

Building digital business capabilities in B2B organisation in Finland

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<p>Taking advantage of digital business has become a cornerstone of today's commercial success. There is a lot of criticism over B2B companies' capabilities to execute digital driven strategies in Finland and it is suggested there is evidence Finnish companies are behind their global competitors.</p> <p>The objective for this master thesis is to identify capabilities needed to succeed in digital business and to help companies to evaluate those capabilities. Topic is limited to commercial development and excluding back-end or production side digitalisation non-visible to customers. As an outcome of this thesis, an evaluation matrix is presented which is designed to help companies to evaluate their existing capabilities and help identifying steps to develop those capabilities.</p> <p>Theoretical framework presented combines traditional organisational development theories with modern business approaches. Organisational development is covered from learning perspective, capabilities perspective, and from the process point of view. Modern business theories presented are selected to support digital impact of business, including digital business strategy, customer perspective, digital means in e-commerce and marketing. Literature review concludes there is no bespoke theories available to guide B2B businesses in their commercial development choices.</p> <p>Thesis is an exploratory study taking a pragmatic approach to research and focuses on producing a practical model, adaptable for any B2B business. Theme interview was selected as a research method and six in-depth interviews were conducted between August and October 2020, three from an agency perspective and three from intra-organisational perspective. Interviews were analysed in deductive manner. From the interviews, 17 interlinking themes were found and analysed how the themes contribute to developing capabilities inside an organisation.</p> <p>Based on the findings of the interviews and literature review, thesis presents six capabilities needed to succeed in digital business. These six capabilities are: strategic capability, optimising capability, process capability, resourcing capability, leadership capability and learning capability. Evaluation matrix was created based on different levels of those capabilities to help companies identify at what level their capabilities are and what direction development need to go to improve capabilities. Thesis concludes that more emphasis should be taken in B2B companies to develop digital business capabilities.</p> <p>As an exploratory study, more specific research on insights would be useful to further identify underlying organisational behaviour. Quantitative research to find out at what level different industries are in the capabilities, in-depth research narrowed down to only one field of industry in B2B world, or investigating barriers related to transform commercial processes would all be interesting research topics.</p>	
Keywords Digital business, digital business strategy, digitalisation, commercial development, capabilities, competence, dynamic capabilities, learning, organisational learning	

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1 Introduction

Modern technology and digitalisation have changed dramatically how businesses have grown in the past 20 years. It has changed all industries in some way, some more than other. It is given that in all industries, digitalisation is building growth opportunities, whether it has become a norm already, or whether the industry is slowly adopting to new ways of working. Growth of e-commerce has been rapid for consumer businesses and change in consumer behaviour has been fast. From sales channel perspective globally, in the past decade digital sales has doubled itself every three years (Lipsman, 2019). New technologies and new commercial strategies are putting organisations under new challenges. As Justin Trudeau famously quoted in the World Economic Forum that the pace of change is the fastest it has ever been, and the change will never be this slow again (Trudeau, 2018). It has been acknowledged that keeping up with the pace of change today is not only a technological issue or a strategic issue, but it is also an organisational issue.

Finnish companies have adapted relatively well with the change, according to Hämäläinen and Schienstock from Sitra, the Finnish Independence Fund (2017). Keeping up with the pace of development means delivering market innovations to have competitive advantage. In most cases, this innovation means taking advantage of digital opportunities. Innovation will be created through range of collaboration inside the organisation and its external stakeholder network. There is no reason to doubt why digital transformation is essential in all industries. (Hämäläinen & Schienstock, 2017)

Finnish corporate landscape is dominated by business to business sector players, traditionally production orientated businesses. From the 30 biggest companies in Finland, 65% represent purely B2B companies, around 10% are serving both sectors B2B and B2C and 25% represents solely consumer business (Pekkonen & Felt, 2020). Therefore, it is important from Finnish society perspective that digital opportunities can be identified across both sectors.

