’s and Ritala’s (2016) elements on organizational change, the one most closely equivalent with the sensing dimension is expressed to be “*the capability of an organization as a whole to see new opportunities for development.*” I consider the “*organization as a whole*” as the important part here highlighting that sensing is not simply the job of managers or some specific group but of the whole organization.

Based on earlier discussion, I consider the sources of the sensing capability to include at least the following dimensions: (1) Individuals' ability to discover opportunities, (2) organizational culture, (3) concrete nature of the organization including organizational structures and rules, and (4.) relevant investment such as R&D investment. These dimensions are interrelated and may not be possible to always be considered individually.

For individuals’ ability to discover opportunities as discussed before, the right individuals are important for sensing capabilities. As Andreeva and Ritala (2016) noted, this applies to the “*organization as a whole*”. When discussing individual’s abilities and decision-making in general, one must recognize that people are neither perfect nor perfectly rational. Everyone is impacted by their cognitive limitations and biases. Helfat and Peteraf (2015) reference a definition of cognition by a dictionary of psychology (Colman 2006) defining cognition as “*the mental activities involved in acquiring and processing information*” and “*an item of knowledge or belief*” and condense these definitions into two things: “*mental activities*” and “*mental structures.*” According to Helfat and Peteraf (2015) management research has focused on the latter. These mental structures can concern things from a simple belief or assumption of what certain action will lead to such major questions as, what is the purpose of an organization, or what is the actual business it is engaged in.

In terms of biases, Hodgkinson and Healey (2011) recognise that what managers, and the organization, attend to, is likely to be determined by their moods and emotions to a significant degree. As such different biases, narrow views and mistakes need to be recognised and watched out for. Evaluating people’s even few individuals’ individual skills or cognitive capabilities might be difficult and beyond the scope of this study, there are some clear potential failures that humans are vulnerable to and might be easier to recognise. First notes by Helfat and Peteraf (2015) is inattentional blindness. In essence, people might fail

to notice and attend to something because they were performing and focused on a different task at the time it happened. Helfat and Peteraf (2015) reference Chabris (1999) test where most viewers did not notice a gorilla walking through basketball court in film of a basketball game.

Another behaviour to watch out in terms of cognitive capability, is so called “ostrich effect” (Galai & Sade 2006, Karlson, Loewenstein and Seppi 2009; Hodgkinson and Healey 2011). Here rational choice of seeking out and addressing new information might not be taken or might not be taken as early if person expects the information to be negative. This is a psychological trait where people try to shield themselves from negative information that might cause discomfort. In individual’s life this might mean delaying seeking medical attention after noticing symptoms out of fear the news might be bad. In terms of business Karlson et al. (2009) for example research behaviour of investors who monitor their portfolios less frequently when markets are stagnant or falling than during times markets are rising.

Both above examples can be justly considered as irrational behaviour that might damage the person due to delayed response to potential problems. Health issues are usually easier to solve the earlier they are detected, while market conditions might change quickly requiring more active monitoring to navigate not less. Psychologically similar situations are likely to occur in business and are linked to the topics of change and dynamic capabilities.

For example, the sensing capability is highly linked to the mental activities as acquisition and processing of information are highly critical to identifying threats and opportunities of changing environment. Hodgkinson and Healey (2011) also describe the ability to update mental representations which fits with Helfat’s and Peteraf’s (2015) term mental structures, as a critical sensing capability. For such change of the mental structures processing of information as described with mental activities, is important, but Hodgkinson and Healey (2011) warns that this alone isn’t enough in their view due to people’s affective responses such as the ostrich effect. Understanding the ability to change the mental models should come with the caveat that beyond mere processing of information, the way people handle their response to new conflicting information is the fundamental mechanism to change their beliefs (Hodgkinson and Healey 2011 referencing Lieberman, 2000 and Lieberman et al. 2001).

Teece (2007) discusses a concept of search activities working on two levels: local and distant search. This is important for considering individual capabilities and biases due to observation that organizations have a tendency to favour incremental over radical change (Hodgkinson and Healey 2011) and focusing too heavily on the local search is a potential failure that Teece (2007) warns against. It is not farfetched to say that this would be linked to narrow views and also biases of the people engaging in these activities.

Existing mental structures, beliefs, or assumptions on what the business is are some things that can prevent person from searching outside that box. For example, with the case organization of this thesis, it started as a bank that later included insurance business through acquisition. People who held onto a belief that they were a bank specifically, probably would not have done that, but one could also view the organization as a financial institution and insurance as a financial service. With changes pursued in recent years, and apparent steps back since change of executive director, there is valid basis to question the models and believes of the new and old managements.

Considering people's sensing capabilities, including their cognitive capabilities, as a part of organization also requires recognizing also organizational factors that can help or hinder people's sensing and other capabilities. One such factor as indicated by Teece (2007) is people's access to information which can be affected by both organizational culture as well as its structure and rules. Does the culture support discussing of work topics or strict confidentiality? Are people spread out in the organization and physical locations restricting information sharing or do people interact across teams and departments? Are there rules or laws that set limits regardless of what the previous would enable?

In terms of culture the concept of culture of trust or "*organizational climate of trust*" (Fainshmidt & Frazier 2017) supports and relates directly to people's access to information along with other elements of this dynamic capabilities framework. Fainshmidt & Frazier (2017) use a definition for an organizational level trust climate from Poon (2003) where the definition for the existence of such climate includes that: "*organizational members have positive expectations regarding the motives, intentions and prospective actions of other members on whom they depend.*" This is definition specifically for organizational level, rather than individual level of trust, but the definition itself concerns members' (=individuals') expectations for other members. Fainshmidt & Frazier (2017) also reference a definition by Fulmer and Gelfand (2012) "*a shared psychological state among*

organizational members comprising willingness to accept vulnerability based on positive expectations of a specific other or others.” The important part here is the “*willingness to accept vulnerability*” as this would also impact those organizational members’ perceived personal risk in actions that would be beneficial from the view of organizational change which inherently come with risk.

Fostering culture of trust also makes people more likely to engage in multiple behaviours specifically useful in change situations such as, Sonpar, Handelman and Dastmalchian (2009) whose study indicated trust impacts willingness to change. Their research case also highlights how previous actions can cause lack of trust, such as previous major change leading to layoffs that then is one more cause for resistance when new change is proposed.

Fainshmidt and Frazier (2017) also reference Dirks and Ferrin (2001) on trust supporting “*adaptive attitudes and behaviours*”. This is true but a slight simplification. Dirks and Ferrin (2001) compare two views on how trust affects people’s attitudes and behaviour, directly or through indirect effects. Such analysis is beyond this thesis, but there are few important points to consider. First it should be noted that according to Dirks and Ferrin (2001) applicability of these models varies situationally and some research, especially on direct effects on behaviour, is described as inconsistent. Secondly, they also indicate that the main, direct, effect of trust, described as “*a willingness to risk,*” would be stronger in situations such as “*cultural changes*” or “*structural changes*”.

An example of how willingness to take personal risk and degree of perceived risk could affect organization’s change- and dynamic capabilities is presented by Fainshmidt and Frazier (2017) in their discussion of sensing capability. This requires acquiring and sharing new ideas and knowledge, which challenges the status quo, something associated with a degree of risk. High risk and then hinders people’s willingness to engage in such actions. On the other hand, tolerating and encouraging challenges to existing views should lead to or at least facilitate more active sensing behaviours. For managers this can mean that that trust towards them and perceived threat of them could make the difference on whether they get enough and right information to make the best decisions.

While people need to be able and willing to provide information that can be important for decision making, those receiving the information must also be able to rely on that information. Fainshmidt and Frazier (2017) indicate ability to rely on information from others as one consequence of climate of trust. While such confidence in provided

information should, and likely is largely based on expertise and process, the social relationships between information provider and recipient can impact this confidence.

In terms of the more concrete factors of the organization, the existence of concrete rules and controls to limit people from sharing information, experimenting, and challenging the status quo would also constraint people's ability to contribute to the sensing effort. Rules, structures, and even physical working spaces that support interaction between people from different parts of the organization would do the opposite.

Key questions to consider when seeking proposed sensing capabilities:

- Do the organization's sensing activities cover sufficiently large spectrum of information on different topics?
- Cognitive and creative skills of individuals:
 - o How employees/managers handle information that is contrary to existing beliefs and understanding ?
 - o Are there any conscious or organizational practices to prevent inattentional blindness the ostrich effect or other biases?
- Do the sensing activities cover both local and distant search?
- Does the organization demonstrate culture of trust?
 - o Are people permitted to interact freely (both in terms of rules/practices and the culture)?
 - o are people encouraged to interact (both in terms to rules/practices and the culture)?
 - o Is there a personal risk when challenging the status quo / previously held notions?
 - o Is there personal risk to experimenting even with the potential for failure.
- Do people have access to information?
 - o Does organizational culture restrict or support access to and the spread of information?
 - o Are there rules that restrict or support access to and the spread of information?
 - o Does organizational structure restrict or support access to and the spread of information?
 - o Do working spaces restrict or support access to and the spread of information?
- Does the organization invest sufficiently in sensing related activities?

2.3.2 Seizing

“Once a new (technological or market) opportunity is sensed, it must be addressed through new products, processes, or services. This almost always requires investments in development and commercialization activity.” -Teece (2007)

While sensing capabilities focus on accumulating knowledge and identifying opportunities without necessarily yet causing concrete change or impact on performance, seizing capabilities support the making and implementation of the concrete decision based on that knowledge. Seizing capability according to Teece (2007) is about firm’s ability to respond to a situation with new services, products or processes. This list may be too limiting though, and I consider the potential responses more widely. For example, wouldn’t a new market served by existing services, products and processes be one opportunity and a way of seizing it, or a new type of branding for a product that doesn’t necessarily require a change in services, product or processes behind it.

As with sensing, the change model of Andreeva and Ritala (2016) can here be compared with the seizing dimension of the dynamic capabilities. The two last elements of the model are: 2. *“to realize what internal changes are needed”* and 3. *“to implement them successfully.”* These aren’t as much one to one match with seizing as the first one was with sensing, but still relate closely. There is some overlap with reconfiguration. Teece’s (2007) discussion on seizing capability heavily involves the making of investment decisions, which most closely relates to the second part of Andreeva’s and Ritala’s (2016) model on realizing what changes are needed, what needs to be invested in. Further implementing these changes involves both seizing and reconfiguration dimensions from Teece’s model.

While key to the decision-making, making the right decisions with right timing, is too general of a statement for it to be useful for analysing the decision-making processes at an organization, the recommendations by Teece (1996) can be more useful. Assuming these recommendations are appropriate for high level of dynamic capabilities, elements of decentralization and autonomy in decision-making, would be considered as a positive when seeking them. Strictly bureaucratic, hierarchical, and centralized decision-making or organizational structures would equally be a negative sign.

Either way in organizations large decisions are often dependent on multiple people and may be done by a specific process. Both the individuals and the process that they do, and perhaps must follow, are important.

Here again individual capabilities become important. While extensive analysis and understanding of these may be beyond possibilities of this thesis, I have identified psychological limitations and biases which presence, or lack thereof, can give an approximation of individual's and organization's capability on the matter. To this end Hodgkinson and Healey (2011) recognize two important psychological barriers against seizing capability. First is a more general concern for organizations ability to "*evaluate sensed opportunities and threats in a progressive, forward-looking manner,*" an ability which is supported by multiple elements of capabilities discussed here. The second is to "*unlock dysfunctional fixations with existing strategies, to mitigate or remove decisional bias, inertia and strategic persistence.*"

The second barrier, presented by Hodgkinson and Healey (2011), in simpler terms addresses bias in decision-making and resistance to change. People can and often do oppose change and decisions they see as leading to it, especially if those people stand to lose something. Investing in one thing might be away from investing in another. Not investing in something might leave person without a job. People facing such negative effects could even consciously sabotage the change effort. The human resistance to any decision or change can be further intensified by people's tendency to give negative information more weight than positive (Kahneman and Lovallo 1993; Ito et al. 1998). Thereby the human side, communicating, gathering support and countering biases is a critical element of firm's capability to seize. Disregard for such matters would reflect poorly on a manager.

Another form of bias that could pose a challenge is the tendency of organizations to favour incremental improvements more than larger innovative investments, that I also considered in connection with the sensing capability. Here too both incremental and more radical changes are important with their own place. The difference between the two could perhaps be compared to the ordinary- / dynamic capability division. With incremental changes a firm can sustain its ability to perform now and in short term, perhaps even longer if the environment is somewhat stable. In long term, larger changes are sometimes necessary to sustain profitability or even survival of the firm though they do come with associated costs and risks. The ability and willingness to take that risk can be considered a part of the ability to go through with the change. Compared to same question with sensing dimension the underlying biases with seizing dimension are different. With Teece (2007) indicating that the tendency to favour incremental change relates to biases such as loss aversion, certainty effect and program persistence.

The concept of loss aversion concerns the tendency discussed in previous section to give negative information or (potential) losses more weight than positive information or (potential) gains. Kahneman and Lovallo (1993) consider this as one cause for risk aversion and what they describe "timid choices". However, while risk aversion can be completely logical, and not negative in itself, the loss aversion aspect can be considered a negative and described as a bias. As a result of it, people may choose to not engage in something with positive expected value, because they are more concerned over the potential loss in case of failure than they are of the superior or more likely potential gain. Situation can be worsened by certainty effect where people underweight probable gains over certain ones (Kahneman and Lovallo 1993). Person might choose to go for a small certain gain than larger probable one, even if the expected gain from the probable one is greater. As larger more radical changes, or investments to new, also carry greater risk and larger potential losses, these two biases contribute to favouring incremental changes, sometimes too much.

Program persistence bias, as discussed by Teece (2007) on the other hand concerns situations where programs are funded and continued beyond what would be logical due to influence of people advocating for them, who would likely have established positions being involved in said program. As a result, less resources are available for investment elsewhere. This links directly to the earlier discussion on people resisting or sabotaging change when they are at risk of losing something from the change. They are not exited by gains the organization could get from a new program if funds for that come from reducing or removing their funding. Moreover, someone committed to a failing direction might continue putting in more money and resources in the hopes of success and justification for prior choices (Hodgkinson and Healey 2011). They reference Staw (1976) and Staw and Ross (1987) on the topic.

Besides making investment decisions Teece (2007) suggest that this discussion on seizing should consider at least maintaining of competences that are necessary for acting on an opportunity and related to this, the concept of path dependency. I now consider these topics.

Once decisions have been made, the seizing dimension also concerns the ability of the firm to execute on their chosen actions when the time is right. In an environment with rapid technological change, the organization's ability to invest in or otherwise seize an opportunity, is heavily involved with and restricted by the organization's (technological) competences. A firm that is well positioned and has the base of technological competences can act quickly when the time is right. One that does not have these advantages may have

difficulties in being able to make the right moves even it has succeeded in sensing opportunities.

While the technological competences can be developed, even bought or hired, this requires resources and time. If timing is critical for grasping an opportunity to countering a threat, this delay can be critical. Hence firms should maintain and improve their technological competences to be ready as new technologies emerge, so they can invest in the technologies when the time is right (Teece 2007). This concern for maintaining competences relates to the concept of path dependency discussed earlier. The competences which a firm has developed and maintained limit what it is ready and able to do. Every new decision impacts the competences of the future.

This discussion has significant focus on technological competences, but this is only one, albeit central, part of developing an organization. Seizing opportunities is not only a matter of developing new technology. Firm should be just as prepared to design business models and other organizational strategy as it is to develop new technology, and these must align.

Key questions to consider when seeking proposed seizing capabilities:

- What kind of decision-making process is used by the organization?
 - o bureaucratic/centralized or decentralized
- What kind of organizational structures the organization has?
 - o hierarchical vs autonomous
- Are any biases recognised in the organization?
 - o Overly favouring incremental improvements over larger changes (when necessary)
 - o Loss aversion (to not be mistaken for reasonable risk aversion)
 - o Program persistence bias
- Does the organization actively consider and counter biases?
- How is the organization's ability and willingness to take risk as part of change?
- How much people support or oppose change?
 - o How is support gained
- Are base competences sustained so firm is able to act when the time comes?

2.3.3 Reconfiguring

“A key to sustained profitable growth is the ability to recombine and to reconfigure assets and organizational structures as the enterprise grows, and as markets and technologies change, as they surely will.” -Teece (2007)

The third dimension of dynamic capabilities, reconfiguration, concerns sustaining the growth and profitability that result from successful utilization of sensing and seizing capabilities (Helfat and Peteraf 2015). One cannot simply make the decision to invest in a new business venture and then expect it to happen without any change to ways of doing things. Profitable growth leads to an augmentation of assets and causes path dependent evolution of the organization (Teece 2007).

Based on the literature, reconfiguration is concerned with change in routines (Teece 2007) and change in identity (Hodgkinson and Healey 2011). Learning is also linked to reconfiguration, but I address it here as a separate topic.

Teece (2007) recognizes the necessity for some level of routines, which are necessary for efficiency's sake, but also warns of the cost of changing them. If the routines are too fixed in place it becomes more difficult for the organization to change. People that have solidly adapted to one way of doing things may be unwilling or even unable to change as needed and losing people can be one form of a cost. Due to the costs of changing established routines this should not be done rashly or without careful consideration.

The challenge and cost are also linked on the type of change that routines are subject to. Teece (2007) makes a difference between an incremental change where routines may be *“adapted gradually or in (semi-conscious) steps,”* and a radical change where *“complete revamp”* of the organization and its structure might happen. Need for different levels of reconfiguration depends on the type of innovation, or environmental change behind the need to adapt. Naturally, organization's actual actions are also impacted to some extent by biases such as the matter of organizations' tendency to favour incremental change I have discussed under sensing and seizing dimensions.

Regardless of the level of adaptation, meaningful change to routines within firm causes concrete changes in people's daily work and may require new learning for them to perform according to new demands. This could cause resistance and even if it doesn't, the change still disturbs the status quo. People's likelihood to and level of resistance along with how the

organization is prepared to prevent and counter resistance are hence critical for the capability to change as an organization. This might be supported or hindered by the culture and identity of the organization. For example, if the change is transforming the organization into something outside its perceived identity, the identity needs to adapt, or it may be an obstacle. This goes back to the matter of mental structures described by Helfat and Peteraf (2015). Repeated changes over short enough time can be especially damaging on both practical level of working efficiency and in terms of people's attitudes.

With some organizational changes the very nature of the organization and its business may need to be redefined, which requires especial adaptation from the employees. This requires the cognitive capabilities I discussed in section 2.3.1. In case of radical change, people might have to change their mental structures (Helfat and Peteraf 2015) of the organization and its business.

Key questions to consider when seeking proposed reconfiguring capabilities:

- Is the organization capable of incremental and radical changes?
- What kind of support and resistance change causes?
- How resistance is addressed by the organization?
- Do culture and identity support or hinder change?
 - o Are culture and identity changing to be more supportive or problematic?

2.3.4 Learning

For dynamic capabilities, or change capabilities, to continue providing successful change and competitive advantage they too need to be built and renewed. Soparnot (2011) addresses this with the "learning dimension of change capacity". With Teece (2007) learning would be considered under reconfiguration dimension, but I have highlighted it as a separate matter to better consider long term sustainability and competitive advantage.

To consider both positive and negative effects of concrete learning mechanism I use mechanisms by Zollo and Winter (2002): (1) experience accumulation, (2) knowledge articulation, and (3) knowledge codification. These represent different levels of learning, spreading the knowledge and holding onto the knowledge. They also represent different increasing levels of cognitive effort required by the learning mechanism.

First the experience accumulation represents learning from performing organizational activities and routines that at least in part also represents “*trial and error learning*”. This requires the understanding of the activities and their consequences which requires the people to have enough information on the. I already covered the topic of access to information (Teece 2007) in section 2.3.1 Sensing and it seems logical to remember this aspect of the organizational condition in mind while considering learning.

The concrete learning from performing tasks leads to an experiential and tacit knowledge held by people, but not necessarily recorded anywhere. As such this experience is also constrained within individual people and the usefulness of the knowledge to the organization is dependent on the individuals’ presence and susceptible to changes in personnel. Zollo and Winter (2002) focus here on the developing of routines, especially operating routines. This suggests lesser value for the topic of dynamic capabilities, but they also describe the experience accumulation as a baseline for their other learning processes with greater impact on dynamic capabilities.

These other processes also require more cognitive effort and deliberate action which makes them easier to recognise and investigate.

The second learning mechanism “knowledge articulation” can be presented as in effect developing, spreading, and sharing the learning more collectively (Zollo and Winter 2002; Romme et al. 2010). Zollo and Winter (2002) give concrete examples of how this might happen through “*collective discussion, debriefing sessions, and performance evaluation processes.*” The key seems to be the interaction between the individuals with accumulated personal experiences. This allows both sharing experiences and confronting differences in the views of different people. With constructive encounters this should lead to improved knowledge in addition to sharing it. As such allowing, supporting and even requiring interactions as described above would support this type of learning mechanism. This can connect to earlier topics such as access to information as discussed under section 2.3.1 Sensing.

In terms of rules, routines and other more concrete actions that could be identified in organization and support the knowledge articulation, the above examples by Zollo and Winter (2002) are a good starting point when seeking to identify knowledge articulation activities in an organization. Debriefing sessions and performance evaluation processes especially are actions that would likely be mandated and based on rules. Similarly, rules can

limit or encourage sharing of information as discussed in relation to access to information (Teece 2007). Such encouragement and mandated actions do not come for free however. While the experience accumulation itself can happen as a side effect to performing regular actions, the knowledge articulation requires investment, at least in the form of employee time. They could take the time spent on that debriefing session to continue performing the routines that provide value now.

The third learning mechanism presented by Zollo and Winter (2002) is knowledge codification. At this level the experiences are “*codified*” or in other words written down whether it is in manuals, instructions or even software. Romme et al. (2010) also describe these as artifacts. The purpose is to help with diffusing the knowledge, but Zollo and Winter also highlight that codification’s benefits are not only limited to spreading the knowledge but also in coordinating activities and evolving the process helping in change of current routines. Importantly it can also separate the knowledge and learning from individual people at least to an extent and this way overcome a major limitation of experience accumulation and to lesser extent the knowledge articulation. Codified knowledge such as a manual can remain with the organization regardless of the condition of any organizational members.