One of the most visible elements in digitalisation is e-commerce and selling online. It may be a surprise that nearly 70% of all e-commerce value comes from B2B sector in Finland and globally 75% (Posti, 2020). There is a generalisation that B2B business is considered traditional and more hesitant to invest on digital sales channels, Posti's research suggested the same; 30% of B2B companies do not offer any form of digital channel for purchasing – from platforms and booking engines to closed ordering systems or digital order forms. It seems that there is a great fragmentation to online purchasing as 25% companies in Finland make majority of their shopping online, and the other end of the line

25% of the companies do less than 10% of the purchases online. (Posti, 2020)

Looking at any company's organisational chart; sales, marketing, IT, manufacturing, operations, HR, distribution, customer service, development – digitalisation can be a crucial part of all those functions, regardless the industry it is operating in. Depending on the industry, focus on digital opportunities can differ greatly based on what is the problem where company seeks digital means to solve. For example, a cleaning company could focus their digital development in HR, due to their major challenge to obtain and keep their employees. A logistics company could focus their digital development into operations and artificial intelligence, business consultants could focus on digital sales systems and lead generation.

I have worked in digital marketing and business development roles for the past 10 years and have come across many challenges in organisations' ability to transform its operations to benefit from digital commercial opportunities. It is often the case that traditional way of business brings 100% of the company revenues when their transformation projects starts, therefore digital business development and traditional businesses are separated in different business units. Hence, we often see digital capabilities from operational efficiency or IT investment perspective and building commercial capabilities are overlooked. From my perspective there is a lot of understanding of opportunities digitalisation has for most industries. On the other hand, in the ever-changing business environment it is vital to gain more understanding of what it takes to build a successful, digitally driven organisation. The best-case scenario is to deliver long term commercial value and competitive advantage. Hence, my motivation to research this topic arises from past experiences and urge to clarify this complex issue and help management to drive commercial digital development.

1.1 Research aim and objectives

The purpose of this thesis is to study digital capabilities from the perspective of commercial development to help B2B organisations to evaluate their own capabilities to become more successful. By being able to identify and evaluate company's own digital capabilities in their own industry and market environment could help companies to keep up with the pace of development or even better, create a competitive advantage over its competitors. Traditional industries face challenges in going digital from multiple sides when capabilities need to be built on top of existing business operations.

The main objective of this research is to identify what are the digital business capabilities for B2B organisation, and to help organisation to evaluate their existing capabilities to

further develop them for future success. The research questions are:

RQ1 – What kind of capabilities are needed to succeed in digital business?

RQ2 – How these capabilities can be evaluated in an organisation?

Answer to the first research question RQ1 – what kind of capabilities are needed to succeed in digital business – will be answered by combining literature review and primary research.

Through literature review, covering digital business theories and organisational development theories, will identify the themes used to build successful digital business operations, and capabilities drawn from them. Primary research will complement themes raising from theory, by analysing different factors preventing or accelerating the capabilities, especially from the perspective of Finnish companies in traditional B2B business sector.

Research question RQ2 – how digital capabilities can be evaluated in an organisation – will be answered by providing an evaluation matrix, derived from capability analysis of the first research question. This matrix will identify different levels in the company journey to build digital business expertise and commercial success.

1.2 Limitations

Holistic digital development in most businesses can be divided into two - operational and commercial. Perspective can also be looked at from the customer perspective; digital development visible to customers, changing the way they work with the company and get served; or development invisible for customers which is mainly finding efficiencies and cost saving for the company. As company structures are different and functions may be divided differently inside the organisation, the focus of the thesis is commercial digital development visible to customers. This limits the thesis scope to exclude any purely operational development, such as operational efficiency exercises. Commercial digital development includes, but is not limited to sales and distribution, marketing, product development and customer service processes. All listed processes have impact on customer experience and can be solely or partly serviced through digital channels. Additionally, this thesis does not take stance on any particular technology or hardware in the market.

2 From digital business to organisational development

Digital business and E-commerce are relatively new topics, first theories from late 1990's, it has been researched a lot showing its significance to business over the past twenty years. In recent years there has been increasing discussion over digital transformation and how it's facing all industries and how companies should tap into it to stay in business. Digital transformation theories encompass both, operational digital transformation, and commercial digital transformation. Often operational transformation is emphasised, and there is no comprehensive theory to present for B2B industry. When analysing the theoretical aspects of this research, there are many topics impacting it from different perspectives. To keep it simple but comprehensive, theoretical framework consist of two broad, interlinking aspects – digital business and organisational capabilities.