Codification might however also be the mechanism with most risk, and the possibility that more is not always better. In addition to higher cost of the codification mechanisms, the findings of Romme et al. (2010) highlight that too high levels of both articulation and codification could become harmful. They for example warn that codified knowledge could become an institutional truth and regardless of its correctness, challenging this truth can become difficult. As discussed before people’s ability and willingness to challenge status quo and old beliefs, is critical for dynamic capabilities, especially sensing capabilities. This is an example of where too much knowledge codification or too much trust in formerly codified knowledge might concretely harm the organization.

Since knowledge codification requires higher level of conscious effort and investment and leads to concrete “*artifacts*”, the codification mechanism should be relatively easy to recognise compared to the previous mechanisms, if they are present. Beyond mere identification however, their potential drawbacks need consideration and attention when considering their contribution to organization’s dynamic capabilities.

Key questions to consider when seeking proposed learning mechanisms:

- Is the organization good at retaining people and their experience?
- What kind of ways is staff educated?
- Does the organization have collective discussion, debrief or evaluation processes?
 - o Are they actually used / enforced?
- How well do people within the organization interact with each other to share knowledge?
- Is and how is knowledge stored and distributed in concrete forms (separate from individual)

3. Methodology

In this chapter I will present the methods used for the empirical research of this thesis to answer the research questions on whether or not the target organization expresses dynamic capabilities proposed in the literature. This chapter will explain the research methodology, why this case was selected, and the nature of the data collected as well as how it was analysed.

3.1 Qualitative single case as the research method

As this thesis can be framed as seeking to provide evidence for theoretical claims often some rigorous quantitative method would be used to statistically prove such claim or show presence of something in an organization. This would be a good approach if the aim of this study was simply to identify presence of well-defined things. The signs of the capabilities sought here are however deeply embedded in multiple facets of the organization from formal processes to specific people and culture that are difficult to quantify in a meaningful way. Moreover, the somewhat open ended and divided nature of current dynamic capabilities framework benefits from a more flexible research methodology. Rather than simply seeking a yes or no answer on a specific organizational element's connection to change capabilities, I aim to discover which elements of theoretically proposed capabilities are present and how they might impact the organization's capability to change. This requires a more flexible approach that is suitable for discovering new aspects of the matter being researched, rather than confirming statistically that set thing is or is not. For this a qualitative approach is best suited.

Additionally in researching organizational change, its context from external factors to cognitive and behavioural reactions of its employees is important, as noted by Garcia and Gluesing (2013), when discussing different kinds of research questions and -areas where they have often seen qualitative methods used and used specifically to "*address change phenomena and issues.*"

Use of qualitative methodology is further justified due to limitations of access to the case organization. Qualitative research, in this case series of qualitative interviews, can be done with access and cooperation from lesser number of organizational members that with quantitative methods such as quantitative questionnaires which would require significantly

larger number of organizational members to respond for statistically meaningful analysis to be possible. Even if responding to a qualitative questionnaire would be a lesser request than a full interview, the number of participants would still likely have remained low. This also supports performing the study as a single case study, allowing for greatest detail and depth of material from the case being studied.

To properly achieve what is required here rich data on organization is required, and this should not be limited to data from a single point in time. As the capabilities researched consider change and changes, especially major ones, take time, the data should also be collected that describes the organization over time. To better achieve this level of depth I chose to focus on a single case organization for this thesis and analyse public reporting material from several years.

The company I have selected as the case company is the OP-financial group. It was selected for this thesis is due to significant change efforts the group has taken in recent years. This is expected to make group's change capabilities easier to identify through group's actions, successes, and failures. To this end I have collected material and data from a time period starting in the beginning of the year 2013, before the organization engaged in many of the major change efforts it has experienced in recent years.

Additional opportunities from researching this specific organization were presented by a recent change of executive director in early 2018 as the research period reaches into 2019 for public reporting of the firm and early 2020 for the interviews. This situation gives possibilities to note effects of top management on dynamic- and change capabilities through differences noted before and after the change. The change in leadership resulted in significant change in the company direction and types of changes it engages in.

3.2 Data collection

Research material this study is based on was mainly acquired from two primary sources, first from the firm's own public reporting over nearly seven years (2013-2019), second from one to one interviews with current employees of the researched organization (during period of Nov/2019 – Jan/2020).

As both the researched company reporting and the interviews were in Finnish, any references or quotations of those in this study are translations by the author. To avoid misrepresentations all translations are made to be as direct and literal as possible.

3.2.1 The case organization

OP financial group is a Finnish financial group formed of cooperative banks. Currently the group operates in three main business segments of banking, insurance and wealth management. The strategy followed in recent years prior to change of executive manager sought to move from pure financial institution into a multidisciplinary service company for digital age with strong financial background. This meant ventures into new businesses, most significantly into health care and welfare market under Pohjola Terveys. According to the strategy this was to be built into a fourth major business segment. The insurance business itself is an older example for a large-scale change and expansion as integrating it into OP-group happened only in 2005 following acquisitions of over two billion euros.

These major changes still ongoing at the beginning of this study and pressures for further development of existing segments due to digitalization and changing customer demand, made OP-financial group a suitable and interesting case to explore in study of organizational change. Since then the organization has made changes in its plans but this too involves a large change project with even larger impact on the employees of the existing segments and business areas.

At the end of first quarter of 2020, the group had approximately 167-member cooperative banks (according to the quarterly report for the first quarter). This number has shrunk in recent years often through mergers of banks. The group consists of the member institutions to the OP cooperative (central cooperative) and such companies that the members hold majority of the voting power. The group itself doesn't have owners as a normal corporation would, but instead the cooperative banks of the group have customer-owners.

The cooperative corporate form of the group importantly reflects on the goals and purpose of the organization. They do not have owners to produce maximum profit for. In their reporting the group has regularly stated that their actions are directed by a dual role of business- and community role. In business role the group must maintain solvency and viability while providing products and services. In community role OP has stated its goal to

promote long term success of its surrounding community. In practice this mainly means the Finnish society as this is the home- and main market of OP group.

3.2.2 Firm's public reporting

The initial data collection consisted of publicly available firm materials such as quarterly and annual reports with additional attention given to executive directors' comments in them. The executive director's comments are approximately page long summaries of the quarter/year of the report that provide the most general standard and compact descriptions of the group's state. For other parts there could also be differences based on variation of people working on these reports while the executive directors' comments should be most consistent.

The reports as a whole were also used in a separate and different analysis from that which only focused on the director's comments. There were however some reports where the comments used for an end of the year reporting were in a different report than the financial statement and annual report used in the analysis of the wider reports. All of this material was acquired from webpages of the OP group.

3.2.3 Interviews

As the public reporting was insufficient for the research at hand the data collection was expanded with one to one interviews with employees of the case organization once these were successfully arranged. Due to nature and limitations of access in the organization enabling these interviews and seeking to focus the research all interviews were done with people working in OP corporate bank. This is part of the same financial group and closely tied with other organizations of the central cooperative including operating from the same building and going currently through the same agile change of their organization and way of working.

There were total of five interviews held between November 2019 and January 2020 all of which were held in Finnish. The interviewees were chosen by series of recommendations from previous interviewees following the first one which was recommended by other employees during a career event. Not everyone who were recommended responded to the

request for interview. The interviewees varied considerably in their background with length of their employment in OP group varying from less than a year to over two decades. Four out of five interviewees hold positions that could be considered leader/managerial positions varying from middle/lower management to higher level leaders within the corporate bank. Everyone stated that they have been involved with the changes OP has gone through. Some referred also working with creating strategy.

The interviews were semi structured in nature with an interview guide structured after identified elements of dynamic capabilities. Between 1 and 3 questions relating to each individual element of dynamic capabilities model were included in the interviews. Also, more general natured questions of the interviewees and question relating to change in OP and its environment.

The guide was made for approximately one-hour interview but could have benefitted from more time. Due to setting up time and restrictions from interviewees' schedules many of the interviews lasted closer to 50 minutes. With varying length of answers to questions one or more questions had to be skipped in majority of the interviews at the interviewer's discretion based on what kind of material had already been gained from previous interviews on each question.

3.3 Data analysis

While research material was collected mainly from two sources, public reporting and interview, there were total of three separate analyses. First the executive directors' comments on quarterly reports were analysed separately following Gioia methodology in the purest form that it was used within this study imposing minimal predetermined structure to allow for discovery. Secondly the same quarterly reporting was analysed as a whole seeking to highlight signs of dynamic capabilities based on a predetermined structure. Lastly the interview transcripts were analysed also taking advantage of Gioia methodology.

3.3.1 Analysis of public reporting

In analysing data, it was important to note details in described actions and attitudes and especially, to recognise repeating themes and changes over time. To provide valid scientific

value the analysis and recognition of different elements needed to be rigorous and transparent in how these themes were recognised. Analysis of data for this thesis mainly draws on Gioia-methodology as presented by Gioia and Corley (2012). This is a methodology where the analysed material is systematically through multiple steps condensed to expose themes and wider dimensions actually presented in them. The methodology can work especially well in discovering or developing new concepts without being too bound to expand on previous constructs. While the final purpose of this study is closer to latter, the use of this methodology for part of the analysis has allowed for a more open ended understanding of the organization and its development before colouring the analysis with the expectations derived from dynamic capabilities literature. This methodology was used especially on detailed analysis of the executive director's comments.

At the first stage of analysis or 1st order analysis large number of categories emerge from the material and is systematically coded. Gioia and Corley (2012) specifically note that at this stage the analysis should *"faithfully adhere to informant themes, we make little attempt to distil categories"*. The goal is to identify categories of things said in the text, or other analysed material. Gioia and Corley (2012) mainly discuss use of interviews. As they also note the number of categories/codes at this level can become very large. In this thesis just the coding of executive directors' quarterly comments yielded more than 120 individual codes. The coding used is best described as descriptive seeking to present and condense the primary topics of the comments rather than for example emotion coding - using codes to mark emotion present in the material. To aid in the analysis I utilized Atlas Ti 8 program.

For the second order analysis researcher seeks similarities and differences seeking relationships and structures among the first order codes in order for second order themes to emerge from the material. For this thesis connecting codes to each other was assisted but not solely directed by co-occurrence between codes in the materials. The assumption here is that codes that are repeatedly linked to same bit of text are more likely to be thematically linked. In case of the directors' quarterly comments, the original mass of codes was condensed into 15 code groups/themes. They can be seen in table 2 in findings chapter.

At this stage we are in theoretical realm (Gioia and Corley 2012) and for the next step must ask: *"Whether the emerging themes suggest concept that might help us describe and explain the phenomena we are observing."* For this thesis the themes from executive directors' comments formed four very distinct categories presented in table 2 in findings chapter. Two

of them relate strongly to recent changes and difference between the directors while two others relate to two important elements of the business in general.

These themes and categories further allowed evaluating the changes over time in both the organization and its executive directors' commentary on the situation. This portion of the analysis was inspired by two strategies for theorizing presented by Langley (1999), quantification strategy and temporal bracketing strategy. I first sought to quantify the directors' comments based on the relative frequency that the different themes and categories were coded in their comments. I did this at annual level comparing frequency of each theme to total number of codes for said year. Hence possible difference in the length of the comments and the total number of codes between years will not bias the result. The goal here was to determine what topics reserved largest share of attention each year. The results can be seen in graphs 1 and 2 and they revealed three mutually distinct periods. In accordance with the temporal bracketing strategy (Langley 1999) this allows the organization state over time be analysed in limited number of more distinct blocks. Findings that separate those blocks are further discussed in findings and discussion parts of this thesis.

For wider analysis of quarterly and annual reports to evaluate presence of dynamic capabilities, I used the above described methodology in a reversed way. Rather than constructing codes, themes and larger concepts organically from coding of the material, I built these structures based on the literature review or the dynamic capabilities model and its applicability to change. This is justifiable as key purpose of this thesis is to identify if dynamic capabilities suggested by literature are present. As such a theory-based model is reflected against the researched material rather than building an organic model from said material as with initial analysis of the director's comments. It should be noted that these comments are included in the overall analysis of the quarterly and annual reports in addition to their own separate analysis. The structure of the coding system used is presented in appendix 1.

3.3.2 Analysis of interviews

The analysis of the interview data was based on two fundamental elements. First the interview material was subjected to an analysis with Gioia methodology as described for executive directors' comments in previous section to identify themes and concepts. These demonstrate the content of the data for the findings with more analytical rigor than simply

taking the interviewee's answers to each question. Many of the resulting themes and categories could be directly linked on some aspect of the structure built to present dynamic capabilities. The results of this analysis from first level codes to third level categories are presented alongside the findings chapter in appropriate sections. They are also collected in the appendix 4.

Additionally, while there were also open-ended questions, a large part of each interview was structured to directly question the interviewees on an identified aspect of dynamic capabilities, such as questioning what kind of information the organization follows in its environment or how/how much employees encounter each other. The answers could then be directly compared to what literature suggests.

3.3.3 Bringing the analysis together

To structure the final analysis and findings the analysis and results from both public reporting and the interviews were reflected against an analysis structure of the dynamic capabilities model developed from the coding system used for the analysis of whole quarterly reports with predetermined codes to represent the dynamic capabilities. This final analysis structure provides for more concrete questions on what things add to the organization's dynamic capabilities and what go against them. The analysis and findings then focus on answering those questions. For example: Does organization set significant or unnecessary limits on internal information sharing or not? Does the culture accept experimenting and failure or not and is this changing? The goal was to clearly present if the findings would match the dynamic capabilities model and what would not.

This final analysis structure is utilized in structuring the findings chapter and is also presented in the appendix 2.

3.4 Considerations and limitations

There are several limitations to consider with the research methods. First is the limited generalizability of a single case. The study can demonstrate the presence of suggested capabilities or their elements in a company experiencing change as theory would suggest but

cannot prove they exist in all companies experiencing change. Finding that the case organization

Second, all interviewees for the interview portion of the research came from the corporate bank of OP group meaning the interview discoveries apply specifically to the corporate bank. While it operates from same location with all other organizations of the central cooperative, the applicability of the discoveries to rest of the group can be questioned due to this focus in the interviews. On the other hand, the interviews are more focused on this specific organization and this focus potential for deeper discoveries accounting for the limited number of interviews. The other part of the research, group's public reporting, applies to the group as a whole.

4. Findings

This chapter presents my findings from the research done on OP financial group in general and within it OP corporate bank in specific seeking for signs of dynamic capabilities as identified from literature. Findings based on OP's public reporting concern the whole group while interviews represent view from within the OP corporate bank. The interviews and analysis structure were largely based on sense, seize, reconfigure model by Teece (2007) with separation of dimension of learning for separate analysis. The second part of this chapter follows the same structure with individual elements adjusted since analysis of public reporting. Before that, the first part provides background by describing the group's state and changes between 2013 and 2019 based on the executive directors' comments in quarterly- and annual reports.

4.1 Organization's recent history according to directors' comments

The analysis used Gioia method to discover themes from the material that constituted four distinct categories or topics discussed by the executive directors. The categories and analysis code groups representing different themes are presented in table 2.

To better understand the firm development over the period studied, I have adopted principles from quantification- and temporal bracketing strategies for analysis (Langley 1999). Comparing the coding for executives' comments on year by year basis and reflecting on relative appearance of each code group or higher theme within each year, reveals three distinct periods in OP financial groups during period 2013-2018. These can be seen in graphs 1 and 2.

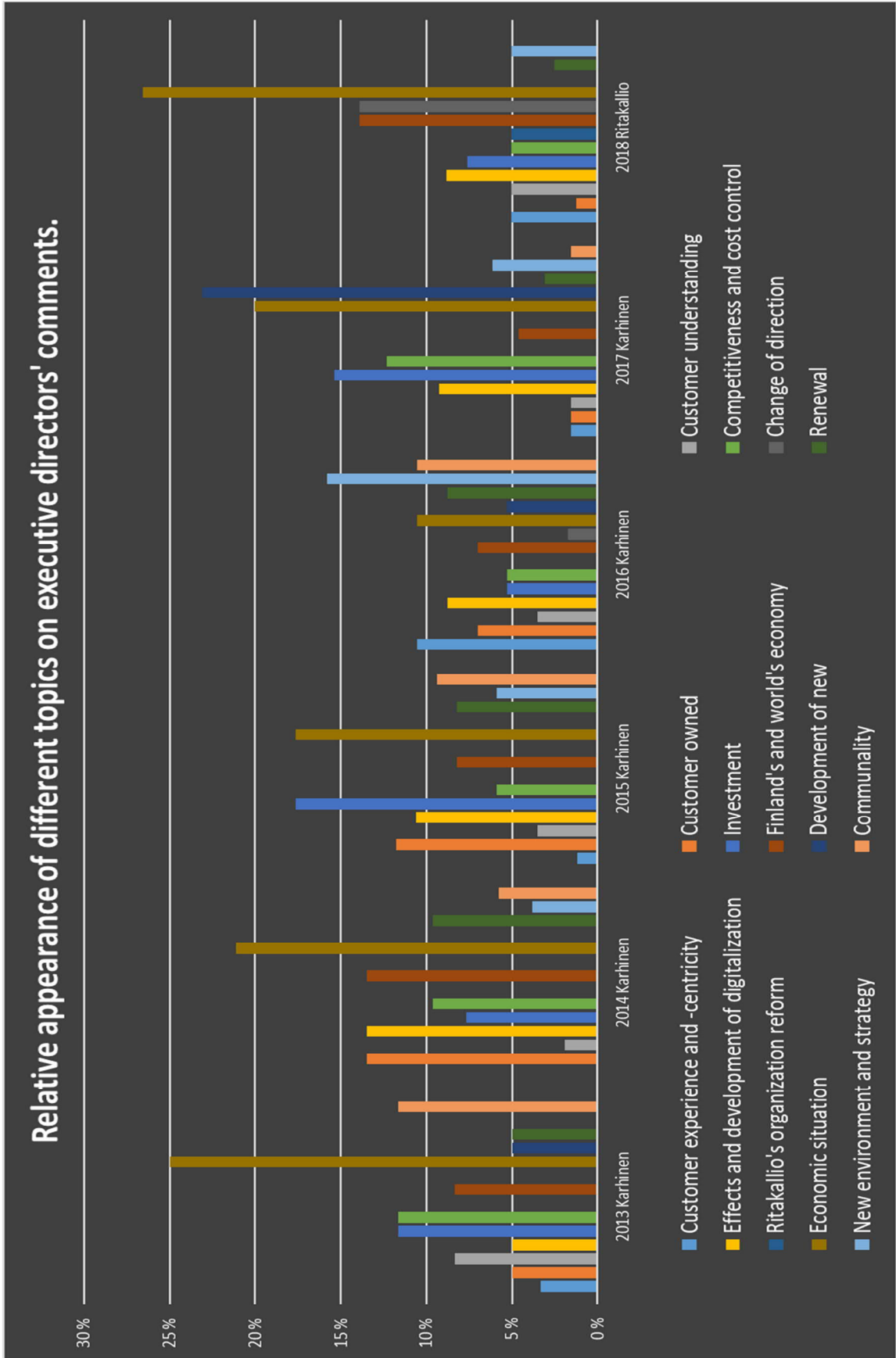
Third stage categories	Renewal of the firm	OP's special position and importance of customer	Economy and competitiveness	New more conservative direction
Second stage themes	Effects and development of digitalization	customer experience and -centricity	Competitiveness and cost control	Ritakallio's organizational reform
	Investment	Customer understanding	Economic situation	Change of direction
	development of new	customer owned	Finland's and world's economy	
	renewal	Communality		
	new environment and strategy.			

Table 2: categories and their associated code groups from executive directors' comments.

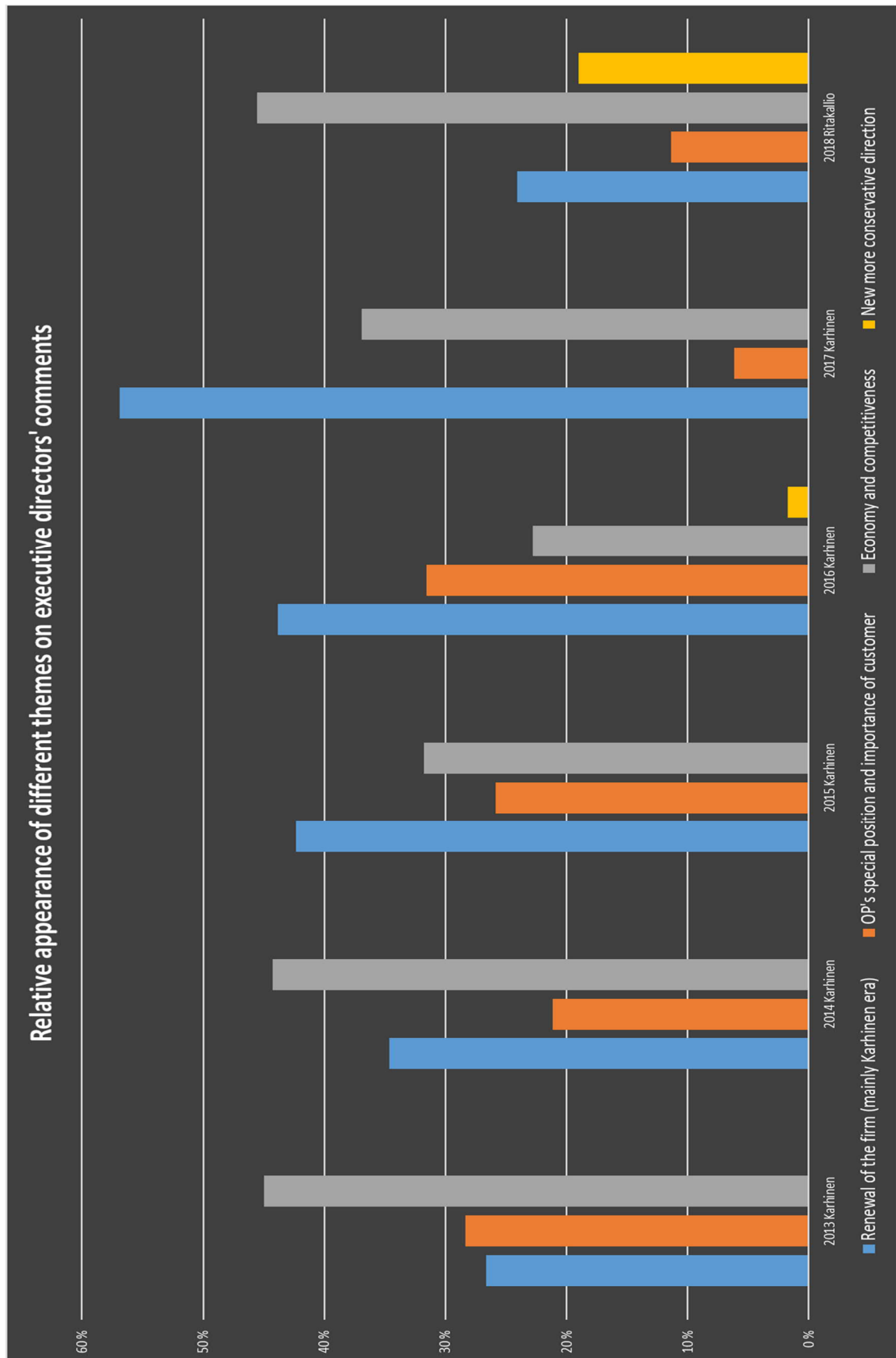
4.1.1 Era 1. 2013-2014

In 2013 and 2014 commentary of the executive director was mainly focused on highlighting economic successes of the firm and much of the discussion on firm and its future was based on development of the existing business. Expenses were noted as something the firm was keeping or would keep competitive with more focus on stating that they are low or will be controlled rather than justifying expenses as would be seen later. There is a significant attention to strong solvency and further improving it. Main purpose of high solvency is stated to be in securing OP's basic operations and funds of their customers. Focus on immediate finances and competitiveness here is understandable, especially as the global financial crisis and resulting recession were still more recent events. Even though the comments commonly highlight the good state of the existing business, such success could well contribute to lesser interest for risky change. While the data is very limited the comments suggest low preparedness or at least willingness for change and risk-taking during this era.

There was at least one change though as OP returned more clearly to its roots as a customer owned cooperative which was major topic in comments from 2014. Overall, the customer and OP's nature as customer owned cooperative are a topic strongly present



Graph 1: the relative appearance of different themes in director's comments



Graph 2: the relative appearance of four categories of themes in director's comments

4.1.2 Era 2. 2015-2017

The last three years of Karhinen as an executive director were the years of great change and renewal for the company. During this period OP sought to redefine itself as a financial group and expand to new areas, most prominently healthcare industry, which could connect to existing insurance business. This period is most clearly visible in the graph 2, the renewal of the firm was the dominant topic in his comments during the period 2015-2017.

A central part of this new focus on change was and is the firm's new strategy that was approved in summer 2016. This is the basis for the large changes such as starting to move towards multi-industrial service company. On the other hand, there are also negative or at least risky changes as well as changes on how some things are presented. While expenses were previously something to be controlled, this period starts seeing increases in expenses, but does not focus on treating that as a problem that should be addressed. Rather this growth is explained with the renewal processes and investment. Besides expansions to new businesses the group also invested in its existing businesses and saw significant increases in development expenses, so while group's expansions to new areas was the most visible change process there were also other developments and launches of new services especially online and mobile services. These kinds of expressions suggest the understanding and willingness to take on the cost of change, but can naturally be a risky path, if expenses run out of control.

Customers as well as the customer owned nature of the group is often referenced by the executive director indicating the motives of the firm that might somewhat differ from those with more common ownership structures and a pure profit seeking motives. This is further reinforced by the movement from a mixed ownership structure to completely customer owned that started already in previous years and was fully completed with changing Helsingin OP, that formerly had stock, into customer owned in the beginning of 2016.

The customer ownership does not mean that OP engaged in its change effort simply to offer a wider array of services out of the goodness of their heart. The decision as indicated by the executive director was result of earlier sensing actions by the organization, especially most extensive analysis of their environment in the firm's

history that was completed in early 2016, only months before this new strategy was approved. The changes identified in the financial markets drove the firm to change.

4.1.3 Era 3. 2018 ->

The last period included here is more distinct from the others here as it is separated from them not only by analytically noted differences in narrative presented in executive director's comments but by a concrete retirement and replacement of said director along with many other individuals in organization's top leadership upon new executive director assembling his team. These changes took place during the year 2018, mainly during early parts of the year.

It should be noted that shortness and recentness of this period so far limits the available material in terms of the director's comments in comparison to the earlier five years. The most current information on the organization is presented with research findings specific to dimensions of dynamic capabilities that also benefit from the interview research conducted after the analysis of directors' comments.

The period under Ritakallio's leadership could be best described as change of direction, or at least change of rhythm. Recognition of changing world and the need to adapt has not gone anywhere, but visions presented under new management are no longer as radical. This can also be seen in topics Ritakallio focuses on (graphs 1 and 2) with economic situation of the company dominating his commentary, followed by the surrounding economy and comments I have classified as the group "change of direction" that includes codes such as cancelling previous plans, clarifying focus, or renewing the management.

This change of direction is perhaps most clearly stated by Ritakallio in quarterly report for quarter 3 of 2018 where he notes that the OP group's vision and strategy were inspected and strategic priorities clarified. He stated that:

"Our goal is to be the most attractive financial group in Finland,"

"During the remaining strategy period we will focus on guaranteeing the competitiveness of our core business and evaluate our service collection especially weighting the benefit to owner customer."

These statements are in contrast with the earlier push for more extensive service company that formed a key part of the previously stated strategy. They can be reasonably described as representing a more careful approach that could also be considered to more closely follow conventional wisdom about focus on core competences of firms. Afterwards Ritakallio has initiated a significant organizational change with the ongoing agile change, which is aimed at renewing the existing business or as some interviewees stated responds to same customer needs in new ways.

4.2 Identified dynamic capabilities

In this section I will discuss the findings from analysis of both firm's reporting and interview research conducted specifically for this study. The findings are structured based on Teece's (2007) dimensions of dynamic capabilities and the structure for the analysis presented in the appendix 2.

4.2.1 Sensing

This section focuses on aspects of the organization that help it monitor the environment and discover both opportunities and threat. OP has an advantage here as monitoring and being on top of the business environment both domestically and internationally is a key part of its business as a financial institution more than for an average company, but to determine its sensing capability, a deeper evaluation of the organization is needed.

4.2.1.1 Access to information

- + Organization does not unnecessarily implement rules to restrict internal sharing of information (ie. when not required by law) (progress in this is still being made)
- Organization is limited by significant external limits on information sharing

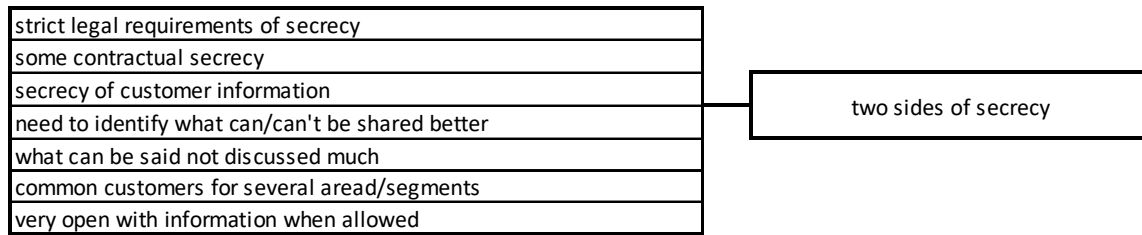


Figure 2: interview analysis, two sides of secrecy

The rules and practices of sharing information in OP and OP corporate bank are heavily defined by the requirements placed on them by laws and regulations as a financial institution. There are banking secrecy, secrecy of customer information and different insider groups from which many things cannot be told outside, perhaps not even to the supervisor/manager. The laws on such matters can be strict. This is a topic that was consistently brought up by all of the interviewees while other details varied. It is also strongly present for the topic of what factors OP follows in its environment (4.2.1.3 Information the organization should be aware of).

On the other hand, the interviewees expressed that beyond what is legally mandated as secret they are very open with little restrictions on what information can be shared. It was even indicated that at least within the corporate bank there is quite a large amount of openness of management agendas and decisions. As described by one of the interviewees:

“We have... a management board, where tool called Teams is used that is open to all of our approximately 300 people, so all see the management board’s agendas and things and what has been decided about them.”

There are however differences on how good they view the organization to actually be in this at the moment. In general, they see the organization as going to a more open direction. Some however see that there is more distance left to go than others. It is not necessarily always completely clear what could and what should not be shared. One interviewee especially called for the need to better identify what information could be shared.

The development towards more open information sharing and the need for it is also closely tied to the major change of implementing agile organization model which includes a philosophy of information being open and available to allow people to participate. Extra challenge pointed out by one of the interviewees is that many

customers can be customers for many segments at the same time. This would benefit from a more open communication. Considering such concerns, the interviewees' stances on being on the right path toward but not there yet seem most credible.

+ Organization provides tools to share information

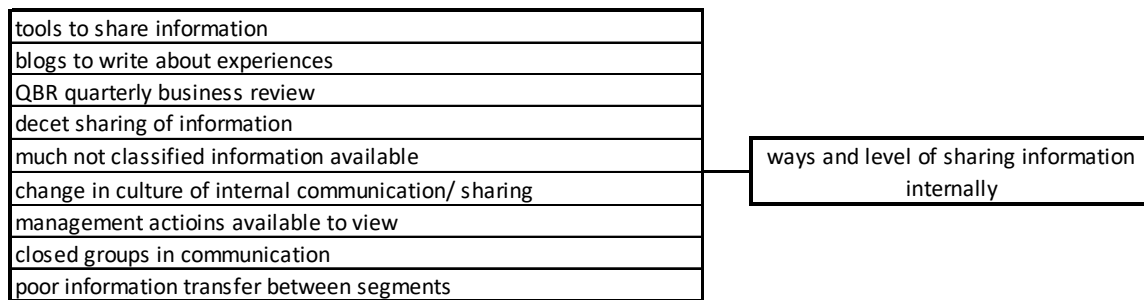


Figure 3: interview analysis, ways and level of sharing information internally

OP has several collaboration and information sharing tools such as intranet or Teams, though even with those the sharing and availability of some information can be restricted to specific groups. Ways and level of sharing information internally was one of five themes constituting the category of information and learning and constitutes mainly of concepts like specific information sharing tools, and openness of information and management actions.

+ People from different departments/parts of organization are physically in contact by common working spaces/-locations.

- Organizational structure separates people into silos/groups

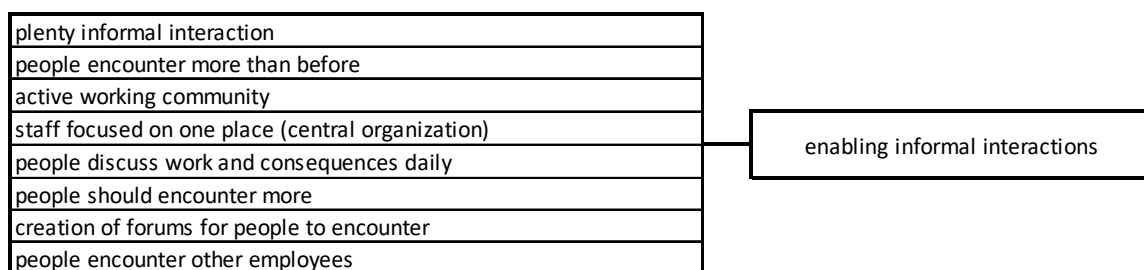


Figure 4: interview analysis, enabling informal interactions

An advantage of OP group indicated by one of the interviewees is that excluding the cooperative banks themselves, the central organizations and related firms of the

groups like OP corporate bank, are all located in the same single headquarters in Helsinki. This headquarters also has very much shared lunch and meeting spaces increasing the interaction between different departments and segments.

“Perhaps one strength is that we are here in the capital region. Could almost say that all personnel are in this one place, like for the central cooperative conglomerate. Of course, branches are their own, but it kind of helps that people run into each other.”

This is good since the group structure and separate firms within even the central organization is not the best organizational model for promoting interaction between departments. The interviewees’ explanations of the new agile structure also indicate that service processes would be done as much as possible within a team though this is not 100% possible, it suggests less interaction outside the team as part of the work.

4.2.1.2 The culture of trust

To evaluate the trust aspect for sensing the interviews sought to investigate three things. First is the level of interaction between employees, besides what is necessary to do the job and on their free time, human relations that could impact levels of trust. Secondly there is the question of how people react to ideas or thoughts that don’t follow the mainstream of the organization. Thirdly the attitudes towards experimenting and failure were questioned. These factors do not describe every possible aspect and impact of trust within an organization. They focus on how trust impacts organization’s change capabilities, especially sensing, through information sharing and the level of personal risk faced by employees in proposing or experimenting with something new. With good personal relations, trust towards other employees and colleagues/managers who are open to listen to new ideas, people are more willing to bring up ideas and experiment on them. This allows for more chances to discover new opportunities.

+ People are enabled to interact (communication tools, common working- and break spaces)

+/- people are neither encouraged nor discouraged from interacting

With the level of interaction between people the results are mixed, especially concerning interactions outside the closest colleagues of one's team. Some interviewees indicate more such activity while others do not see it as such a clear thing, suggesting it is more of an individual matter. Besides direct statements on the level of interaction the interviewees also indicated several factors of the organization and its structure that impact or should at least enable interactions.

Much of the discussion related to the new structures from agile change and connected matters. The work for example is now done in teams with team being responsible for some matter rather than individual employee being responsible for a specific task. Additionally, reduction in numbers and change in role of supervisors and different types of managers in the organization changes the work of those who do or used to work under their supervision. These require increased cooperation and communication at least within the team. Based in the interviewees description the perfect agile structure would have each team doing a whole service to customer which would have contrary impact on people's interaction between teams, but this hasn't been possible in practice for OP due to the nature of the business. For the level of interaction of people in the organization this limitation seems to be actually positive.

“Now us due to this nature of the business we have not been really able to create such teams that could produce it (the whole service to customer), which means that there are contacts in work matters to other teams daily.”

There was however a suggestion that different segments would still be rather separate.

To the extent that people are not communicating and interacting, the interviews seem to indicate that this is not, or at least should not be by lack of ability or opportunity from the organization. One strength of OP, more specifically its central organization, is the concentration of all functions physically in a single place at Vallila Helsinki. Hence employees have plentiful opportunities to encounter and interact

also beyond their teams, segments, or companies of OP-group. Beyond physical encounters several communications and cooperation tools were indicated by the interviewees. I have already discussed these under “4.2.1.1 Access to information.” In summary they are useful tools but often access to information and specific groups in these systems can be limited to a specific group of people rather than open to facilitate wider interaction and participation.

+/- Organization has developing attitude towards experimenting/failure

+ Organization is becoming more accepting of experimenting/failure

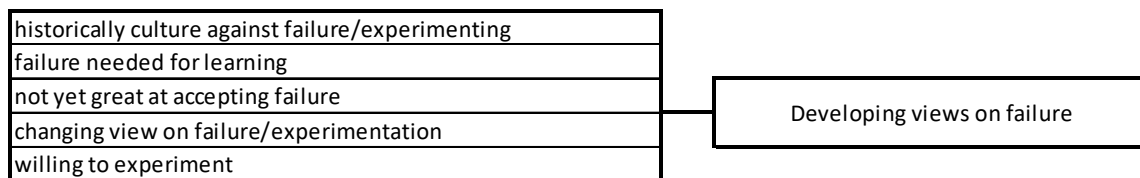


Figure 5: interview analysis, developing views of failure

Concerning openness to new ideas there is too some uncertainty in in the interview responses, but all interviewees leaned towards the attitudes being positive and/or open to new ideas. There were also suggestions that OP and its people could still be better with this, but these suggestions were not as strong or common as with the matter of access to information. The stronger development and need for further development in the matter of trust and personal risk was indicated to concern willingness to experiment and especially attitudes towards failure.

The general view was that OP has been traditionally not very accepting of failure and that this has been a common attribute of banks and banking industry overall. Everyone interviewed thought that OP is and has recently been heading for a culture more accepting of failure, but also agree that they aren't yet there/as far as they should. On exact state of this progress there is some disagreement two think that they are already on a fairly good ground heading to opposite of previous culture or that failure isn't feared anymore while the change continues.

“Attitude or attitude to failure is changing and attitude towards trying new.”

Others think the importance of failure is still something that has not visibly realized yet or exists in speeches, but people can't actually think of such failure that they would have had.

“Yes, that tolerance of failure or even encouraging it well that probably is not at good enough level yet.”

“That we have started to like speak about it, but no, it has not realized in anyway like visibly, but yes it is like sprouting.”

Latter connected to a view that there is not enough risk taking. Risk taking willingness overall can have many other reasons, but to individual person the trust and personal element of risk are two likely contributors.

More specific topics mentioned on experimentation and failure are experiments and pilots done that were suggested to have matured the organization on accepting failure. One interviewee especially described them as building experimenting culture, but as stated above they are not there yet. Importantly it was expressed that this direction of progress has the support of top management.

4.2.1.3 Information the organization should be aware of/follow

+ consumer needs information

+ rules and constraints faced by the organization information.

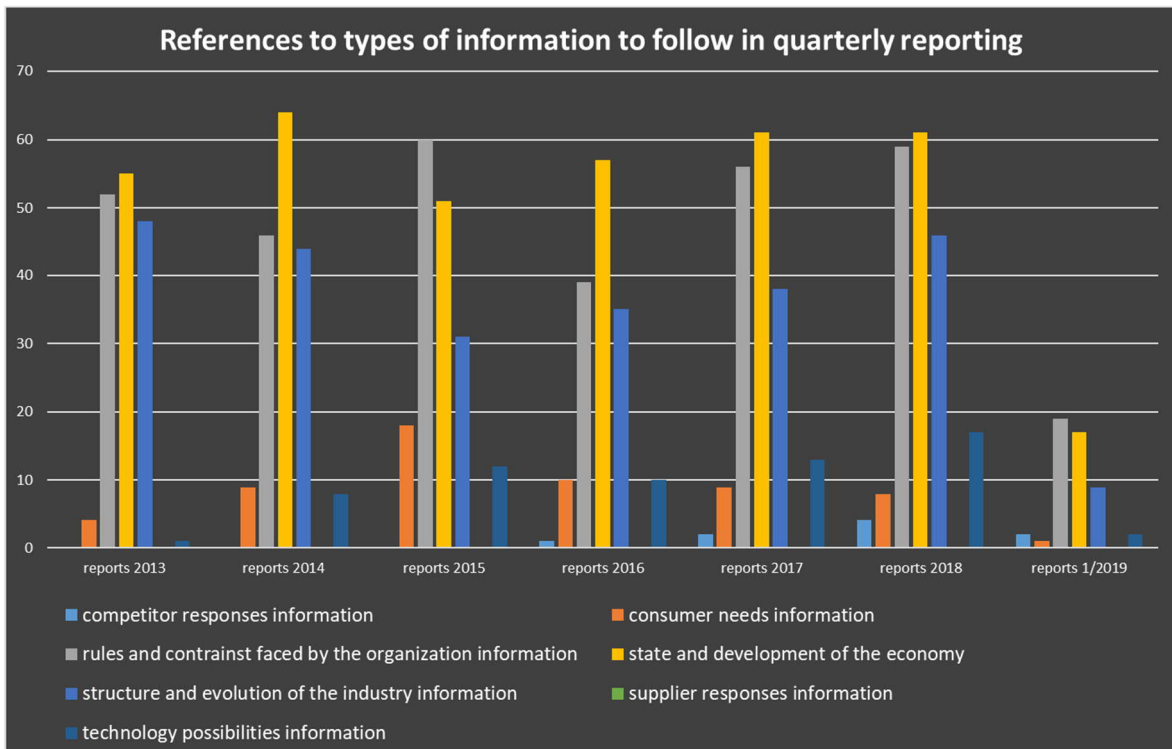
+ state and development of the economy

+ structure and evolution of the industry information

+ technology possibilities information

? supplier responses information

? competitor responses information



Graph 3 the number of references into types of information for the organization to follow in public reporting

As a financial institution OP needs to follow the market and business environment extensively and has separate personnel for that. One of the people interviewed for this research even stated it would be easier to list what they do not follow. The group reporting however gives some indications on what the organization pays especial attention to.

This analysis of OP's reporting assumes that dedicating space in reports to certain area of information (as listed by Teece 2007) indicates the organization's awareness and attention to them overall. Those that do not appear as prominently are more likely paid less attention to or considered lesser priority, though this should not be considered a definite indication of ignoring such information. OP discusses most of these, but there are clear differences in space and attention given to different areas of information, and the different areas of information can be divided into three groups based on how often they are identified in the reports. Notably the issues OP follows, and level of attention given to them is heavily influenced by the nature and industry of OP.

The most prominent areas of information in OP reporting are information on the state and development of the economy and the industry as well as rules and limitations imposed on the organization. In general, these represent ability and limitations of the organization to act and drivers for development.

As the financial industry banks and investment funds are closely entangled with the entire economy and the state of the economy is often measured by measures that are directly part of the financial industry such as stock prices and interest rates. The result is that discussion on state of the economy and state of the (financial) industry are strongly entangled and cannot always be separated. This is most clearly visible in the description of business environment that each quarterly report dedicates a page to. OP's executive directors have also regularly addressed Finnish economy and what should be done to it, in their director's comments. The interviews support the view of OP following the economy and market with a very wide perspective. To reference one of the interviewees they follow industries, as in all industries and it might have been easier for the interviewee to list what they don't follow.