2.1 Defining Digital Business

Digital business is filled with concepts and buzzwords and overlapping terminology. Many topics have several terms that means the same and there is a lot of terminology that have several interpretations. Digital business and digital business strategy are useful to understand and separate from one another. Leaders speak about “digital business” but in fact they are talking about “business” that is driven by “digital”. Businesses and their operating models are impacted by digital technology, therefore Bones and Hammersley (2015) defines digital business by categorising them based on how “digital” is impacting the business itself. The purest level of digital business is when “digital” is the product itself, area dominated by big data owners. The second level of digital business is “digital” as a disruptive innovation. This level companies are applying technology in a new way and creative new markets that would have not existed before. The third level of digital business is where digital is transforming how the product or service is delivered to a customer. This level is facing basically all companies and means the most change by transforming the existing business models and establishing the new models to transforming the whole industry. (Bones & Hammersley, 2015, 3)

E-Commerce is as a term used to describe actions related to digital business and often mistaken to cover all aspects of digital business. Literature makes a difference between e- business and e-commerce where e-business is more broad term to describe any business that transacts via computer-mediated networks (Kraemer, Dedrick, Melville, & Zhu, 2006). E- business means the same as digital business and it is more used terminology in Europe, hence selected to use in this report. E-commerce as a term refers an action of selling goods or services online (Mourya & Gypta, 2015). E-commerce is therefore an operational term where digital business turns into an e-commerce operation

in an organisation (Bones & Hammersley, 2015). There are a lot of variations for what is included as part of e-commerce operations. Responsibilities include in-channel marketing, sales, pro- motions, new product development and measuring success, but not the choice of technology or management (Bones, Hammersley 2015). According Kraemer (2006), also design, procurement, operations, manufacturing, or human resources supporting digital business can be defined as a part of e-commerce activities. He also argues that for e-commerce it depends on how e-commerce operations and processes are planned to affect the business; it leads to different interpretations of e-commerce as a definition. Based on literature, e-commerce as a term was widely used from late 90's until 2010 but in recent years the wider concept of digital business has been more visible.

2.2 Understanding the customer

Putting the customer first or at the centre of your business, is an old business advice. Often company's internal agenda gets the importance over the discussion of what the customer wants and needs (Abrell, 2016). By recognising an insight of customer behaviour and intention can provide a substantial competitive advantage. The role of customer has changed with digital development and today depending on a business, a 'customer' can be anyone transacting in digital space, from purchasing or simply digitally registering interest. In literature, terms 'customer' and 'user' are used interchangeably, meaning anyone at any stage of digital purchase path. This loose definition of customer may be problematic in terms of designing digital business strategy and considering differences for example between existing customers in traditional channels and potential new customers in digital channels. (Abrell, 2016) (Bones & Hammersley, 2015).

Today's customer role is no longer only transactional. The concept of customer-centric business means that creating customer value is at the heart of business and its processes. Hemel suggests that such strategy delivers great financial performance by creating and capturing value from customer relationships (Hemel, 2016). In addition to new value creation model, today's customers may have a role for example in product innovation and taking part in designing goods or services for them (Abrell, 2016). In essence, digital technologies are shaping the customer interactions with the company, and new possibilities bring new ways in which to get closer to understanding the customer (Westerman, Bonnet, & McAfee, 2014, 29). As Westerman et al puts it – *the customer data is at the heart of the customer experience* (Westerman et al., 2014, 34).

2.3 From strategy to digital strategy and digital business strategy

Strategy to develop company's digital business concerns the whole organisation. Strategy in general can be defined in different ways. Simply, a strategy can be defined as a function, pattern, a goal, a direction, or a plan. Strategy is not an easy to articulate and very few can outline it simple and clear so it can be repeated by the whole organisation (Collis, 2008). Objective, scope, and advantage are the key elements of any strategy, which should be drawn from company's mission, values, and vision. It is often seen strategy is unnecessarily complicated, therefore many employees leave strategy to be management jargon. Some organisations are pretending to be very strategic, having a separate strategy for everything. This is diluting the importance of strategy or even worse, conflicting strategies together and simply complicating things. (Rumelt, 2011)

The recent development with technology impacting all fields of business, connectivity, computing, communication, and data has forced companies to re-evaluate the importance and hierarchy between business strategy and IT strategy. The relationship between IT strategy and business strategy is highly interlinked, therefore Bharadwaj et al (2013) suggests marrying them to create digital business strategy. Digital business strategy defined by Bharadwaj et al (2013) states that it is an organisational strategy designed to leverage digital technologies to create business value (Bharadwaj, El Sawy, Pavlou, & Venkatraman, 2013). They have identified four key themes in digital business companies must address in their organisation to perform. First fundamental theme is scope of digital business, meaning that how to define the products, processes and actions within a company and ownership of those. Scope is linking to technological platforms and choices companies can make to select partner networks over in-house teams, and how those decisions impact company's competitive position in the market. Second principle of digital business strategy relates to scaling. Being able to scale the business to different markets, products and services has been the driver for overall digital business profitability. Digital sales channels are the source of constant business opportunities, which also drives organisations to build dynamic capabilities to leverage arising opportunities. Third theme in digital business strategy is speed, and in particular, speed in launching products, speed in decision-making, speed in managing supply networks and speed responding to customer requests. Speed itself is a value. Fourth theme to address is the value creation, which differs a lot in different business types. Digital business can deliver value through new revenue models, from information itself, of being able to leverage customer data. (Bharadwaj et al., 2013)

As terminology in the digital field is varied, digital business strategy and digital strategy can mean the same or be perceived differently. Lancry, Morrissey, Shannon, and

Cummings (2017) talk about digital strategy when they describe the journey B2B companies must take to take to develop their business with digital transformation (Lancry et al., 2017). They seem to mean the same as what Bharadwaj (2013) and Westerman et al (2014) called digital business strategy – a way digital technologies can bring value to the company. Westerman et al (2014) explains how digital business strategy can contain different elements, depending on how digital technologies have a possibility to create value. Bringing descriptive layers between general digitalisation and digital business, they address the topics of transforming operation or transforming customer experience (Westerman et al., 2014, 30-50). Transforming operations mean delivering efficiencies, increased productivity and agility thought digital opportunities. Some of the elements transformed in operations may lead to heightened customer experience for example faster service, transparency, or better product quality. However, by transforming customer experience it means transformation on customer touchpoints, delivering value through digital interactions, in the aims of driving retention and loyalty (Westerman et al., 2014, 30-50). It seems evident these two sides of digital business must work together. (Lancry et al., 2017; Westerman et al., 2014)

2.3.1 Strategic challenges

One of the first strategic challenges relates to how a B2B company defines what is included in their digital business strategy. As Lancry (2017) explains, B2B organisations work in very different industry ecosystems, therefore lessons from consumer business may be less relevant. They acknowledge these ecosystems may work as barriers to hinder digital development inside an organisation (Lancry et al., 2017). As Westerman et al (2014) divided digital business strategy into transforming operations or transforming customer experience, impact on external industry conditions presented by Lancry would need to be addressed to both areas of digital business strategy. To make use of all digital opportunities, companies should be able to evaluate both side of the digital business strategy.

Building a strategy is one thing but being able to execute one successfully is another. Literature identifies several challenges related to executing the strategy in general, but in the context of digital business strategy, these following topics seems to impact it directly: conflict between business leaders and digital experts, data, and organisational culture. Bones & Hammersley address an issue of credibility, in which they mean a conflict between digital experts and business leaders (Bones & Hammersley, 2015, 38). The clash comes when senior business leaders appoint a digital expert to take lead in majority of digital tasks, hoping to stay away from digital opportunities they don't quite understand, nor know how to guide. At the same time, digital experts see a lot of the

potential in digital solutions but with limited years of experience, they fail the basics of the business development. This is resulting credibility issues in digital expertise in general, but also higher risk to underperform as a company. The same clash has created a market for consultants, whereby the needed digital business intelligence is bought from external companies. According to Bones & Hammersley (2015, 45-46) where there are good aspects of consultants helping to navigate through times of commercial digital transformation, cooperation may also result on unnecessary adopting of technology or questionable use of data based on non-relevant previous cases. (Bones & Hammersley, 2015, 38-39)

Data is a big topic from opposing viewpoints, from lack of data to uncontrollable amount of data. Information technology development contains the thought of data creation from its core; speed in communication systems are dramatically increasing year on year and with the possibility to save, store and combine multiple forms of data creates a big challenge for companies to get the most out of it (Hämäläinen & Schienstock, 2017, 106). Hämäläinen and Schienstock suggests it is no longer about data processing or managing those systems, as according to research, there is no correlation between technical potential and innovation capabilities. Using data to support work processes, monitor processes or supply chain, collect information, technically mediate communication or automating labour intensive tasks are all valid functions of data, however it does not secure effective use of the data (Hämäläinen & Schienstock, 2017, 108). Now, when is it possible to store all organisational information in a form of data and share it, it is more about the competence and knowledge to use it. Many companies are in the position that more data is being created every single day, and with a holistic data strategy it is possible to innovate and create new data driven business streams (Wäyrynen, 2020). From investment perspective, data equipment can be costly, especially if data is left unused for any reason and therefore having difficulties in proving business value (Townsend 2018). Hence the dilemma, investing on tools that organisation doesn't know how to draw value from or don't invest on systems that could create data in the first place. According to McKinsey survey in 2018, reasons for corporates for not taking advantage of digital business opportunities are related to barriers of adoption, delays in seeing the effect and transition costs related to change (Mischke, Mekala, & Remes, 2018).