In the analysis of quarterly reporting the state and development of the economy is the most prominent area of information with industry information being third most frequent appearing.

Similarly, OP's attention to and presence of laws and regulations in their reporting is significant as there is large amount of regulation targeted at financial industry specifically and it has been increasing following the financial crisis. Many of these regulations are aimed at stabilizing the financial industry and markets, but also present constraints to what the company can do. Regulation and especially its changes and tightening are also repeating topics with the interviews when considering the changes in firm's environment. One person did not bring this out specifically thought this might be due to focusing the answer on longer discussion of other separate issue.

Regardless of specific changes in regulations their importance is reflected by prevalence of references to different laws and regulations entangled with most parts of OP financial reporting. Some new rules and taxes can also present the company with direct costs or otherwise reduced financial numbers. Out of the listed areas of

information references to the rules and limitations are the second most commonly recognized area in the analysis.

I discuss the impact of regulation also under the sections “4.2.2.3 Organization risk taking willingness and ability” and “4.2.1.1 Access to information”.

Of the remaining areas of information technology possibilities and consumer needs are the second most prominent group of information in the reporting. These can be seen as drivers and especially guides to the organization’s development. What people want and what can be done technologically are strong influences on what path organization should pursue. This appears especially in OP’s stated justifications for significant change and renewal efforts usually expressed as digitalization and change of customer behaviour that OP seeks to answer. Besides increasing importance of digital channels for doing business, the reporting is not specific on how OP expects technological development and consumer demands to change, except that these two areas of change are linked. One of the employees interviewed for this research however highlights especially customer demands of speed while other pointed to the advances in speed of processing payments which is one. Digitalization is an often-referenced change that is linked to such capabilities.

Paying attention to consumer demands is also closely linked to OP’s nature as customer owned cooperative and they at least claim to have the customer at the centre of their business. Considering the local nature of individual cooperative banks, the cooperative group structure of OP may bring it close to the customer and provide better local understanding than competitors. At least this is believed by some of the interviewees. The level and quality of communications between local banks and the central cooperative needed to fully benefit from such understanding in larger scale remains unclear. In more concrete way some services, such as renewal of online banking service are stated to have been developed in cooperation with the customers.

The areas of information with smallest, nearly nonexistent presence in the public reporting are competitor responses and supplier responses information, especially the latter one. This is to some extent due to industry and interpretation. OP as a financial institution is not heavily dependent on suppliers, at least the conventional sense of providing products in the value chain. However, institutions like other banks

and central banks even could be considered as suppliers of financing. I have not considered sources of finance as suppliers for this analysis, as OP's awareness of them falls under the industry information. The interviews give similar image. There were no statements of being concerned over something that would be clearly labeled as supplier. Following potential competition, including that coming from other industries received more attention, though most discussion on firm's environment was still focused on wider statements about following markets, industries and changes in regulation in general.

In short OP as financial institution widely follows its environment with specific analysts/economists dedicated to follow the market for example and the research, especially statements by the interviewees did not expose major gaps in information gathered.

"Would probably be easier to list what we don't follow. Are there even those? Yes, we follow like banking market. We follow industries, like all industries."

"I'd say that we follow everything. Well weather we probably follow less, follow in the business." "Banks in provinces probably follow weather too since those are financiers of farmers, so probably have to know about that too."

Environment is followed heavily

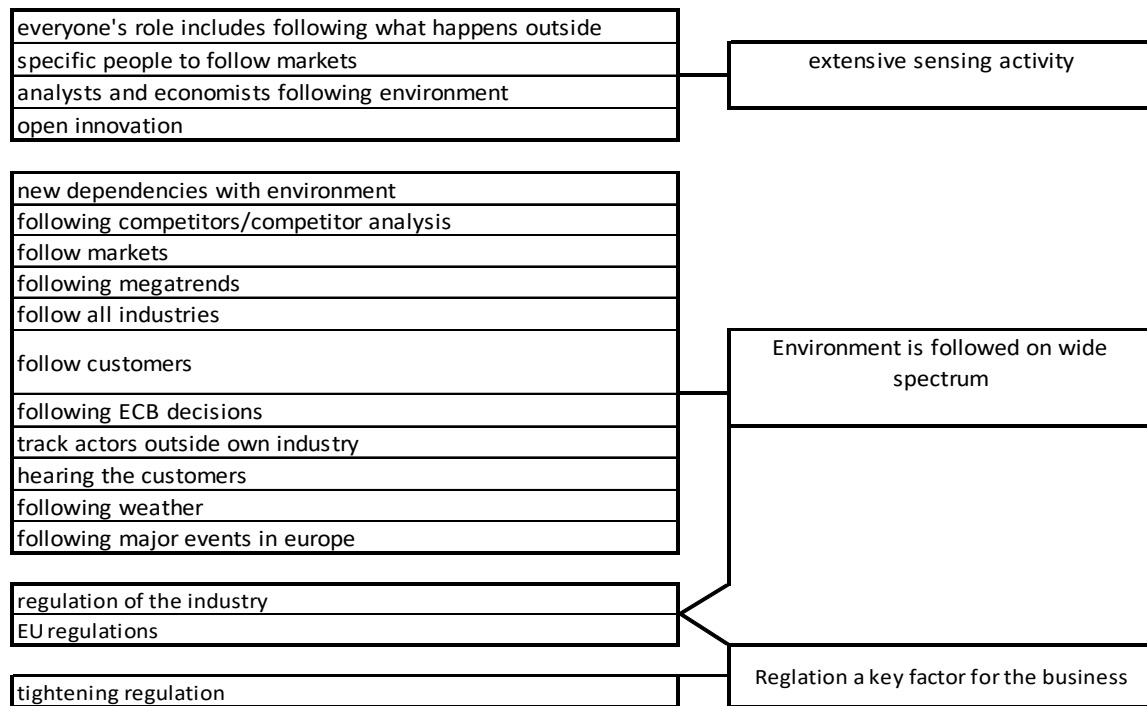
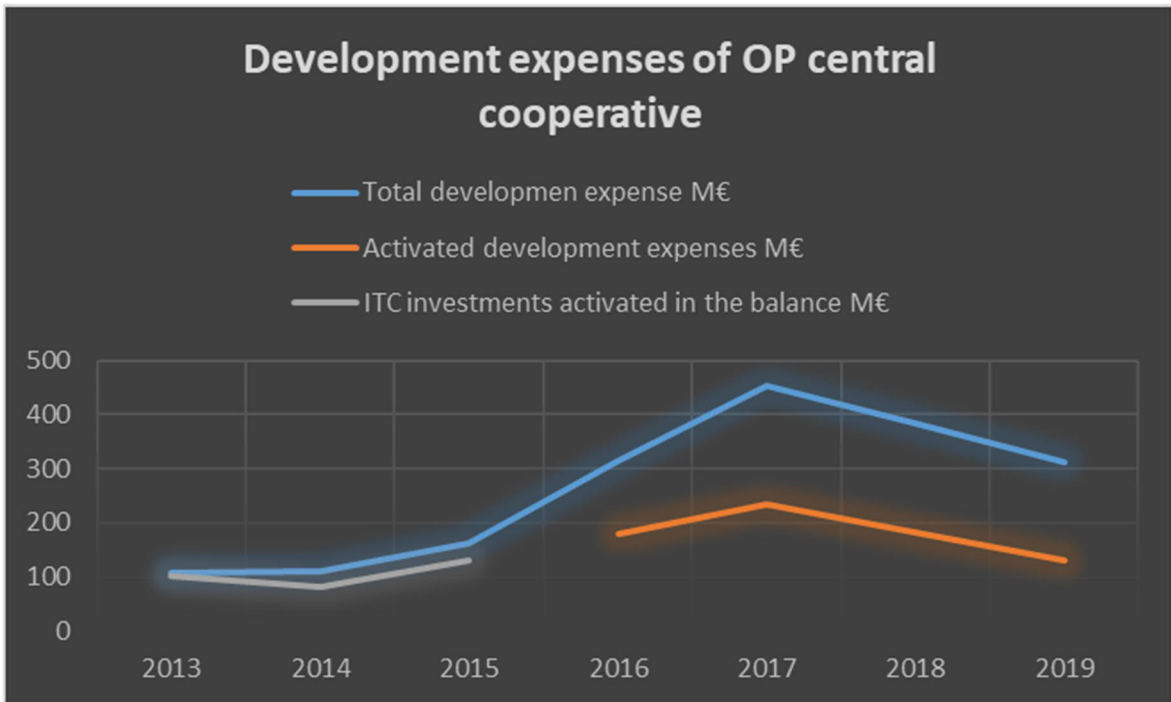


Figure 6: interview analysis, environment is followed heavily

4.2.1.4 Sensing related investment

- + Level of R&D investment is high (historically)
- Organization has reduced R&D investment

One of the greatest concrete indications of OP's increased push for development in past years was the significant rise in their development expenses. The reporting does not specify different costs in a way that investments and other costs related to implementing changes could be separated from sensing specific expenses, but the significant expense dedicated to renewal suggests that sensing related investment would also likely be significant compared to situation with low development expenses. There has however been a reduction in these expenses in the past two years coinciding with change in group's top management and change in strategic direction. For 2019 the total sum was still higher than before 2016 on the research period. The level of development expenses during the research period is presented in the graph 4. Information on this topic is solely based on public reporting and none of the interviewees could comment on the level of investment.



Graph 4 development expenses of OP central cooperative.

+ Resources are specifically dedicated to monitor environment/opportunities

While interviewees could not give specific information of sensing investment, they did make it clear that OP follows the environment and economy actively with people dedicated for this purpose.

4.2.1.5 Local and distant search

Clear focuses

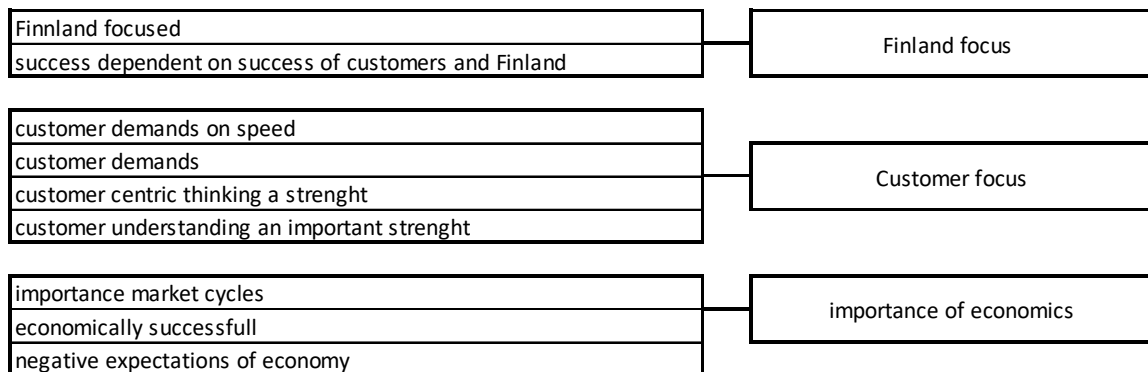


Figure 7: interview analysis, clear focuses

The concerns with evaluation of organization's attention to local and distant search are if they are in healthy balance and appropriate for the organization and its situation. An organization should not forget development of its day to day business to reach for distant opportunities, especially if those have no ties to the current business and capabilities, but failure to at least maintain awareness of such options can be damaging over time too. This applies both geographically and in terms of different industries or ways of serving customers.

In geographical terms analysis of OP is easy. They are focused on Finland and even highlight their Finnishness. This stance is repeated consistently in the interviews. When interviewees were willing or able to discuss "*future business opportunities*" as one of them put it, the most definite stance was consistently that Finland is OP's home market. There are some activities in Baltics, but according to one of the interviewees the main philosophy even there is to serve Finnish companies and their subsidiaries.

"Well, OP-group works in Finland and for certain businesses in Baltics."

"The philosophy for Baltics too is that we seek to serve Finnish companies, their subsidiaries in Baltic region"

This geographic narrowness can be seen as a weakness in terms of narrow search and sets limits to the group's growth. The cooperative nature of the group might impact their view of and ability to pursue such growth compared to other banks. The limited geographical area of the business also does not mean OP would be unaware of matters outside Finland. As I have shown in the previous part about information the organization is aware of, OP is aware of the state of world economy, financial markets and other matters outside Finland.

4.2.2 Seizing

4.2.2.1 Appropriability of organizational structures

The benefits and hindrances of organization's structure and location of power within it (central control vs decentralized lower level autonomy) relate to dynamic capabilities overall and link to several of the dimension. They are here analysed with seizing capability due to close ties between organizational structure and decision-making within it.

+ The OP group has decentralized structure with autonomy

The structure of OP financial group is to large extend determined its basic nature as a group of cooperatives. The financial group consists of autonomous banks which themselves are cooperatives "owned" by customer owners/members of the cooperative rather than being more common limited or public companies or a single company. During the researched period this cooperative structure was even strengthened by moving away from an earlier hybrid structure which involved more traditional ownership.

This form of organization naturally lends it to a decentralized structure with lot of autonomy for individual member banks. Teece et al. (1997) expressed support for such structure as having a positive impact on dynamic capabilities so this aspect of OP can be considered as, if not indicating, then at least supporting existence of dynamic capabilities in the organization.

Cooperative group structure

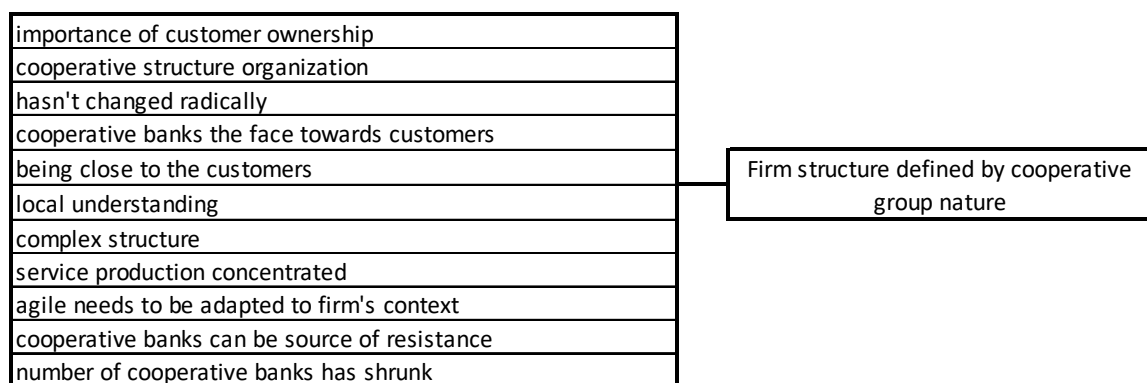


Figure 8: interview analysis, cooperative group structure

+ Departments and teams of corporate bank have increased decentralization and autonomy (agile)

In analysing structure and autonomy of different units for the corporate bank specifically, the cooperative group structure no longer has meaningful impact on the analysis as it works more like a conventional firm inside the group. At this level, the matters of structure and level of autonomy are some of the things most heavily impacted by the most recent and still ongoing agile change. Had the interviews been done months or a year earlier they might have indicated a more bureaucratic and hierarchical structure and control. The interviewees specifically referenced earlier larger number (6-7) of hierarchical levels, traditional supervisory-/manager roles and things like different control groups that the interviewee considered nearly meaningless.

“... this like agile model these changes that have come during two years have taken this thing only in a better direction, that we have very much been able to bring down bureaucracy. We have well like ended many control groups and this kind of decision steps and who knows what which like from retrospect and maybe already then concluded, that they don't have much purpose this kind of decision groups and control groups...”

With the new agile change there have been or are currently ongoing changes to all of these things. The number of hierarchical levels has been reduced to 4, nature of supervisory- and leadership roles have been overhauled and unnecessary control groups have been removed in an effort to bring bureaucracy down. With the analysis one of the identified categories consists of how agile is changing work and within the category the two main themes besides size of the change are increasing team autonomy and change in supervisory roles.

Agile changing work

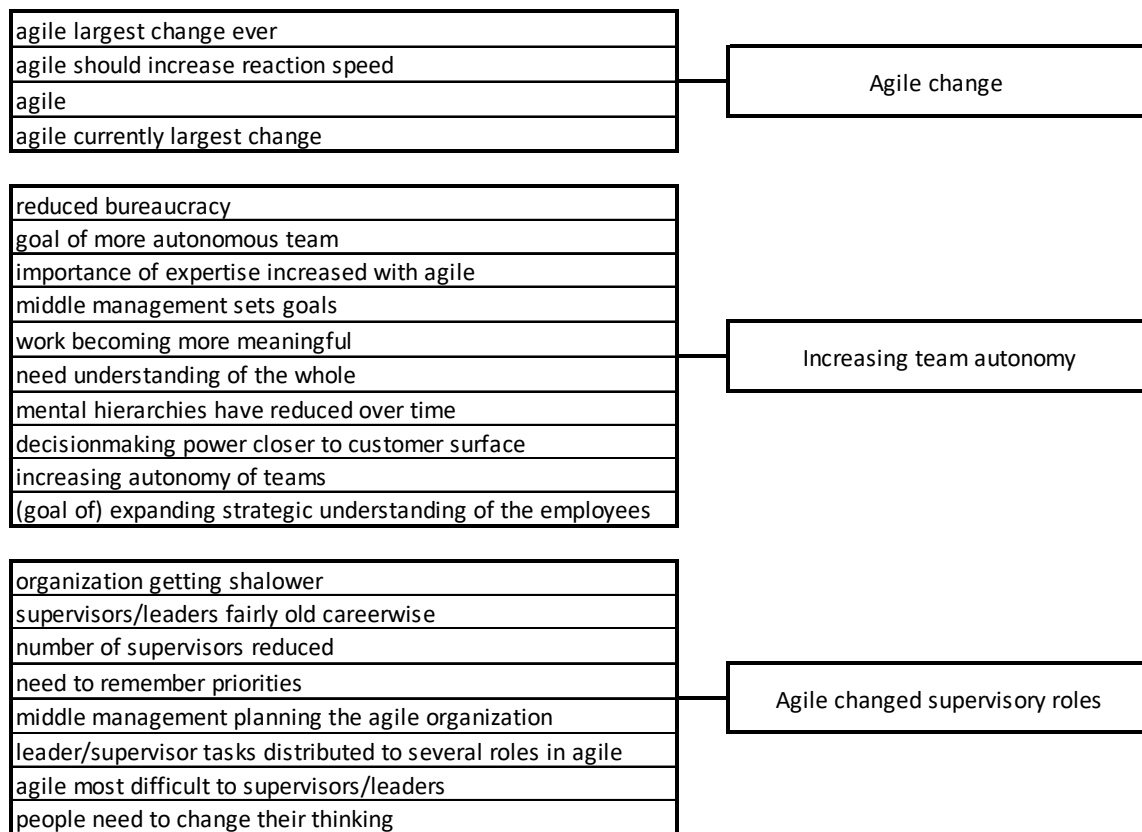


Figure 9: interview analysis, agile changing work

Especially the system of highly autonomous teams in this agile structure suggests the kind of autonomy and flexibility that is expected to support dynamic capabilities and adaptation to changing environment. The description of this structure and teams in also one of if not the most consistent among the interviewees.

4.2.2.2 Decision-making process

In questioning about investment decision-making process, the three interviewees questioned on this answered with different focuses, but their responses on the topic were complimentary. The investment decisions, especially at higher level seem hierarchically and centrally controlled with large frames being made by higher management as annual plans and followed by segment management in “traditional annual cycle” with plans being checked quarterly. This is not unsurprising for an organization as large and old as OP-group but might not offer best flexibility for responding to changes in the environment considering Teece’s (1996) warnings of hierarchies and bureaucratic decision-making. This cannot be said for certain with

available information though, and the descriptions for the top management's role and top down element in decision-making describe them as giving frames to investment levels and defining rough lines rather than claiming total centralized control.

“So, investment decisions are divided so that the highest management gives frames for this whole group's investment level and it divides then like by segments like for example corporate bank and retail bank and insurance. There then the leader of each segment, the responsible leader then decides how that investment is targeted in that area.”

In case of OP group and at least for the corporate bank the “segment” acts as its own company within the group, so above description does not give information for its internal decision-making specifically. Additionally, the third interviewee's description of investments in “certain size range” as business decisions suggests a level of freedom in making the decisions at lower levels of the organization.

“When we move in certain sized scales, which are directed directly to a certain business area, then those are maybe more business decisions than investment decisions in the sense that when we are doing something that if it is as a business case sensible and we are within sensible euro frames, then we can as business make a decision about that.”

To the extent that investment decisions are top management led the nature and capability of that management matters. The interviews generally expressed positive views of the current top management both on their own and relative to the previous top management team. Positive descriptions of the current management included statements that they are open to discussion, listening to people and delegating power. Considering these facts, the decision-making might not be as centralized as it could be with current structures or has been previously.

New management has had major impact

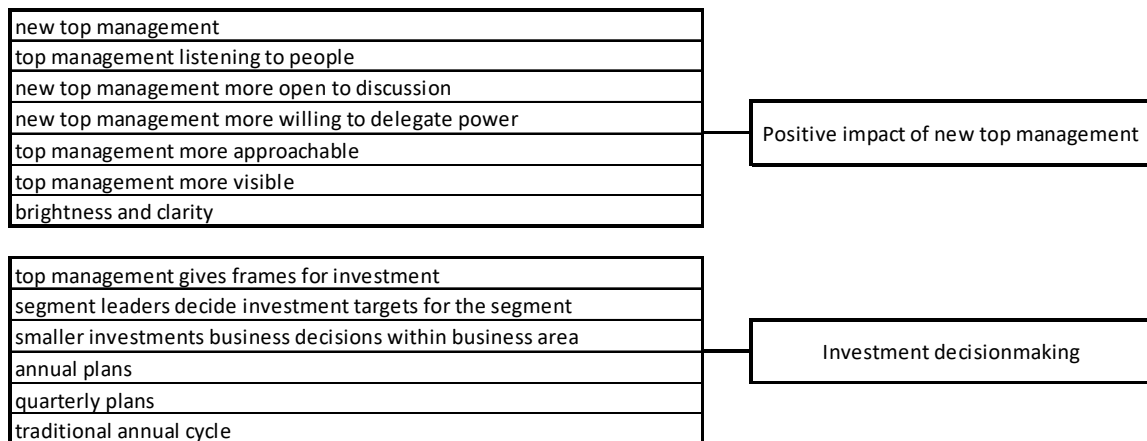


Figure 10: interview analysis, agile changing work

Additionally, the individual cooperative banks have their own independent of businesses that the central cooperative does not fully control. Even these however are restricted in the level of risk they are allowed to take. This is regularly explained in the group’s annual reporting.

In short, the investment decision-making for the central cooperative and related organizations seem to be fairly conventional in how major investment decisions are made, but the cooperative group structure means there are large number of banks in the group making mostly independent decisions.

4.2.2.3 Organization’s risk-taking willingness and ability

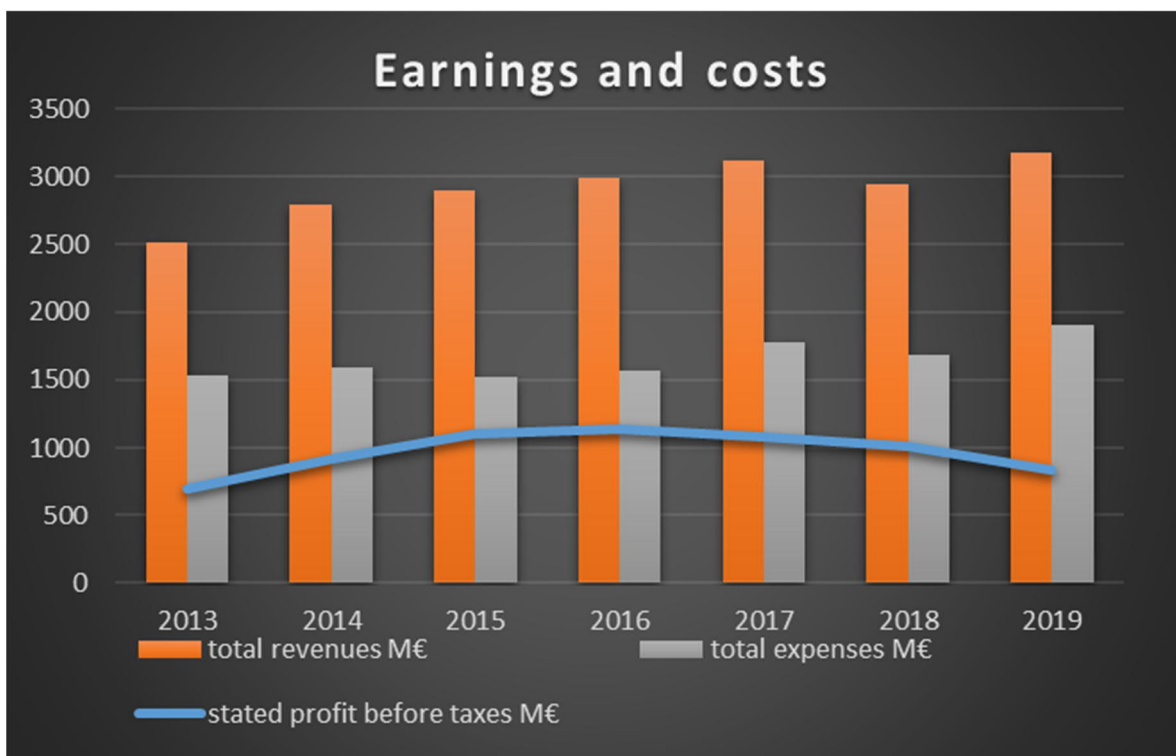
For this element of seizing capability, the study focuses in two aspects. First is the financial state and development of the organization that enables and restricts the organization’s ability to invest or take risk. Second is the attitude towards and the level of willingness to take risk.

+ Is in good financial situation

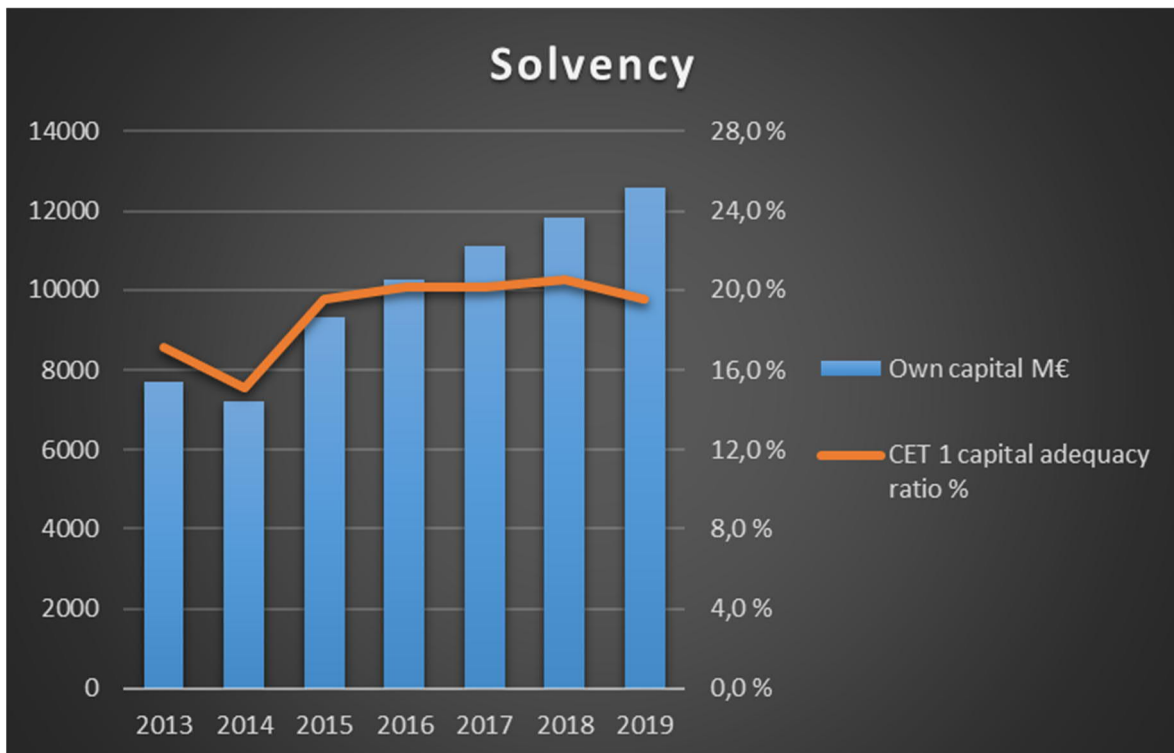
- Has deteriorating financial situation

During the research period OP- group has had several financially good years reaching its all-time record profits of 1138M€ in 2016. This was one enabler for heavy investments and expansions to new business experienced during the later years of the previous executive director the “second era” , but those pursuits also

increased costs as the themes of profitability and cost control diminished in the executive director's comments. The positive financial growth has stalled in recent years impacted by both revenues and costs as seen in graph 5. This has likely contributed to some of the different and perhaps more careful choices following the change in leadership. In latest reporting the financial strength of the group still remains strong, but with the economic downturn from 2020 pandemic, there is increased possibility of financial difficulty and uncertainty. This may limit risk taking willingness at least temporarily.



Graph 5: OP's revenues, costs and profit 2013-2019



Graph 6: information on OP's solvency and financial security 2013-2019

Since the case organization is a financial institution the financial risk-taking ability is also heavily influenced by legal rules and regulations which have increased before and during the researched period. The effect of these regulations is two sided. On the other hand, they seek to increase the financial stability and security of the organizations impacted, but at the same time those limits restrict the room the organizations can operate in. In addition, there are additional costs caused by the regulation.

- + Publicly claims strong risk-taking ability or willingness (public reporting and or statements by management)

In its public reporting OP has consistently claimed a strong ability to carry risk and described economic state that has been strong and primarily better each year.

“Strong risk-taking ability and moderate goal level of risk maintained the credit risk position as stable.” – Q3 quarterly report 2019

+ Has undertaken significant (risky) change recently (with current leadership)

+ Statements of being willing to take risk (in interviews)

- statements of being risk averse (in interviews)

Willing to change

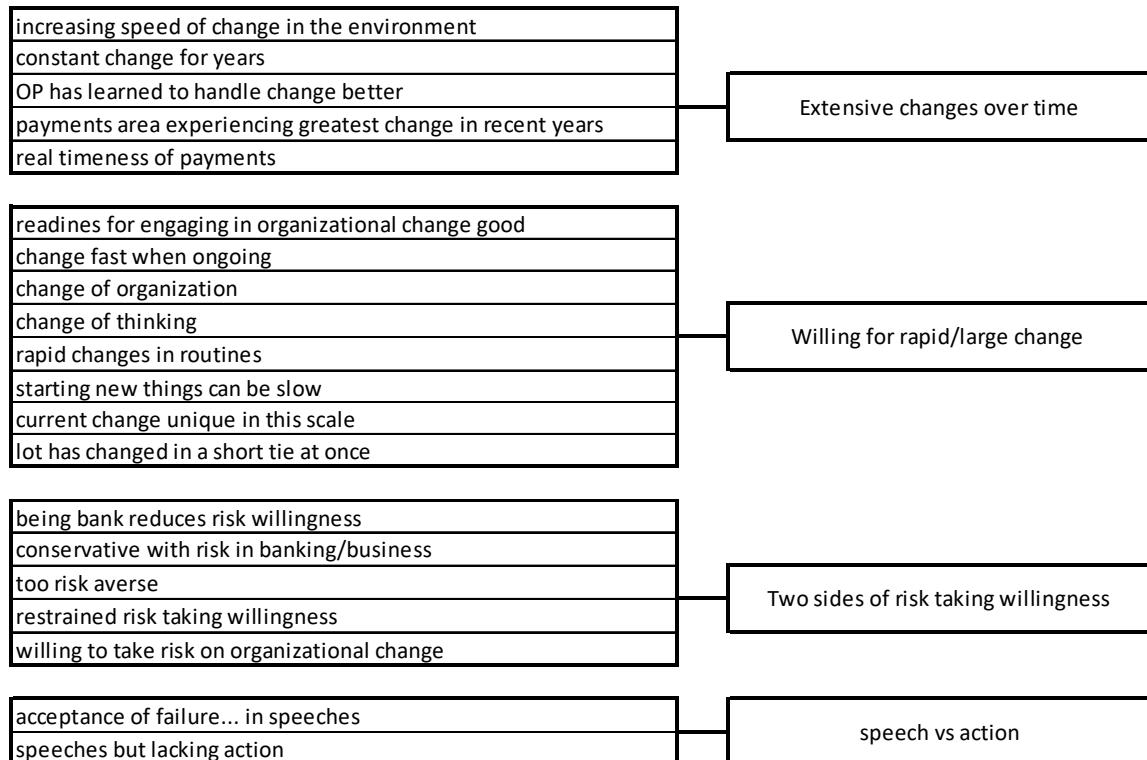


Figure 11: interview analysis, willing to change

The second aspect investigated is the level of willingness to take risks. This is distinctly different from the concrete financial ability to take the risks and reflects the attitudes of the organization and the people in positions to make decisions for it more than any definite number in the financial statements. The interviews also bring up the question of what kind of risk is being taken making a difference between financial risks in their regular business and risks involved in significant organizational change.

“so maybe perhaps this like for external... like... business risks conservative, but for this kind of own change and this like quite this like forerunner view.”

While several of the interviewees expressed views of limited risk-taking willingness suggesting that OP as a bank would be, especially traditionally conservative or that they cannot as a bank take unreasonable risks, the ongoing major changes in its

own structures and ways of working demonstrate significant readiness for radical and as such risky change. One of the interviewees condensed this difference and effect of different types of risk by stating that they are conservative to external business risks but more forward looking for their own change, which also does involve risk.

4.2.2.4 Sustaining base competences

- + Actively invests in technology
- Stagnant or shrinking investment in technology
- Lack of technological capability has limited what could be done (according to public or interviewee statements)

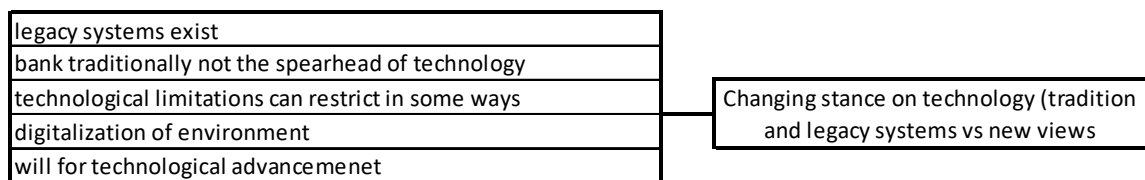


Figure 12: interview analysis changing stance on technology

In terms of technological competences some of the interviewees indicated OP's background as a traditional bank as possible weakness. This is based on an idea that banks would not traditionally have been at the spearhead of technology and that there are or were lot of legacy systems with many base systems having long lifespans. There was also a suggestion by one of the interviewees that sometimes there might be the will to do something that is held back by the organization's technological capabilities or their insufficiency.

“Then we have to remember that when speaking about financial industry we have certain legacy systems that exist and can be that sort of organisatory technological capabilities don't match the enthusiasm and will that might otherwise be in the organization in which case it can be sort of or people otherwise would have, that it can be in certain way a braking factor on certain areas.”

Based on the graph 4 for OP development expenses a lot should be invested to changing this, though the development expenses have gone downward in most recent years.

One of the interviewees also suggested that the identity of the firm, or banks in general, would have changed towards a view of them as technology companies, but this was only suggested by a single person. Importance of increasing digitalization of the world however cannot be refuted and OP's online and mobile services suggest capability here.

4.2.3 Reconfiguring

4.2.3.1 Identity and culture and their change

- + Changes in identity or culture that are favourable to dynamic capabilities
 - + Developing views on failure.
 - + Changing stance on technology
 - + Flexibility of the identity that allows change

In discussions of identity along with culture both changed and unchanged elements of these were pointed out. On one hand some interviewees thought that the identity had not really changed or were uncertain if it had. Others and in other contexts during the interviews the interviewees suggested change in the identity or culture. Generally, the points about changing identity relate to specific aspects of how things are done or viewed rather than the general foundations of the identity and indications of these changes could also come up outside discussions of identity specific questions. Examples brought up in these findings would be the cultural change in attitudes towards failure and technology with a mention that banks are increasingly seen as technology companies rather than just traditional banks in context of discussing the maintaining of the organization's technological capabilities.

“Dates back to like that in the banking world there is a fairly hard thinking today that the banks are seen almost more as a technology companies than traditional banking actors.”

Loss of people during changes and entry of new ones over time further adds to the extent and speed of these changes.

The changes and strategy of expanding to new business areas in later years of the previous executive director Karhinen also likely impacted the identity of the organization in a more fundamental level as the stated goal was to transition from traditional financial actor to a multidisciplinary service company. With interviews held in late 2019 and early 2020 there however was no indication of such identity, though the interviews were held specifically for employees of the corporate bank of OP group which would continue financial business either way. With change of direction following change in top management it seems reasonably safe to assume that the fundamentals of the corporate identity as financial institution were not changed significantly in a permanent way.

The balance between changing and unchanging aspects of the identity can be summarized as serving the same needs in new ways or as stated by one of the interviewees:

“The business doesn’t change into anything from the agile, that still customer needs are the same and so, but the way how these things are done, the culture and practices they, they have changed.”

The unchanging foundation of the organization like the basis of customer owned cooperative structure can provide steady foundation while the changing parts represent adaptation. The changing view on technology is a direct adaptation to the environment. Change in culture towards being more accepting of failure supports the existence of dynamic capabilities and capability for change by better enabling the organization and its people to experiment and try new things.

Changes in culture and identity

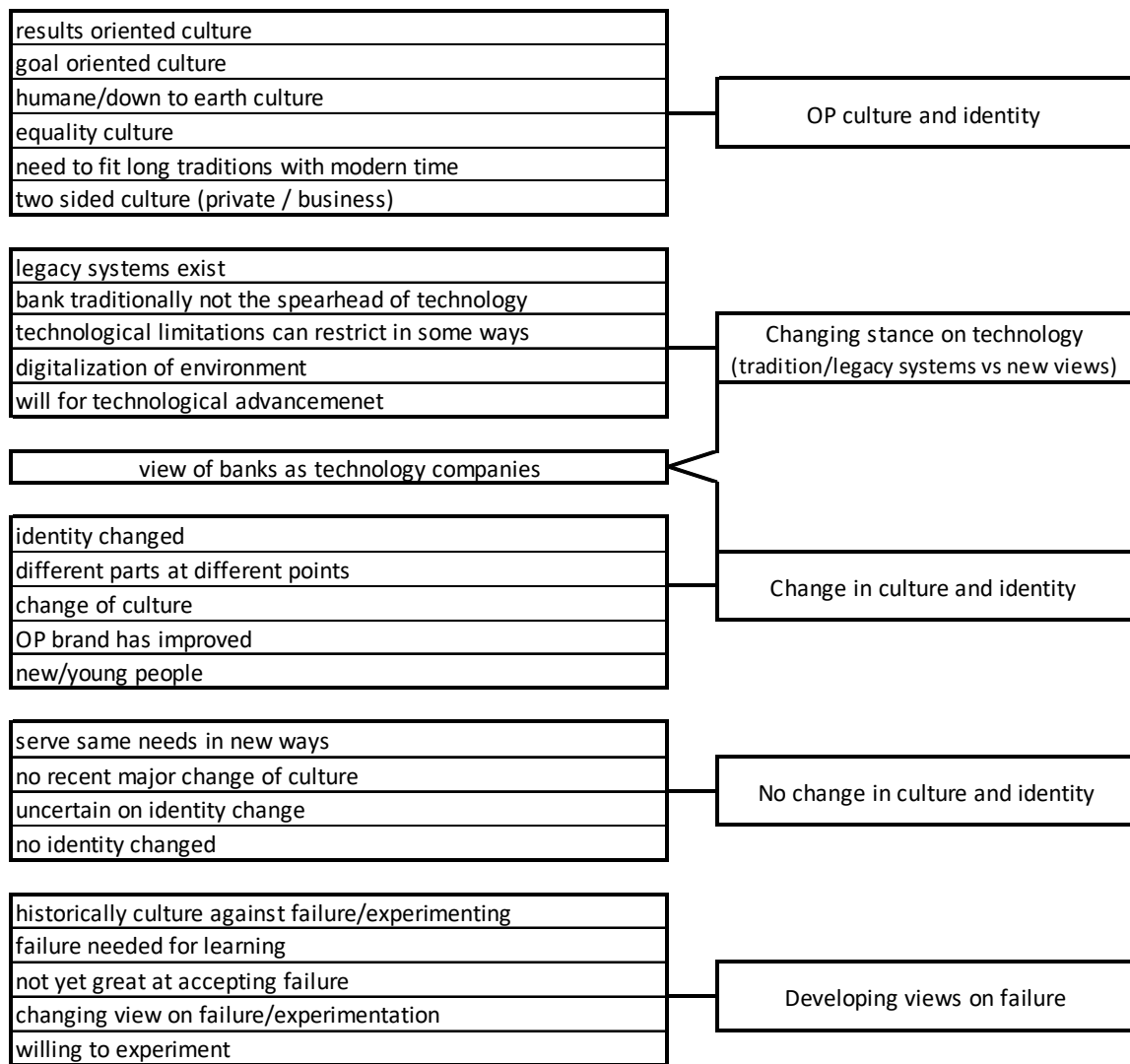


Figure 13: interview analysis, changing culture and identity

4.2.3.2 Routines

+ capable of both incremental and radical change

- repeated changes over time cause additional resistance

With the routines the main questions are how fast and significant changes in routines the organization has been able and willing to do as well as the consequences of these. With the interviews being done during a major overhaul of organization's structure and ways of working it was immediately clear that the willingness and readiness to engage in such a radical change. The groupwide changes and expansions to new industries in previous years can also be described

as radical changes but for most people outside those expansion efforts they likely did not change the routines of work significantly. One interviewee described changes in routines of the work before 2019 as “cosmetic” followed by the big change of agile.

Whether this change can be declared as success it is too early to say as with the total cost of the change, but there has been a cost. The most obvious is people leaving or being fired and how that could have affected the rest. In direct discussion of changes in their work and routines the interviewees did not express major issues or costs from the change except for statements about people leaving or being fired and some positive statements of people being involved in change. Especially relevant for the discussion about changes in routines is also an observation by one of the interviewees about how willingness to change something is lesser if it was already changed in recent past as this would be a negative indication for the ability to do repeated incremental changes and changes overall following a large one which in a way is also a cost of that change.

“That, maybe it now that we have made changes really largely that those sort of changed areas have now somehow gotten stuck. So now when we have gone forward in this agile model and noticed that hey that which we did a year ago, well it isn’t a good thing after all. So now in the light of new information and experience we should change that which was changed over a year ago, then no more willingness is found for that.”

There were also more details about opposition to and caused by change across the interviews overall that are discussed in the next section.

4.2.3.3 Support for change

Level of support and opposition to change?