Organisation itself brings challenges to digital business when looking at the structure, processes, or its ability to achieve the goals. Bones and Hammersley (2015,41-42) talk about mis-organisation, by which they don't mean falling short on one aspect but a combination of multiple beliefs in which drive digital business forwards. They identified aspects related to processes failing to test and learn, lack of customer understanding, inflexible role of IT, misbelief in approach initiating constant change that eventually led in

poor return of investments and in blaming the technology. These are very operational issues leading much larger problems, if there is a misunderstanding over the digital channel ownership. Traditionally digital channel has been either in the ownership of IT or marketing. Depending on the functionalities of the digital channel, a real benefit lies in cross-functional involvement, despite where the actual ownership lies. (Bones, Hammersley 2015)

2.3.2 Capabilities to execute digital strategy

Prior to analysing further capabilities in the context of executing digital strategy, it is useful to understand what we mean by capability. Cambridge dictionary has a simple meaning for it; ability to do something. Ability on the other hand means mental or physical skill of performing something. (Cambridge Dictionary, 2019) This definition has a human development approach, where capabilities are not just lying inside a person, but a combination opportunities and personal abilities influenced by the environment (Nussbaum, 2011, 20). In the business context, people make decisions and influence what tasks people must perform with the abilities and opportunities they have in that environment. However, digital capabilities are something that an organisation has it becomes more complex. Capability in an organisation is a combination of processes, assets, knowledge, and skills in an organisational environment, coordinated to deliver value (Day, 1994, 38). Business literature tends to be interested most in capabilities that create competitive advantage, Day (1994, 39) referring those as 'distinctive capabilities', the term 'differentiating capabilities' is commonly used by various sources.

There is limited research available that combines capabilities and digital into same framework. Some research also is outdated due to fast development in the digital business environment over the past 10 years. Westerman et al highlighted their thoughts on mastering digital via the levels of capabilities in leadership and capabilities in digital technologies (Westerman et al., 2014). In their model they have high and low level of each capability, forming four groups of digital mastery; Beginners have low level of both, leadership- and digital capabilities, with sceptical management towards digital investments, immature digital culture initiating some digital experiments at best. Fashionista's have high digital capability but low leadership capability, leading generally to advanced digital tools but lacking overall digital vision and siloed digital culture. Conservatives have high leadership capabilities but low digital capabilities with often a good digital vision, however perhaps underdeveloped, and active but perhaps slow development roadmap. They have few advanced digital features but may lack speed in processes to make it a competitive advantage. Digital masters have high capabilities in both, digital and leadership with a strong digital vision with multiple digital initiative creating measurable business value. (Westerman et al., 2014, 25) It is not evident high

digital capabilities turn into value, as we have seen in the past. Before computing started to generate value in the 90s, companies who invested in technology were suffering with low productivity, often referred as Solow paradox (Mischke et al., 2018). In the past decades, technology has not initiated a significant boost on productivity, and in some countries it has been decreasing (Remes et al., 2018). However, a recent survey of global corporations by McKinsey showed that companies have adopted only a small part of possible activities with latest technology. Hence by tapping into already existing digital possibilities and investing on those is key to gain the leap in increased productivity for the future (Mischke et al., 2018).

Another viewpoint on digital capabilities by Kieran O’Hea (2011) starts from the point that there is an internet connection, hence there is digital capability in the organisation. O’Hea (2011) argues that digital capability is determined from the quality and speed of internet and its connectivity across different business units. Companies should need to increase their digital capability across all units, in the aim of having digital at the heart of their operational strategy (O’Hea, 2011). Comparing with Westerman et al (2014) approach, O’Hea accounts digitalisation as a part of each business unit, whereas Westman and Bonnet is more highlighting the two key factors in an organisation, technological capability, and leadership. As digital has moved so quickly, it seems that almost 10 years old approach by O’Hea is not addressing the fact that digital development across the organisation needs to function together, otherwise there are siloed systems and siloed teams reinventing the wheel. This is something that Westerman et al (2014) already identifies in their book few years later. (O’Hea, 2011; Westerman et al., 2014)

2.4 Digital Marketing

Marketing as a function raises in the topics of digital business and e-commerce for many reasons. Firstly, according to a study made in US in 2009, over 70% of digital channel ownership is fully or partly marketing responsibility (Bones & Hammersley, 2015, 71). Marketing has an important role in supporting digital business and depending on organisation’s own definitions of marketing responsibilities. One of the most famous theories of marketing gives a very wide area of influence in the organisation; Philip Kotler’s marketing mix (Kotler, 1999). Kotler introduced product, price, place, and promotion – 4 P’s as the key elements of what marketing needs to get right. During the years his theory developed to include more P’s – process, people, and physical environment. The main purpose for marketing according to Kotler is to identify the needs of a customer and to achieve the business targets by giving customer what they want, better than competitors. (Kotler, 1999)

In the context of Westerman's transformation of operations and transformations of customer experience, marketing has, according to Kotler's definition an important role. Marketing is the function which investigates customers wants and needs, hence driving the development in digital channels, across all customer touchpoints. Marketing also influences operations transformation, in cases which has a clear implication to customer satisfaction of the product. (Westerman et al., 2014) (Kotler, 1999)

Going from the strategic concept of marketing into more operational side, digital marketing has been a hot topic in the past 10 years. Digital marketing has its own characteristics that at the time of writing Kotler's theory did not exist. Even though Kotler's theory still has relevance, the reality of digitalisation is convergence over channels of finding customers, learning about them, and communicating to them. Marketing at digital age has been defined by separating the different types of channels of communication: - own – paid – earned media (Bones & Hammersley, 2015, 82). Own media means the company hosted environments such as website, company's own YouTube channel or Facebook page, which are in the control of the company. In paid channels brand visibility is paid for, such as TV, outdoor, print, but also in any paid online advertising including social media. Earned media means PR, influencers, bloggers, and vloggers that give visibility to brands, may it be hard to control in good and bad.

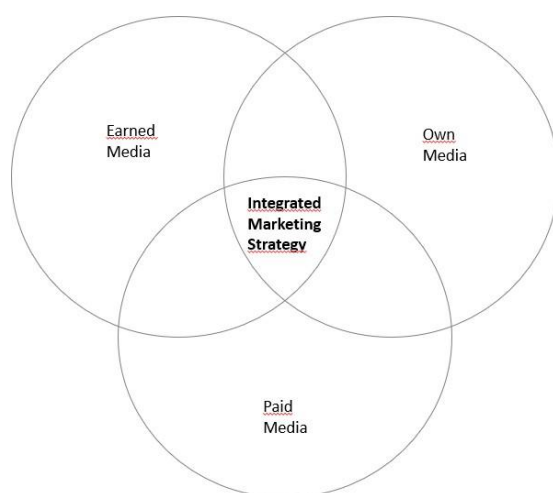


Image 1. Different types of communication channels (Bones & Hammersley, 2015, 82)

The role of marketing when sales comes from online channel is more measurable and data driven than traditional marketing means. There are no clear boundaries between digital marketing and e-commerce, as based on definitions e-commerce is simply one of the marketing tasks in own media circle.

2.5 Organisational development

Setting the scene in organisation's ability to survive in today's everchanging world and keeping up with opportunities arising from technological development is not easy and according to several studies companies are struggling to know what to do. There is a great disconnect over existing industry structures, companies, working culture, leadership, and the competitive reality (Kilpi, 2016, 3). Therefore, the combination of old ways and new technologies is frustrating and putting a lot of pressure for management to solve. Concept of capabilities in an organisational context has many theories but few themes raise from literature when looking to find ways of developing organisation's capabilities to address the challenges that, especially, digital business brings to companies. Organisational learning, dynamic capabilities, and management process.