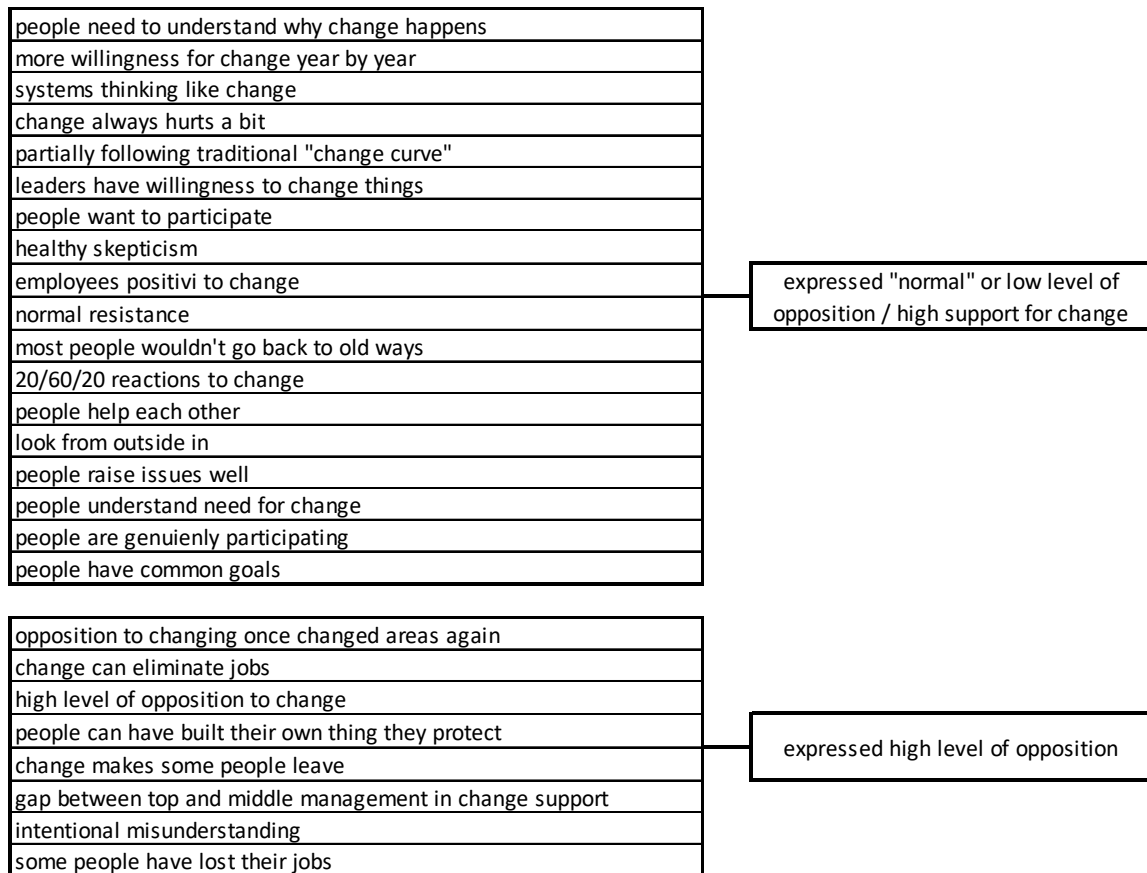


Figure 14: interview analysis, level of support and opposition to change

The overall levels of support and opposition for change among employees proved to be difficult to evaluate reliably due to clear division in how such matters were described by the interviewees. In the analysis 8 quotations and 8 codes were grouped under “expressed high level of opposition” while 19 quotations and 18 codes were grouped under “expressed ‘normal’ or low level of opposition / high support for change” with 2 quotations and one code existing at the edge of these groups. Significant difference in these numbers is balanced by stronger statements and narrower spectrum of the group representing higher level opposition.

Significant questions on reliability of this data are raised by how types of responses vary between interviewees. Out of the 8 statements coded in the group for expressing high level opposition for change five were made by a single interviewee of five with other two being made by two different people. Statements grouped as expressing views from “normal” change opposition to high change support were

spread between other 4 out of 5 interviewees with one making 8 out of 19 such quotations. Hence the view on this matter appears to depend heavily on individual questioned without clear consensus though majority of the interviewees seem to lean on the side that opposition to change among OP employees wouldn't be more than "normal" opposition with many happy expressions of positive views on change.

Responding to opposition

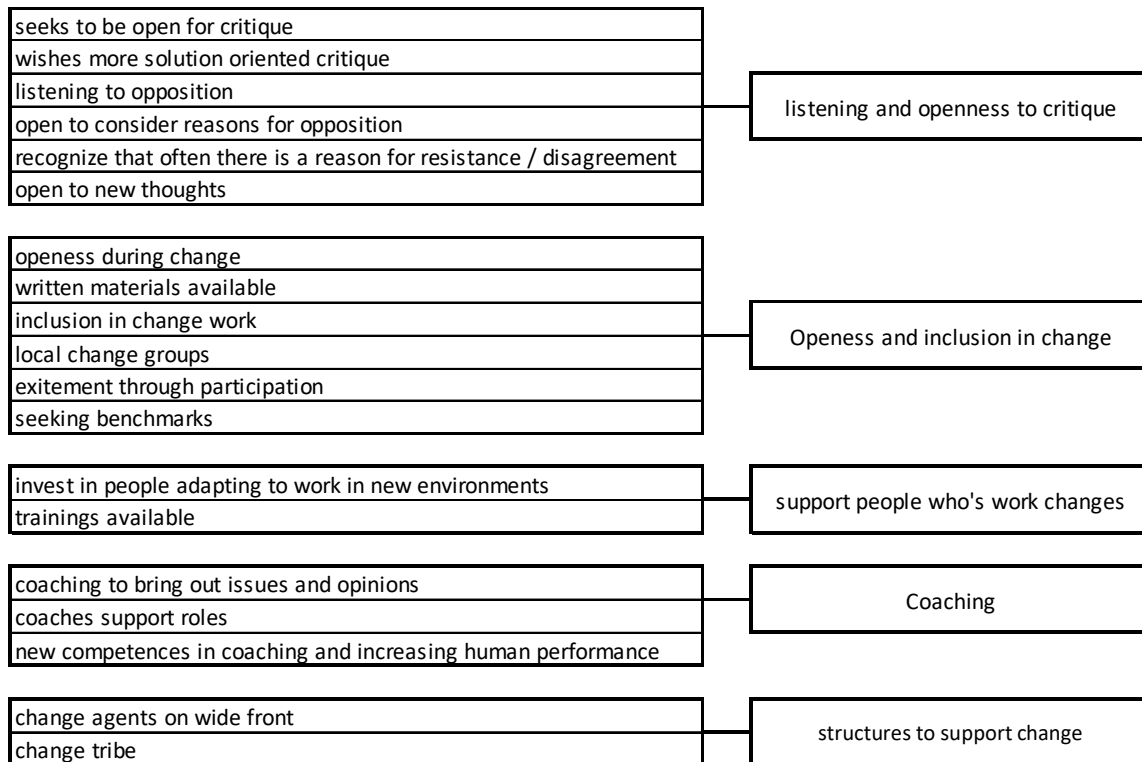


Figure 15: interview analysis, responding to opposition

There were also many references to positive changes in attitudes or culture among people and development how opposition is addressed or prevented. There are attitudes and culture towards change and its consequences that were identified by the interviewees and impact organization's change capability. These are coded under themes for different levels of support and opposition for change in the above code structure from the analysis. As stated, before low or normal opposition and high support were more commonly indicated by the interviewees than high opposition. While this conclusion comes with some uncertainty one example of the change in attitudes towards change is in the description of what kind of reactions were caused by co-operation negotiations and resulting reductions of employees as a result of better understanding of change.

Regardless of how valid statements on positive views of change are, such a large organization can hardly ever claim to have no opposition to change and in this case existence of such opposition was also supported by the interviewees. In discussion on how the organization has responded to such opposition many things from general way of doing things to specific roles and structures were listed, but especially two major themes emerged: openness and inclusion.

The openness here applies both ways. On one hand the organization and its management have sought to actively communicate about the change in addition to the level of openness and access to information discussed in section 4.2.1.1 access to information. On the other hand, there is the organization's and its management's openness to and willingness to listen both critique and new ideas.

“And then of course we have had very open communications and plentiful communications from the renewal tribe.”

The approach towards critique described in interview can be summarized as recognizing that usually there is a reason for resistance and disagreement, and one should be open to consider the reason and what it might entail. There were also some negative views on critique with an interviewee hoping for a more solution-oriented critique and individuals could have less receptive attitudes, but the openness to listen appears to exist in OP corporate bank. No strong statements against this were identified in the interview responses while statements supporting presence of such openness were more common. It was even suggested that there aren't options to listening as one interviewee said:

“Well, as a change agent you can't do other than to listen to people.”

They were also present in the interviewee's descriptions of the current top management of the group with descriptions such as listening to people and being more approachable and open to discussion than previous management.

“I have noticed that there is more readiness for that discussion, more willingness for that discussion” -One of the interviewees on the current top management compared to the old one.

That comparison also indicates development in this area, at least for top management.

The openness to listen people's critique is closely tied with involving them in the change. Including and involving people in the change came up regularly when discussing change and how opposition to it is addressed. When asked about how the organization responds to those opposing change one interviewee immediately said "ottaa mukaan" roughly meaning to take in or include in the change.

4.2.4 Learning

4.2.4.1 Experience accumulation

- Organization has lost many people (lost experience)

While the research gave no significant insight on how well people learn from gaining experience from their work, it gave indications of likely loss of the accumulated experiences. At this level of learning the increase in knowledge and capability is closely tied with the individual people holding the experience rather than the organization as a whole. With the repeating changes in recent years many individuals have left the company or lost their jobs which was also pointed out by several of the interviewees. While they suggested that the organization and its people had gotten better at handling and accepting such changes in personnel, there could regardless be a hidden cost in the form of lost experience which despite the changes is still linked with the same core business that the current top management has returned to the focus.

-/+ educating staff?

In terms of concrete education activities to increase learning and experience accumulation of individuals within the organization the available data was too limited to evaluate state of such activities reliably. Educating and trainings of employees were directly discussed in three occasions by the interviewees in connection to discussion of how the organization responds to or counters resistance to change. These are more useful as part of evaluating those efforts more than the level of learning itself though one interviewee expressed that there are lot of trainings/education available.

4.2.4.2 Knowledge articulation

Out of the three learning mechanisms considered here the knowledge articulation and presence of elements supporting it was most clearly present in the interview research. For this learning mechanism three kinds of processes and organizational aspects were considered. First are more or less formal processes, meetings and reviews that help with knowledge articulation. Second learning is impacted by the more informal meetings and interactions between people, how prominent these are within the organization and how they are enabled and supported.

- + Organization has processes to review, debrief or otherwise evaluate what has been done
 - + Review, debrief and evaluation processes are encouraged
 - Review, debrief and evaluation processes are not enforced



Figure 16: interview analysis, learning

Like many other elements of dynamic capabilities researched here the more formal processes for knowledge articulation are currently in change. Unsurprisingly the discussions on the topic regularly referred to the current change towards agile organization and practices related to that. The main two processes indicated by the interviewees are “retros” or “retro culture” and “demos”. One of the interviewees reminded that regular HR-processes like development discussion are still done and unlike some other things these are not new.

The most referenced process for knowledge articulation directly brought up and discussed by four out of five interviewees is the retro culture / -practice. This is a practice within teams where the team meets every two or so weeks do evaluate how their work has gone, where they succeeded and failed. Limitation of this system is

that the retros are internal for each team (roughly ten people) so it only applies to learning within that group.

A possible weakness of the retro-system and possibly other processes is that while it is required it is not really enforced according to one interviewee. Considering this and the newness of the retro culture it is impossible to say for sure how tightly this practice will be followed. It can be said that these processes exist, and it cannot be said definitely if everyone and every team follows the processes as they are supposed to. One of the interviewees also noted that, at least to some extent, there is talk without action about learning from each other, but others did not bring up such concerns.

Another process mentioned in the interviews by two out of five interviewees were what is called “demos” and “demo culture” and these have people and teams presenting what they do well to other teams rather than only internally within their own team. Interestingly only one interviewee discussed demo-culture in connection to the knowledge articulation related questions. With another interviewee the topic came up during discussion relating to culture of trust. This is an example of the overlap between different dimensions of dynamic capabilities or at least elements that support them. Interactions between people across the organization are important for both culture of trust and learning.

+ People are enabled to interact (communication tools, common working- and break spaces)

+/- people are neither encouraged nor discouraged from interacting

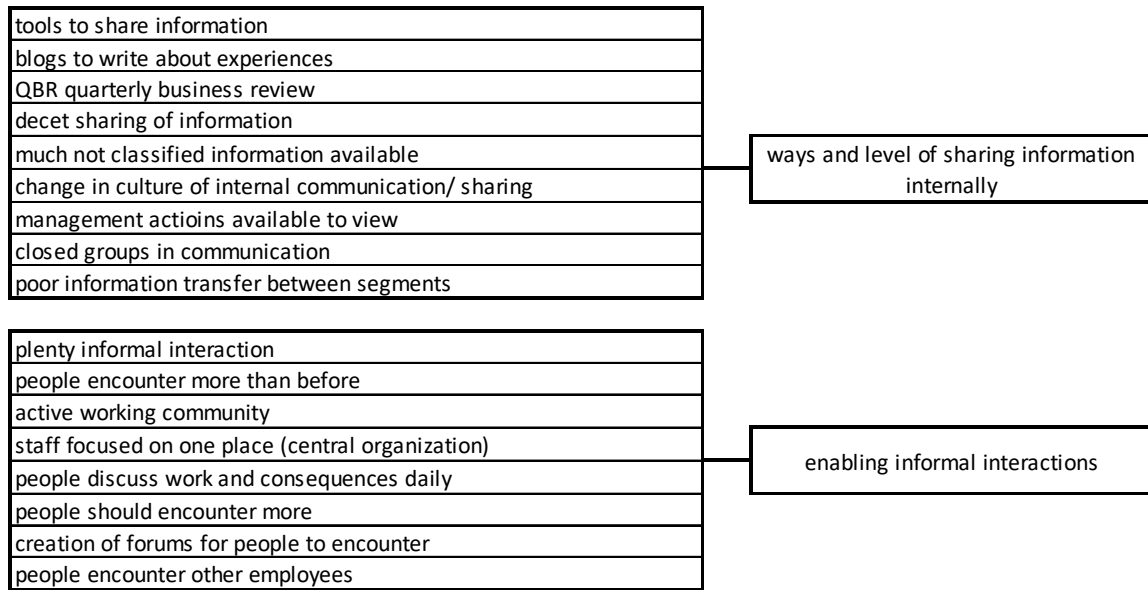


Figure 17: interview analysis, sharing information and enabling interactions

For learning, such interactions when people are for example discussing work related matters are key part of knowledge articulation alongside formal discussions, reviews and other such organized meetings. The matter of people’s interactions was more extensively discussed above in section 4.2.1.2 The culture of trust, but organization in this matter can be described as enabling it in many ways, but not necessarily actively encouraging it beyond that.

4.2.4.3 Knowledge codification

- + Experiences can be shared in concrete (ie. written) form
- If formal manuals/guides exist, they aren’t well enough known

The interview questions which inquired on ways to store and distribute information in a concrete form received answers that indicate both existence of suitable tools and/or processes as well as some uncertainty on the part of the interviewees concerning. About additional question on whether there are any guides or written instruction one of the interviewees answered: “*such probably exist.*” Another interviewee between presenting examples of knowledge codification stated: “*I don’t know if there is any such library which would have these.*” Additionally, interviewees responding to this question tended to give answers with very little in common. When asked about storing and distributing information one discussed formal quarterly

business review process that no one else ever mentioned while others talked about how documentation is saved or how people can write a blog to share some experience.

The sample of people here is very tiny but with this difference of examples and direct expressions of uncertainty on the topic it appears that many tools and processes are available but not necessarily known well enough by everyone. Like with earlier findings on people's ability to interact and communicate within the organization, this situation could be described as the organization enabling should sharing and storing of knowledge, but not necessarily mandating it for everyone. On one hand this might increase flexibility and reduce burden on people by not forcing them to spend time on something they may or might find efficient use of their time. At the same time there is a risk something might not get done enough if the matter is not pushed. Tools themselves are irrelevant when they are not used.

There also appear to be a large number of different tools available to enable forms of knowledge codification. Having too many different tools, internal social media and blogs might have negative effect since people can and are willing to use only so many different tools/systems actively. During the interviews at least following tools and systems were referenced: intranet, Jammer, Teams and Blog(s?). The costs of the tools still exist so return on investment on them is less than it could be. Additionally, knowledge codification would include more formal guides and instructions but on these the interviews provided little information suggesting they, to the extent they may exist, do not play a major role in the jobs of the interviewees.

5. Discussion

In the management literature dynamic capabilities were originally developed to explain firm's sustained competitive advantage in a rapidly changing environment which older more static models could not explain effectively. This naturally relates to the topic of organizational change which is visible in many definitions for dynamic capabilities with word choices like integrate, build reconfigure (Teece et al. 1997), gain, release (Eisenhardt and Martin 2000), extend, modify and create (Helfat and Martin 2015). Soparnot (2011) for example supported classifying or qualifying change capacity as a dynamic capability though he did not consider them exactly the same.

There however are still significant disagreements on various topics concerning dynamic capabilities many of them originating back to differences between the seminal works of Teece et al. (1997) and Eisenhardt and Martin (2000) as addressed in the literature review of chapter 2, such as topics concerning how they provide sustained competitive advantage and how the capabilities themselves work under different levels of environmental dynamism. In this study I recognise the capability to change as a potential key on how to view dynamic capabilities and maintaining competitiveness in changing environment. This study sought to test and demonstrate the usefulness of dynamic capabilities' from the viewpoint of change capabilities which would then also contribute to literature focused on organizational change.

The varying definitions and understanding of dynamic capabilities in the literature also contribute to lack of universally accepted clear descriptions of concrete attributes or actions within an organization that would contribute to the organization having dynamic capabilities and could be clearly identified. Such concrete model was needed for this study to identify the presence of capabilities without resulting in problematic approaches such as claiming the capabilities are present based on firm performance on some measurable aspect. The concrete dynamic capabilities model used in the study was assembled from writings of multiple authors to conduct the research and this in itself can be helpful in generating a better understanding of the dynamic capabilities and what kind of concrete actions, culture and structures might constitute them.

To evaluate and seek confirmation for dynamic capabilities' usefulness as a measure of organization's change capability this study sought elements of dynamic capabilities from a company that was undergoing and had in recent years undergone major changes. Identifying these elements in the organization allows their presence to be reflected against the change

that has happened. For interview research that means mainly an ongoing change to an agile organizational structure and change of working. For longer term view gained from public reporting an expansion of business to new fields plays a major role.

While the findings overall are not generalizable and or yet strictly enough proven to make definite statements of dynamic capabilities as presented here being solid measure of change capability in general, and through that answering definitely to the question of maintaining competitive advantage, the study did reveal enough dynamic capabilities and their connection to change to confidently support this approach and its further study. This presents a way forward for a possible change in how we should think about dynamic capabilities. Next, I discuss some of the most significant aspects of the findings' connections to the case organization's change before my final conclusions.

5.1 Sensing

Out of the dimensions of dynamic capabilities the sensing capability and active efforts towards it are most clearly demonstrated in the case organization. This is partially due to its status as financial institution/bank which comes with need to extensively monitor the economy and markets but the culture and ways of working also largely support sensing activities such as discovering opportunities. This is especially true when taking account most recent and ongoing changes in them though evaluating value of new or still developing aspects to successful change can be more limited than with aspects that have been present long enough to impact identified and complete change process.

An example of this would be the scale of intentional and organized scanning of the environment by the organization. The link between sensing abilities and ability to bring forth change is supported by descriptions in both firm reporting and interviews of actions preceding major changes. Reports preceding significant change in strategy noted the firm's history's largest analysis of its environment and how it recognized the industry as facing large scale change. The interviewees describe in their own ways extensive intentional monitoring of the environment by the organization which supports this. This was the most obvious case where an identified element of dynamic capabilities impacted change to directly address rapidly changing environment, as Teece et al. (1997) described in their definition of dynamic capabilities.

The interviews also revealed that when the new executive director Ritakallio came to the position he queried the employees to map their views. The interviewee did not elaborate on what kind of topics were questioned but described this as the start of the agile change suggesting the change was initiated to respond to the employees' concerns and questions. Here we effectively see two cases where sensing activities incited and provided direction for extensive changes. This supports treating sensing capabilities as change capabilities.

Limitation of these specific examples is that in both most clearly demonstrated impact of central leadership accumulating knowledge and identifying opportunities to base decisions on. At least this is the case within the level of detail available information. They do not demonstrate the full extent of the sensing capabilities' expected role in the organization's capability to change at different organizational levels. The top management is not and should not be the only ones sensing and identifying opportunities. The findings of the research give strong indications for the presence of organizational and cultural factors that are proposed to support the sensing dimension of dynamic capabilities, beyond simply giving information to the top leadership. In terms of their impact on change I could find no clear link to initiation or success of identified specific change efforts in the organization, both the current agile change and previous strategy to expand onto new areas appear to very much originate from the top, with the aspect of listening to employees. While major change efforts did not originate from these aspects of sensing they can still have had effect in changes that organization has gone through.

5.2 Seizing

A key to seizing is implementing changes and investments based on knowledge acquired through sensing capabilities (Teece 2007; Andreeva and Ritala 2016). In practice the analysis of seizing for this study came to question of how decisions are made, the willingness and ability to take risk, and whether the organization maintains base competences (especially technological) that serve as foundation for change and creation of new.

The efficiency and speed of OP's decision-making process and related ability to seize opportunities in a timely fashion should be reflect against the fairly large size of the organization. In OP's case the cooperative group structure with largely autonomous cooperative banks also impacts the decision-making. On one hand the literature suggested that this ought to be positive from the view of dynamic capabilities as Teece et al. (1997)

supports decentralization and autonomy. From the research the primary suggested benefit of this at the group level was the local knowledge and understanding of the autonomous banks while their independence should also allow more flexibility. However, there was also a statement of these autonomous banks being a source of change resistance, in which case this autonomy would be a hindrance to groupwide change. The more power and autonomy that a part of organization has the harder it can be to push through change that that part of the organization resists. With 167 separate banks OP's group structure poses major potential challenge if large number of these resist some change. As such I cannot confidently state that autonomy, at least of this type, would consistently help with change capability of the organization overall, even if decentralization in general is supported by the literature and allows more flexibility for the autonomous part to adapt to changing conditions. Such observation opposes or at least sets limitations on benefits of decentralization and autonomy described by Teece et al. (1997). This study however can make no claims concerning the impact on internal change of the individual cooperative banks. That is outside the research conducted.