2.5.1 Learning in an organisational context

Organisational learning is vital from the perspective that the world is changing so fast, therefore no one can know. Individual learning, team learning, and organisational learning are all concepts that are impacted by the surroundings of where the learning is meant to happen. In the context of this study, the focus of the theory will be about team and organisational learning, which is directly linked with organisational capabilities needed to tackle the issues of business environments today. Organisational learning concept was originally introduced by Peter Senge in the 1980's when he defined the five disciplines organisations need to have to create a learning organisation. These five disciplines, described in image 2 below, are like capabilities an organisation must acquire to learn fast as an organisation and eventually become better than competitors. (Senge, 1999; Senge, 2006)

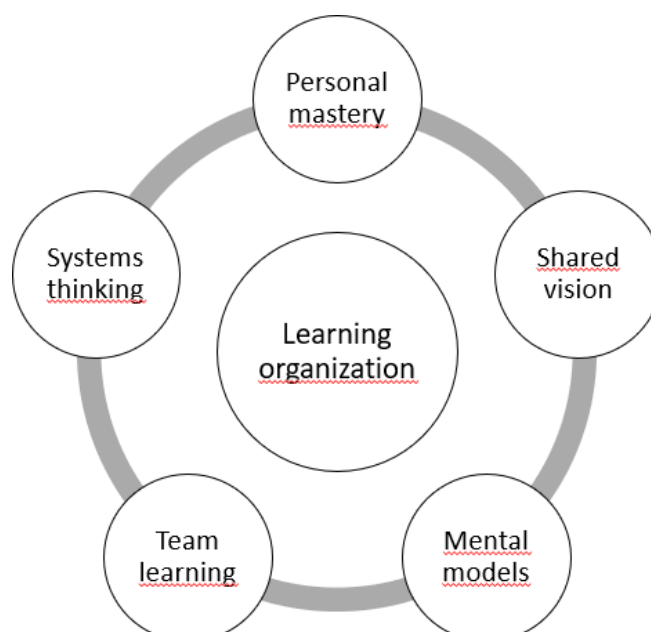


Image 2. 5 Disciplines of Peter Senge (Senge, 1999)

1. Personal mastery is where the organisational learning starts. Nurturing individual purpose, development and need the human aspiration is an important starting point for any organisations learning capabilities.
2. Team learning is about organisation's ability to create an open environment for teams to learn together. Learning can be undermined by culture, hierarchy, or anything that makes team members to have different level of motivation for teamwork. Therefore, in team learning the wisdom is to acknowledge those undermining factors and remove barriers.
3. Mental models mean the way we, as individuals see the world. Mental models are learned, and we are not always aware of their impact on our behaviour and the way we see things. For an organisation to learn, it needs to become aware of own and other models and to be able to analyse and understand them, makes an organisation better at solving problems and see different perspectives.
4. Shared vision is a force that brings people together. Organisations may fail in communicating vision or in some cases there may be different, conflicting visions that does not bring together people's personal ambitions or mental models. Shared vision is therefore a non-fixed topic that needs adjusting to keep it truly shared.
5. Systems thinking brings these other disciplines together. It is the big picture that may be difficult to grasp, but in essence means that if one aspect changes, the whole system must be inspected to see the impact. What happens if one barrier for individual learning is removed? What is the impact to the system?

The main argument for Senge was that he believed that the only sustainable way to build competitive advantage was to build an organisation that learned faster than other organisations. Many professionals agree with this. Esko Kilpi (2016) continues Senge's thoughts by saying that '*work is learning*'. He thinks in today's technology driven society work starts with a problem that needs solving, therefore learning is about asking questions and creating knowledge that may eventually solve the problem. Therefore '*learning is essential for innovation to occur*' (Kilpi, 2016, 58). While innovation has many approaches, Kilpi (2016, 58) argues that in the context of learning, innovation as an outcome of learning process influenced by social factors and existing knowledge. This interesting perspective makes a clear direction for organisations together with Peter Senge's five disciplines where to aim. The challenge is of course how to deliver on these thoughts in everyday work life.

2.5.2 Dynamic Capabilities

To execute a transformation or a new strategy, it is evident that organisation needs direction to how it can be done. David Teece's theory on dynamic capabilities address this issue and gives perspective on how strategy, dynamic capabilities and business model are interlinked with each other (Teece, 2018). Before further going into details with his theory of dynamic capabilities, it is useful to define what business model means. Like in most business terminology, there is no universally acknowledged definition of a business model and depending on a theory, the components of it differs. Teece defined the business model as "*the design or architecture of value creation, delivery and capture mechanism. The essence of business model is in defining the manner by which the enterprise delivers value to customers, entices customers pay for value and converts those payments into profits*" (Teece, 2010, 172). Teece argues by having the right balance between customer needs, technology and organisation to addressing those needs and generating business value from those activities, is key for long term successful business model. In other words, business model tells in what logic customers are served and money is made (Teece 2018). Perhaps the most famously used tool for defining business model has been the concept of business model canvas (Osterwalder, Clark, & Pigneur, 2010). By identifying the components in relation to value proposition, revenue model and cost model, an organisation can draw a holistic picture. Despite the components of any available theory, all emphasise the important of alignment of them internally. As companies are transforming their business models, it is evident that the further from the existing business model the transformation is, the harder it is to make organisation to sync all aspects of capabilities.