The corporate bank however, while it is not an independent cooperative, is a separate company within the group and could be analysed better for dynamic capabilities. In terms of decision-making and where power lies the timing of the research was interesting as these are shifting due to the current agile change process. The elimination of management levels and control groups and leaving more decision-making power in the teams of experts described for the agile change seems to be moving the organization towards the decentralization and autonomy within that Teece et al. (1997) and Teece (1996) support. While an interviewee described these structural changes as speeding development works and reducing how many people are needed for that, supporting the positive impact of such structures, due to the recentness of this change its impact on change capability could not be properly evaluated. There have not yet been any actual developments where effect of these changes could be shown. If the new structure proves to improve firm's dynamic capabilities and their impact on performance that would also support findings of Wilden et al. (2013) on importance and impact of organizational structures on whether dynamic capabilities even provide performance improvements while also giving evidence on what kind of structures might work.

Descriptions of the changing structure also raise questions of how well or badly the organization previously matched what is recommended by dynamic capabilities literature.

According to interviewees description there were as much as seven management levels in the corporate bank along with control and management groups that at least one interviewee described as a massive bureaucratic machinery to get permissions. The above-mentioned description of eliminating these things as speeding up development also indirectly describes the negative effects of the older structure to dynamic capabilities and change capability. Positive descriptions of the current management relative to the previous one also suggested that there has been positive change, or at least change that the interviewees consider positive in terms of things like management's approachability and willingness to delegate power. These statements may have been biased by earlier management's attention to expanding on other businesses, some mentions in the interview suggested that there had been at least uncertainty and concern for what was going to happen to the traditional banking, but they still serve at least as indications that power appears to have been more centralized previously.

In discussion of risk-taking willingness, a significant finding was that there are different kinds of risk-taking willingness. Interviewees' consistently indicated that the company is or has been risk averse, conservative or restrained with risk, while also discussing how large changes and overhaul of the organization has been undertaking, something with significant amount of risk. This inconsistency can be explained if the risk-taking willingness is evaluated separately for different types of risks. A bank may, and likely should be careful and conservative with their base business and the customers' money, but its attitude towards organizational change can differ from this as suggested for OP.

The fact large change efforts include an element of risk makes it obvious that being able to change, especially in a significant scale, requires a proportionate level of risk-taking willingness from the organization. This discovery of different risk-taking types with OP however should acts as a warning when trying to evaluate or predict an organization's readiness to take the risk of major organizational change before one happens. This would also apply when trying to evaluate organization's change capability with dynamic capabilities model. People can tell you that the organization is conservative with risk, even consider it too risk averse in some sense, and once you declare it too risk averse to make more than incremental changes that organization may overhaul its entire structure and way of working.

In terms of technological readiness, the interviewees highlighted both increasing importance and role of technology to the business, as well as concerns that lacking technological

capabilities is a “*braking factor*” where they cannot do everything that the organization would have interest and will to do. Especially the description of lacking technological readiness as “*braking factor*” describes how you can have the ability to make decisions and willingness to take necessary risk, but not be able to act on those if you don’t have the necessary base of capabilities and technology. With many financial services being increasingly digital services, this is highlighted. Such descriptions support Teece’s (2007) statements on how “*addressing opportunities involves maintaining and improving technological competences and complementary assets.*” The fact lacking these competences prevents doing things rather than being something immediately acquired when needed also reminds of Teece et al. (1997) discussion on importance of path dependencies and how choices on developing and maintaining competences impact available choices later. Such path dependencies could be considered as self-made limitations on the organization’s change capability determined by earlier choices. Naturally, such limitations can be overcome but this requires more time and resources than would otherwise be the case.

Importance of technology as well as the organization’s technological advances are also commonly highlighted by the public reporting. Same cannot be said about the concern over lack of capabilities indicated by interviews. This is likely more a matter of what a firm will reveal in its reporting than an argument against the concerns of sufficient technological capabilities or existence of such problems in the organization. The two descriptions together support the idea of maintained technological capabilities as important to organization’s ability to adapt and change as needed to gain and maintain competitive advantage, as dynamic capabilities are meant to.

5.3 Reconfiguring and learning

The topic of reconfiguration concerned organization’s and its members’ ability and willingness to change and adapt when the environment, business and organization change. The discoveries focus on the flexibility of identity and cultural factors as well as their impact in the organization’s change capability, what kind of resistance and support the changes have received in this organization and how that resistance was addressed. Learning was analysed as a separate topic to seek more detail on the findings concerning them, but in terms of dynamic capabilities dimension as presented by Teece (2007), learning is largely involved with reconfigure-dimension.

In terms of being supportive of change the findings on culture and identity are closely tied with the organization's responses, support, and resistance, to changes. The research findings for example identified several identity and cultural changes that are directly tied to organization's willingness to certain changes and support other proposed elements of dynamic capabilities such as becoming more tolerant of failure which supports sensing capability as proposed by the literature. Logically this ought to also impact the seizing ability as people are more willing to take the risk of grasping for something new as reducing personal risk of experimenting for individuals could be extrapolated to overall risk-taking willingness of the organization. With changing attitudes and even identity based on technology the company is more ready to adapt with changing technologies on the market.

Change in culture, or at least people's reactions were also pointed out for situations when people are being fired. This is of course an aspect of change and reconfiguring of an organization as a result that can be most difficult, especially for those who might be in danger of losing their jobs and as such not very supportive of change. Outside of the organization news of firings or in Finnish context co-operation negotiations (YT-neuvottelut) can also cause a reputational cost to the change. The interviews conducted for this study suggest that acceptance of such consequences and processes in OP, at least the corporate bank, has gotten better, which would mean a concrete reduction of resistance to change and in a sense cost of it. This is an effective increase in change capability of the organization.

In terms of learning the experience accumulation of individuals proved difficult to evaluate. While there were some mentions of trainings to help people find their place in changing organization, overall data did not provide much information on accumulating the experience. Retaining that experience however is impacted by the changes of the organization. At a level where learning is tied to people, those people leaving represents loss of knowledge which ties in with the cost of change from people leaving or being let go. With the opposite end of the learning spectrum the results on knowledge codification were somewhat mixed. Considering the costs of the learning efforts at this stage the hoped result would not necessarily be maximised organized codification and the interviewees' clearly haven't seen significant resources and time being poured into such activity though there are ways of sharing/storing information in concrete form.

The most illuminating aspect of learning analysed is what is called as knowledge articulation where individual learning is shared beyond one person, but not quite as formally (or costly)

as creation of concrete guides and manuals would require. Zollo's and Winter's (2002) examples for knowledge articulation processes were "*collective discussion, debriefing sessions, and performance evaluation processes.*" Like with many other topics the discussion around knowledge articulation during the interviews revolved largely around newer practices linked to the agile change so the study's ability to reflect this against earlier changes of the organization is limited while impact on success of current and future change capability cannot be yet stated. Descriptions of some practices do however suggest a link to change capability and ability maintain competitive advantage. This would apply especially for the demos and demo culture. Rather than reviewing what has been done within a team, the demo's can spread something that has been found to be beneficial beyond the team or area where it was first learned in effect propagating a change, even if small individually, within the organization. While this study is mainly based on school of dynamic capabilities based on Teece's approach (Teece et al. 1997) this propagation of successful practices also supports dynamic capabilities described as best practices as described by Eisenhardt and Martin (2000).

6. Conclusions

6.1 Summary of the study

This study sought to investigate use of the dynamic capabilities model as a model for organizational change. It began from an interest towards change of organization, especially what makes one organization able to either go through large radical changes successfully or to effectively adapt to changes in the environment while others fail at these and may be destroyed in the process. A possible answer emerged from one answer to the question of how to maintain competitive advantage in changing environment.

A critical question for businesses is how to get and maintain competitive advantage over their competition. Over time management literature has proposed multiple models for how this happens from the five forces model of Porter (Porter 1980) to the resource-based model, but these are more of static models. They explain how a company can have competitive advantage under certain conditions, but not so much how to maintain and sustain such advantage when environment changes. This is what dynamic capabilities model was developed for. Through the need to adapt to changing environment dynamic capabilities are linked to organizational change raising the question of a relationship between dynamic capabilities and organizational change capabilities. Even the model of the dimensions of dynamic capabilities by Teece (2007) with sensing, seizing, reconfiguring could be interpreted as depiction of a change process.

This study investigated this relationship between dynamic- and change capabilities by seeking dynamic capabilities as described in literature from a case organization engaged in significant change both currently and in a different way in recent history as well as linking those capabilities to the change actions where possible. The case organization chosen is the OP financial group which at the beginning of this study had for a few years followed new strategy including change into whole new industries to change the nature of the business. During the study the group's top management changed leading it to pull back from these expansions but new management also initiated significant changes in organization and ways of working for the existing areas of business with the implementation of agile change during 2019-2020.

The research for this study was based on the group's public quarterly and annual reporting between 2013 and early 2019 as well as series of qualitative interviews conducted in late 2019 and January 2020 with employees of the OP corporate bank.

The findings of this study found that the case organization possessed many of the elements considered as parts of dynamic capabilities to varying but reasonably high degree and where it wasn't very strong at them, the organization was often found to be developing towards that directions both culturally and as part of current large change projects in its concrete structures as well.

Direct links were also found between some elements of dynamic capabilities and current or previous change activities in the case organization, for good and bad. In specific cases both dynamic capability and change could be linked to changing environment that is key part of definition of dynamic capabilities as presented by Teece et al. (1997). For the sensing dimension identifiable sensing activity preceded the initiation of the two largest change processes during researched period. These were "*group's history's largest analysis of the operating environment*" preceding adoption of a new strategy in 2016 and actively hearing and questioning of the employees by executive director before initiating the change towards agile organization.

With seizing there were statements suggesting that lack of technological capabilities had held back changes that there would otherwise have been a will to do. This supports the importance of maintaining competences, at least technological ones, for change and adaptation to the environment. With organizational structure and decision-making processes several aspects supported by the dynamic capabilities literature were found, though large portion of these were a result of still new and ongoing changes that might not represent the organization historically. Interviewee statements support positive impact of these for organizational capabilities and flexibility, but this could not be concretely shown or proven with solid evidence.

While it is too early to say if the agile change of the case organization is going to be considered success, the currently available data suggest positivity of the change. It moves the organization closer to what is proposed for organization that has good dynamic capabilities, mainly through higher level of decentralization of power, freedom and openness in the organizational structure and decision-making rather than a more strictly hierarchical type of an organization. This is also being done in a bank/financial group which are not

necessarily famous for such attributes and a large organization of thousands of people. If this change proves successful it will provide strong further evidence for this study's findings and an example of this specific type of organizational change in an organization where it might not be first expected.

Additionally, the analysis brought up interesting suggestion for risk-taking willingness indicating that there are different types of it. Detailed analysis of this difference is beyond this thesis, but this serves to act as a warning for those seeking to evaluate an organization's risk-taking willingness. The answer may be different depending what kind of risk is in question.

With reconfiguration several cultural- or identity changes were recognised that tie into the dynamic capabilities model and reducing challenges of changes that have occurred. These were for example changing views towards technology and failure as expressions of increased support or acceptance to changes especially in situations where people are losing their jobs. Making such personnel changes cause less conflict is most clearly beneficial to the change capability. For others the level of support these findings give to the study is weighted down as I could not directly tie them to a specific change like as with the aspects of sensing that provided the top management information to base initiation of large changes on. Their value is still supported by their links to other aspects of the model. Being more accepting of failure internally should support risk-taking willingness, same with the culture of trust that was discussed under sensing dimension. Identity and cultural views of technology on the other hand can support or hinder maintaining competences in this area, which was indicated to have been a braking factor for change and/or innovation in the organization before.

6.2 Implications

While not every aspect of dynamic capabilities could be directly linked to a success in change, the findings of this study still imply that in general the elements identified as part of dynamic capabilities, like active monitoring of the environment as part of sensing activity have a positive impact on organization's capability to change while lack of them can have negative impact like lacking necessary level of technical competence. Organizations and their management should at least pay attention to the elements of dynamic capabilities presented here and consider how these elements of dynamic capabilities impact them,

especially if they are planning to initiate changes or face changing environment which may require that.

Especially with the expected positive effects of the case organization's agile change and its complementarity with the dynamic capabilities model, implication would be that management in other organizations should consider if they are the best to make all of the decisions or might there be necessary expertise and customer contact for example at a lower level of the organization. At the very least the case OP supports listening and directly asking the employees what they think would make things better as this was what allowed the top management in this case to begin a significant change.

On the other side the study also contains a warning for cost of change and possible consequences of repeated change. Even though the descriptions of support for change and responding to resistance were quite strong the consequence of people either being fired or leaving of their own accord was a repeating theme. Additionally, there was a specific though singular warning that even if people had been open to change once, if it is later concluded that the same thing needed to be changed again the resistance was more significant. These findings support countering resistance and involving people who might be opposed to change in the change and being open to hear the reason for their opposition.

In terms of learning people leaving was also a loss of accumulated experience. This suggests that especially organizations planning change should consider higher levels of learning and maintaining knowledge within the organization even if some people leave.

6.3 Limitations of the study and suggestions for future research

The main limitation of this study is its narrowness. The empirical research was done as a single case study to gain highest amount and detail of information, but at the cost of generalizability. Every individual organization has different aspects and elements, OP for example is a financial institution with lot of "*experts*" as employees, which is distinctly different from organizations that for example have large part of their staff being lower skilled labour. It is also a very specific type of a firm, a cooperative group, which can have significance on how organization operates as well as motivations behind decisions. Individual firms within and owned by the group such as the corporate bank might still

reasonably be evaluated as comparable to firms with more common structures and ownership.

The narrowness of single case study also exists in terms of the environment an organization exists in, but ought not to be as significant of a limitation. The dynamic capabilities were developed to address competitive advantage in fast changing environments and OP in its reporting has also presented their environment as rapidly changing. Considering the link between need to change and speed of change the need for the capabilities investigated here would not be so significant without that type of environment. Furthermore, this should not change whether these capabilities work for supporting organizational change.

Additionally, the strongest evidence for a capability's value for organization's change is found when the capability can be directly linked to an actual change that has occurred. In this study for example, this could be demonstrated for aspects of sensing dimension leading to initiation of changes. Doing this for all the different dimensions of dynamic capabilities and different elements constituting the capabilities would require analysing more different changes and organization than was possible with this study.

While findings of this study cannot be considered a definite proof that dynamic capabilities are definitely measure of organizational change capability they do give enough support for it that further research would be justified to search for dynamic capabilities and analyse their connections to change in wider selection of organizations and change processes.

Additionally, more research on different types of risk willingness (or lack of it) simultaneously existing in an organization could further illuminate the findings concerning different views of risks for different types of actions for the organization.

To complete this study a model of concrete elements within dynamic capabilities had to be assembled from literature on the topic by multiple authors as singular definition including concrete elements of the dynamic capabilities model does not exist. The model and structure assembled here could be beneficial for other works seeking to continue building a more concrete dynamic capabilities model.

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8. Appendixes

Appendix 1: Initial model for analysis of reporting with predetermined coding structure:

Sensing

Access to information

- Organizational culture restricts access to and spread of information
- Rules restrict access to and spread of information
- Working spaces restrict access to and spread of information
- Organizational structures restrict access to and spread of information

- + Organizational culture supports access to and spread of information
- + Rules support access to and spread of information
- + Working spaces supports access to and spread of information
- + Organizational structure supports access to and spread of information

Cognitive and creative skills of individuals

- Inattentive blindness
- Ostrich effect
- + Organizational practice to prevent biases

Information the organization should be aware of

- Competitor responses information
- Consumer needs information
- Rules and constraints faced by the organization information.
- State and development of the economy
- Structure and evolution of the industry information
- Supplier responses information
- Technology possibilities information

Local and distant search

- Distant search
- Favouring incremental change
- Favouring radical change
- Local search
- Search in current market/industry
- Search outside current market/industry

Sensing related investment

- Reduced R&D investment

- + High/increased R&D investment
- + Other sensing related investment

The culture of trust

- People discouraged from interacting
- People not interacting freely
- Personal risk to challenging the status quo
- Personal risk to experimenting/failure

- +Little personal risk to challenging status quo
- +Little personal risk to Experimenting/failure
- +People interacting freely
- +People encouraged to interact

Seizing

Decision-making process

- Consideration for impact on future investment opportunities
- Deciding what to invest in
- Deciding when to invest

Organization risk taking willingness and ability

- Weak financial base
- Weakening financial base
- Low risk-taking willingness

- +Good financial base
- +Strengthening financial base
- +Strong stated risk-taking ability
- High risk-taking willingness

Seizing biases

- Loss aversion
- Overly favouring incremental improvements
- Program persistence bias

- +Organizational practice to prevent biases

sustaining base competences

- Sign of problems from lacking needed technological base

- +Sign of utilizing existing technological base
- Sign of technology investment

Reconfiguring

Changing identity

-Identity hindered change

Part of identity changed

Part of identity unchanged

+Identity helped change

Routines

-Cost of changing routines

-Repeated changes over a short time

-Resistance to change

Incremental change of routines

Radical change of routines

Support for change

-Losing support

-People oppose change

+People support change

+Gaining support

Learning

Experience Accumulation

-Change of personnel

Knowledge articulation

- Organizational culture restricts access to and spread of information

-Rules restrict access to and spread of information

-Working spaces restrict access to and spread of information

-Organizational structures restrict access to and spread of information

+Organizational culture supports access to and spread of information

+Rules support access to and spread of information

+Working spaces supports access to and spread of information

+Organizational structure supports access to and spread of information

+collective discussions, debriefing sessions, performance evaluation processes

+active staff education efforts

Knowledge codification

- Creation of manuals, instructions etc.
- Knowledge maintained independent of people

General

Using resources

- Gaining resources
- Integrating resources
- Reconfiguring resources
- Releasing resources

Favourable organizational structures

- Bureaucratic decision-making
- Central control/hierarchy

- +Decentralized structure with autonomy

Appendix 2: Evolved model for analysis of dynamic capabilities to structure findings:

Sensing

Access to information (enables individuals to discover opportunities)

- + Organization doesn't unnecessarily implement rules to restrict internal sharing of information (ie. when not required by law)
- + Organization is not limited by significant/unusual external limits on information sharing
- + Organization provides tools to share information
- + People from different departments/parts of organization are physically in contact by common working spaces/-locations.
- + Organizational structure does not separate people into

- Organization implements rules that restrict internal sharing of information beyond necessary
- Organization is limited by significant external limits on information sharing
- Organization does not provide tools to share information
- People from different departments/parts of organization are physically separated by working spaces/-locations.
- Organizational structure separates people into silos/groups

The culture of trust (enables individuals to discover opportunities)

- + People are encouraged to interact freely
- + People are enabled to interact (communication tools, common working- and break spaces)
- + Organization has accepting attitude towards experimenting/failure => low personal risk from failure
- + Organization is becoming more accepting of experimenting/failure

- +/- people are neither encouraged nor discouraged from interacting

- People are discouraged from interacting freely
- People are not enabled to interact (lack of communication tools, common working- and break spaces, other restrictions)
- Organization has intolerant attitude towards experimenting/failure => high personal risk from failure.
- Organization is becoming more intolerant towards experimenting/failure

Information the organization should be aware of/follow (enables organization to gain information)

- competitor responses information
- consumer needs information
- rules and constraints faced by the organization information.
- state and development of the economy
- structure and evolution of the industry information
- supplier responses information
- technology possibilities information

Sensing related investment (enables organization to gain information)

- + Organization has increased R&D investment
- + Level of R&D investment is high (historically or compared to similar organizations)
- + Resources are specifically dedicated to monitor environment/opportunities
- Organization has reduced R&D investment
- Level of R&D investment is low (historically or compared to similar organizations)
- Significant resources are not specifically dedicated to monitor environment/opportunities

Local and distant search (does organization seek opportunities in balanced enough way)

The organization seeks business opportunities from outside its traditional geographic area (yes/no)

The organization seeks business opportunities from outside its traditional market/industry (yes/no)

Seizing

favourable organizational structures

- + Has decentralized structure with autonomy (proposed by Teece as good for DC, note that group structure and structure for individual firms in it are not the same)
- Bureaucratic decision-making
- Central control/hierarchy

Decision-making process

- + decentralized decision-making
- + flexibility and autonomy in decision-making
- Bureaucratic / hierarchical decision-making
- Rigid / rule heavy decision making

Organization risk taking willingness and ability (needed to seize opportunities)

- + Has undertaken significant (risky) change recently (with current leadership)
- + Publicly claims strong risk-taking ability or willingness (public reporting and or statements by management)
- + Statements of being willing to take risk (in interviews)
- + Is in good financial situation
- + Has improving financial situation
- Has not undertaken significant (risky) change recently (with current leadership)
- Publicly admits weak risk-taking ability or ability to survive risk (public reporting and or statements by management)
- Statements of being risk averse (in interviews)
- Is in weak financial situation
- Has deteriorating financial situation

sustaining base competences (needed to seize opportunities)

- + Actively invests in technology
- + Increasing investment in technology
- + Lack of technological capability has not limited what could be done. (according to public or interviewee statements)
- Doesn't actively invest in technology
- Stagnant or shrinking investment in technology
- Lack of technological capability has limited what could be done (according to public or interviewee statements)

Reconfiguring

identity and culture and their change

- + Changes in identity or culture that are favourable to dynamic capabilities (specify)
- + Flexibility of the identity that allows change

- Changes in identity or culture that are detrimental to dynamic capabilities (specify)
- Rigid identity opposed to changes that are sought

Routines

- Has change in routines been incremental or radical?
- What kind of costs has change caused?

- + capable of both incremental and radical change

- repeated changes over time cause additional resistance

Support for change

- What share of people supports change?
- How enthusiastically people support change?
- How much resistance and negative reactions change causes?

Learning

Experience Accumulation

- + There are active efforts/processes to educate staff
- + Organization is good at retaining people (retaining experience)

- Organization has lost many people (lost experience)
- There aren't significant active efforts/processes to educate staff

knowledge articulation

- + Organization has processes to review, debrief or otherwise evaluate what has been done
- + Review, debrief and evaluation processes are encouraged
- + Review, debrief and evaluation processes are enforced
- + People are encouraged to interact freely
- + People are enabled to interact (communication tools, common working- and break spaces)

- Organization lacks processes to review, debrief or otherwise evaluate what has been done
- Review, debrief and evaluation processes are not encouraged
- Review, debrief and evaluation processes are not enforced
- People are discouraged from interacting freely
- People are not enabled to interact (lack of communication tools, common working- and break spaces, other restrictions)

Knowledge codification

- + manuals, guides and other recorded instructions are created
- + Experiences can be shared in concrete (ie. written) form

- No significant creation of manuals, guides and other recorded instructions
- No significant sharing of experiences in concrete (ie. written) form

3. OP:n muutos

Kiitos, siirrytään yritykseen itseensä

- Mitkä koet keskeisimmiksi muutoksiksi OP:n toimintaympäristössä viimeisen 7 vuoden aikana? (tai kuinka kauan ollut töissä)
- Mitkä koet keskeisimmiksi muutoksiksi OP:ssa viimeisen 7 vuoden aikana? (tai kuinka kauan ollut töissä)
- Mitkä ovat OP:n keskeisimmät resurssit ja kyvykkyydet? Kuinka nämä ovat muuttuneet viimeisen 7 vuoden aikana? (tai kuinka kauan ollut töissä)

-
- Kuinka organisaatio yleensä ja henkilökunta ovat reagoineet OP:n kokemuksiin muutoksiin?
 - o Millaista sisäistä tukea ja vastarintaa muutos on kohdannut?
 - o Miten tähän on vastattu?

-
- Kuvaile OP:n yrityskulttuuria
 - o Onko se muuttunut viime vuosina ja miten?
 - Kuvaile OP:n rakennetta ja hierarkiaa?
 - o Onko se muuttunut viime vuosien aikana?
 - o Miten olet kokenut muutoksen?
 - Kuvaile esimiesten toimintaa OP:ssa?
 - o Kuinka he suhtautuvat uuteen tietoon uusiin ajatuksiin?
 - Kuvaile OP:n ylintä johtoa?
 - Kuinka pääjohtajan ja ylemmän johdon vaihtuminen viime vuonna on vaikuttanut yritykseen. (OP:n suunta, henkilökunta, yrityskulttuuri)

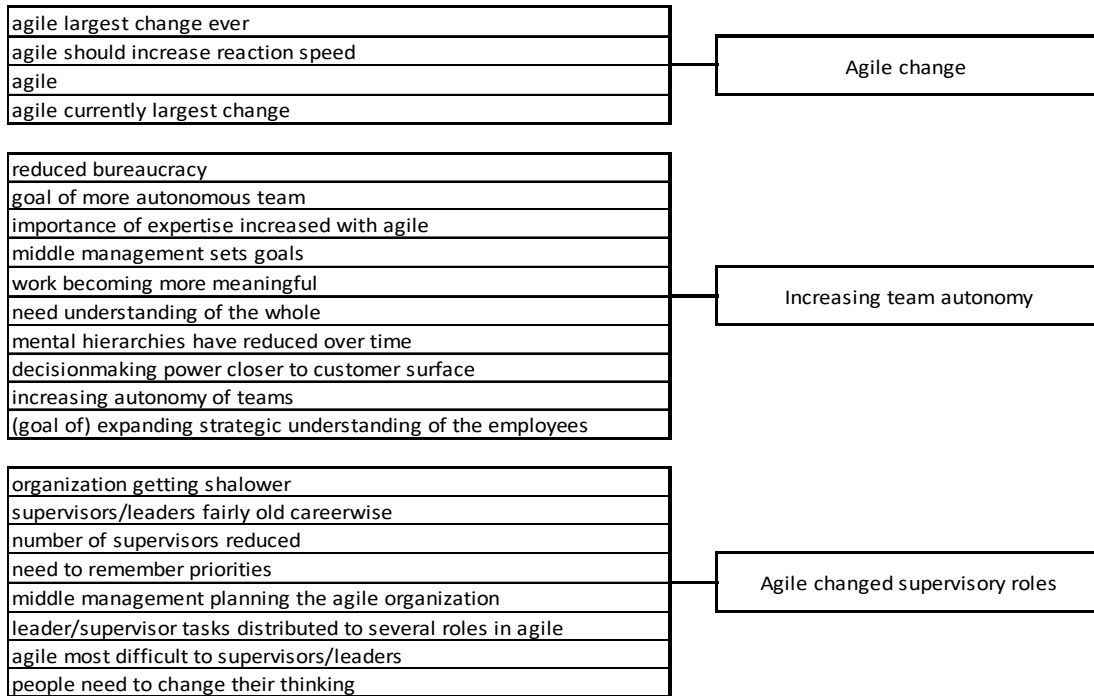
- Esim opas, kirjallinen ohjeistus tai muu dokumentti.

Voitteko osoittaa ketään, jota kannattaisi ja voisi olla mahdollista haastatella tähän tutkimukseen?

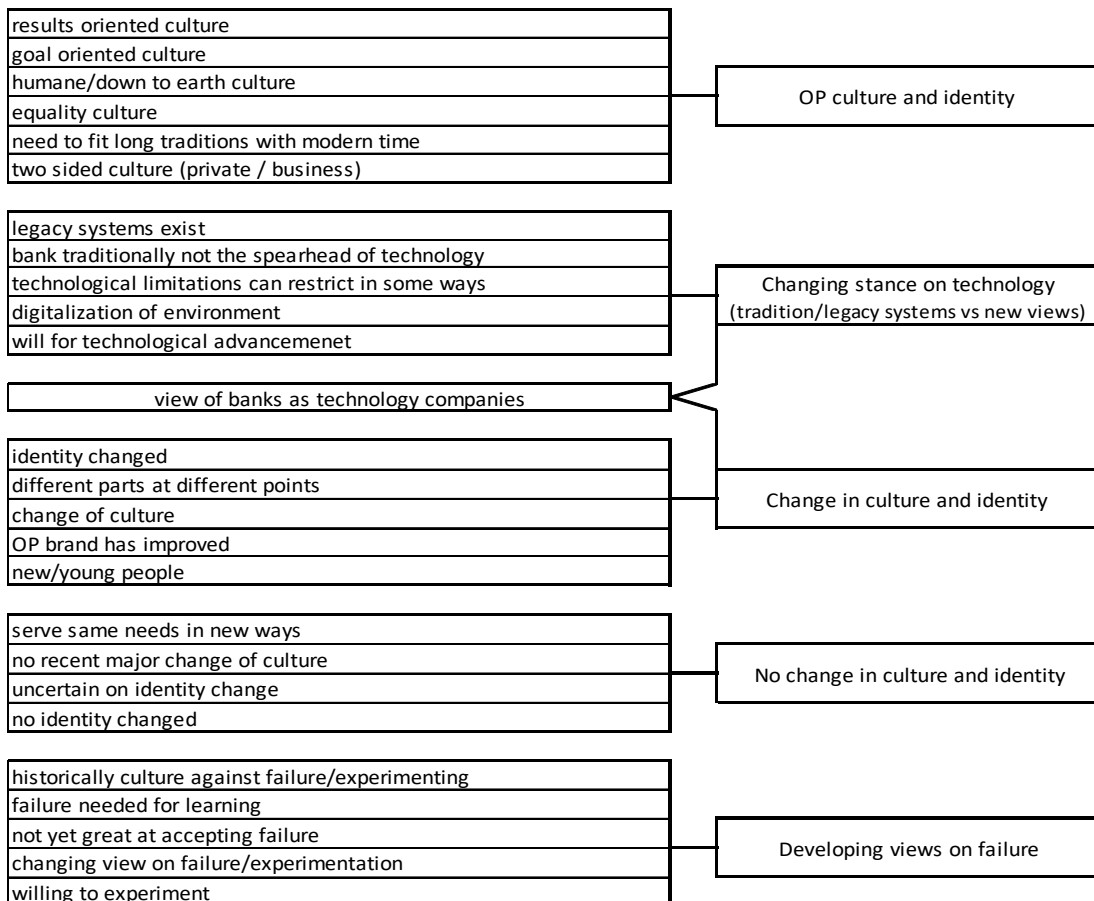
Kuinka tavoitettavissa? / Yhteystiedot?

Appendix 4: Codes, themes and categories discovered from interview data:

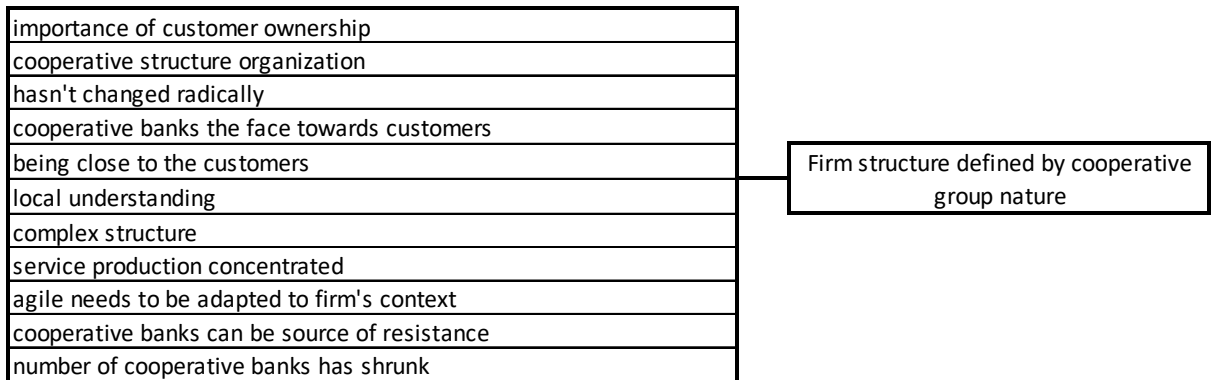
Agile changing work



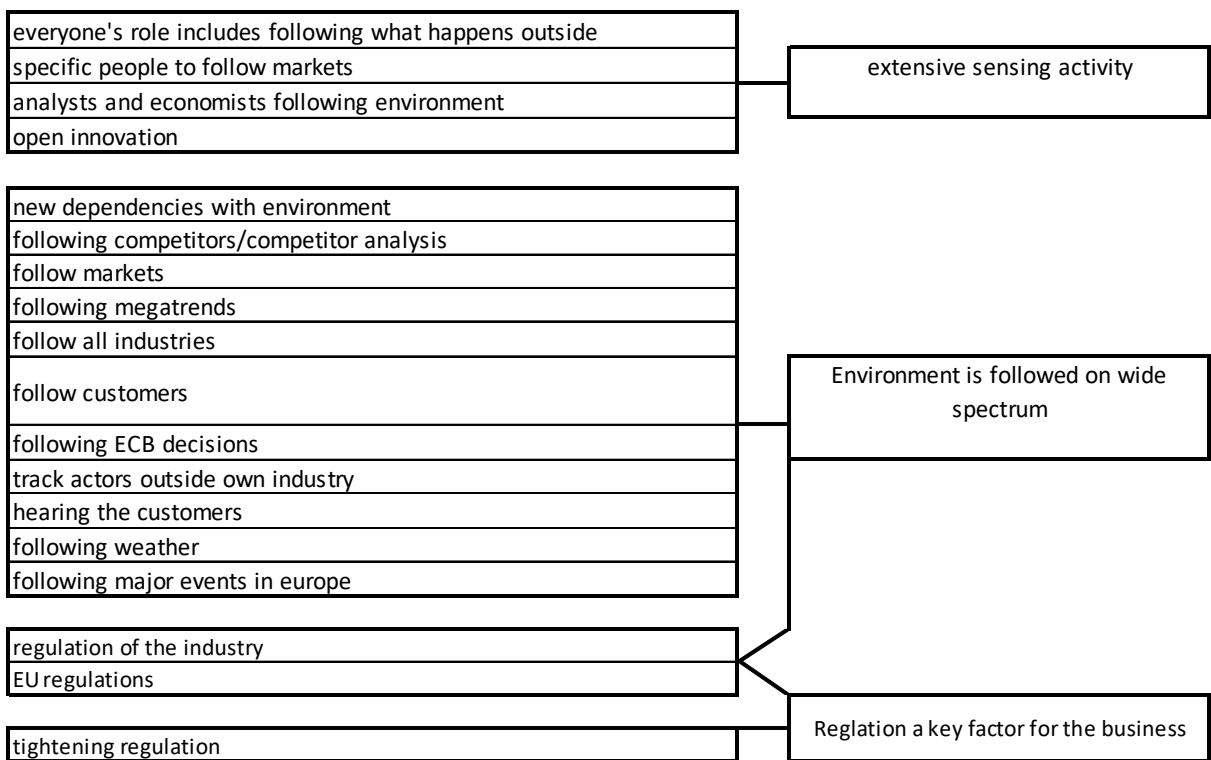
Changes in culture and identity



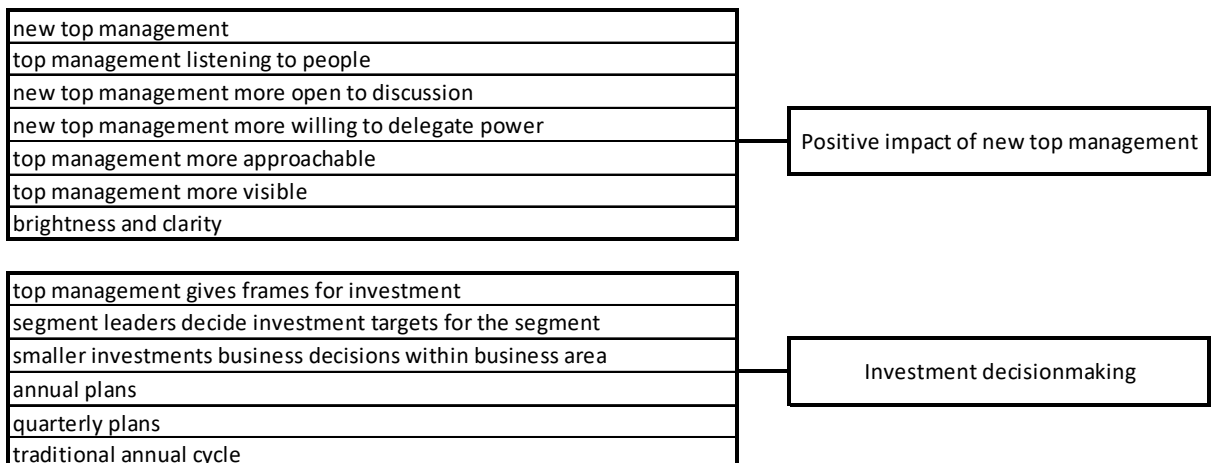
Cooperative group structure



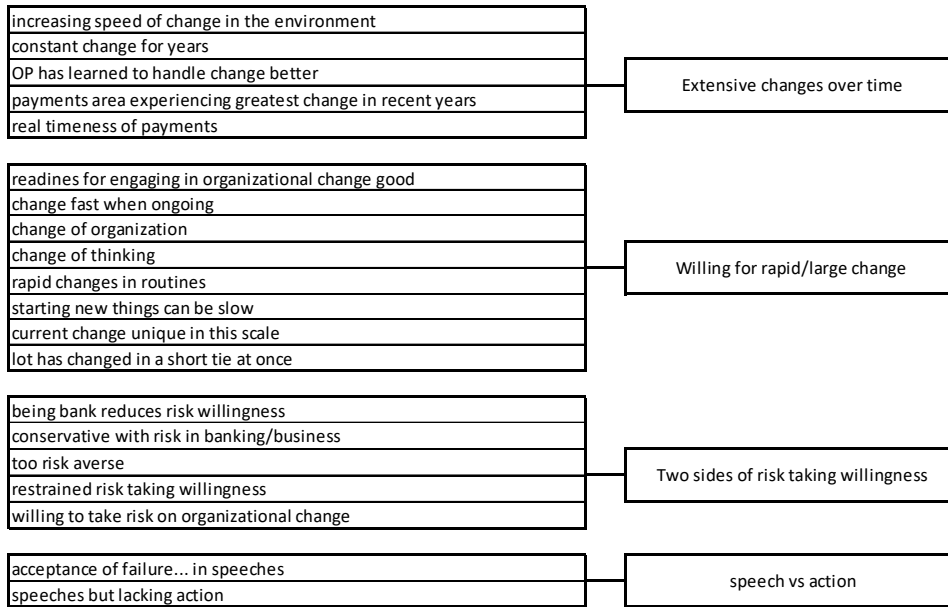
Environment is followed heavily



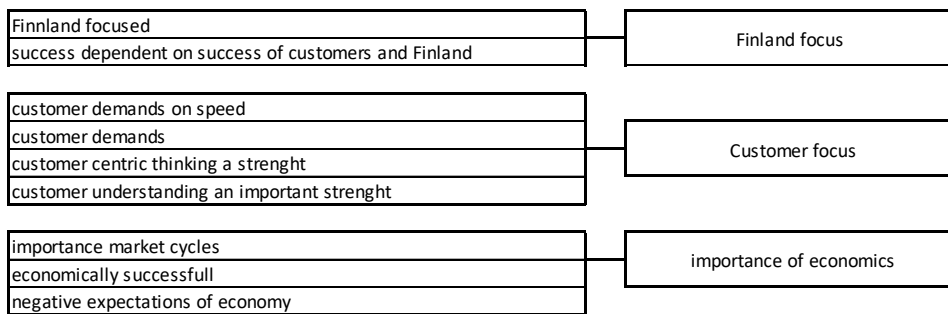
New management has had major impact



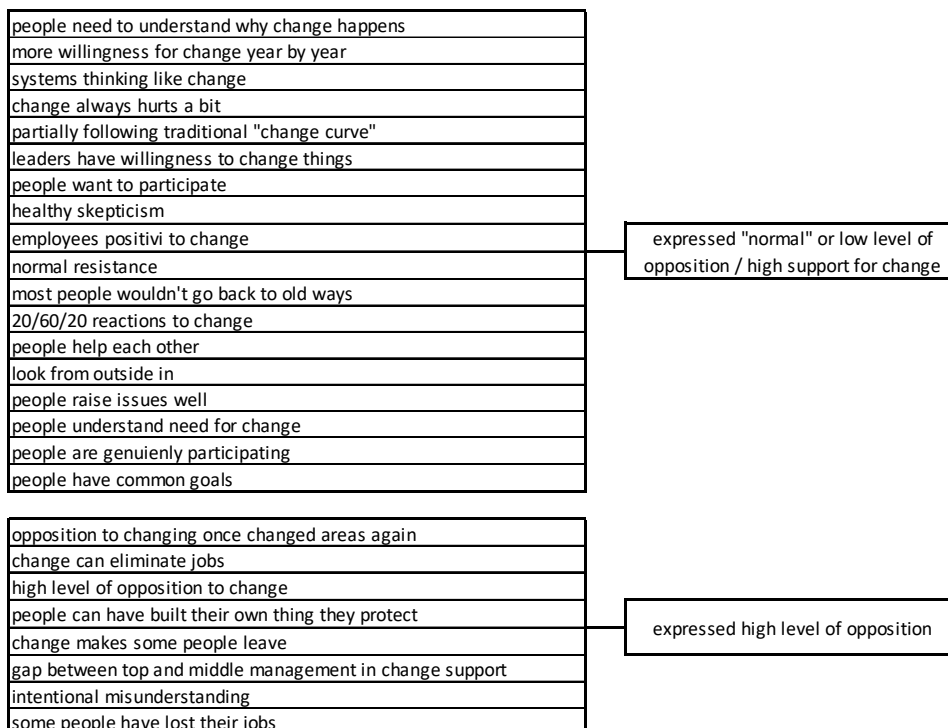
Willing to change



Clear focuses



Level of support and opposition to change?



Information and learning

tools to share information	ways and level of sharing information internally
blogs to write about experiences	
QBR quarterly business review	
decent sharing of information	
much not classified information available	
change in culture of internal communication/ sharing	
management actions available to view	
closed groups in communication	
poor information transfer between segments	
plenty informal interaction	enabling informal interactions
people encounter more than before	
active working community	
staff focused on one place (central organization)	
people discuss work and consequences daily	
people should encounter more	
creation of forums for people to encounter	
people encounter other employees	
progressing democulture	formal review and learning processes
retro culture	
should learn more from each other	
more systemic review/evaluation/learning	
culture of constant improvement has come	
learning phase can wear on employees	change requires learning
change requires learning	
strict legal requirements of secrecy	two sides of secrecy
some contractual secrecy	
secrecy of customer information	
need to identify what can/can't be shared better	
what can be said not discussed much	
common customers for several areas/segments	
very open with information when allowed	

People the key to the business

high competence in traditional core businesses	Resources and capabilities
extensive office network	
new competences coming in	
capability for the core business	
strong market position	
people create the change	Importance of people
uncertain on change of importance of people	
people an important resource	
unpleasant things not left unhandled	cognitive biases not confirmed
possible cases of putting OP before personal interest	

Responding to opposition

seeks to be open for critique	listening and openness to critique
wishes more solution oriented critique	
listening to opposition	
open to consider reasons for opposition	
recognize that often there is a reason for resistance / disagreement	
open to new thoughts	
openness during change	Openness and inclusion in change
written materials available	
inclusion in change work	
local change groups	
exitement through participation	
seeking benchmarks	
invest in people adapting to work in new environments	support people who's work changes
trainings available	
coaching to bring out issues and opinions	Coaching
coaches support roles	
new competences in coaching and increasing human performance	
change agents on wide front	structures to support change
change tribe	