Delivering on strategy and business model requirements in today's business environment means constant adaption from organisations. Teece's theory on dynamic capabilities explains how organisations must prepare their organisations to cope with the constant change. Company need to sense, seize, and transform their business model according to market requirements. Sensing means keeping eyes open for opportunities raising from especially technology and evaluating their feasibility for the organisation. By seizing the opportunity, means refining the existing business model and committing resources to pursue the new opportunities. Aligning existing capabilities and acquiring new capabilities to serve new business model is inevitable, so transformation should be a result of sensing and seizing the arising opportunities. Strong dynamic capabilities mean speed and degree in which the company can align its resources to fulfil the customer needs. This mean also realigning business model if needed. By upgrading standard capabilities and directing them to deliver higher return on investment is key to higher profits and eventually shaping the marketplace itself. (Teece 2018)

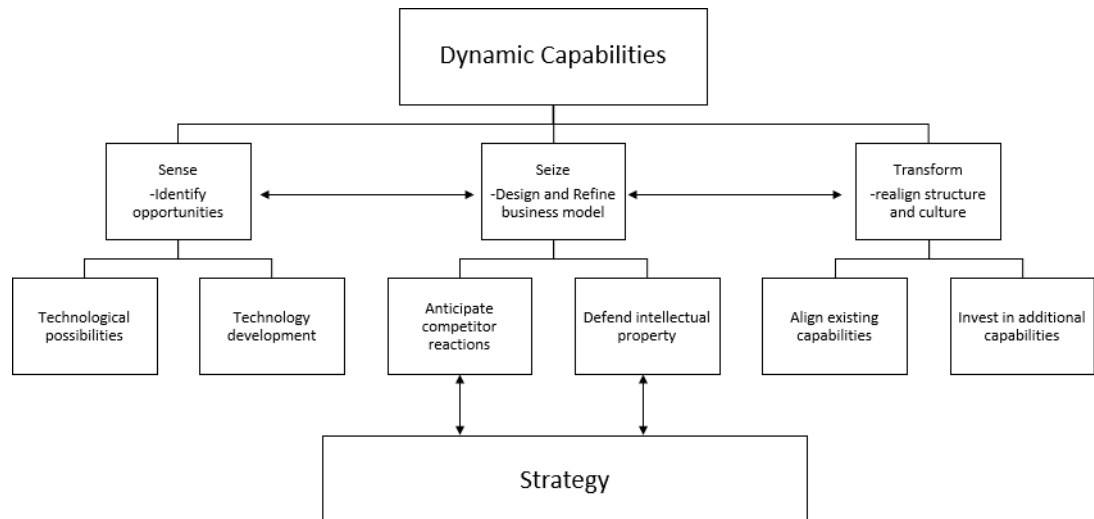


Image 3. Dynamic capabilities in relation to strategy (Teece 2018, 44)

Above image 3 is showing a simplistic structure of organisation's dynamic capabilities by Teece (2018). Dynamic capabilities are not easy to copy, as they are heavily linked with internal characteristics, culture, and leadership of a company, hard to evaluate from outside and make a comparison.

2.6 Managing the process

At the time of rapid change, it has become clear that old management processes may not be suitable to manage digital business. The rise of agile approaches to work according to Stowe Boyd in his forewords in Sitra's Perspectives to new work, is the result of 'fast and loose' way of working, where increase in complexity, volatility of business as well as decrease in loyalty between employee and employer is requiring new collaborative forms (Kilpi, 2016, 5). Stowe argues the best value of the human effort can be achieved by stripping down hierarchies, command-and-control type of processes and centralised decision making (2016, 5). He is referring to management approaches such as agile, lean and design thinking. All process models are originating from the same phenomenon of new work, described by Stowe, and driven by the fast development of technology impacting how business processes need to be managed, even though each model have different points of emphasis.

Agile, lean and design thinking are all frameworks which are designed to take advantage

of continuous improvements when creating a technology focused project (Gotheld, 2016). This list is not exclusive and there are plenty of adaptations around widely used in a particular field. Whereas approaches have a lot in common and they are often referenced in business discussions as they are the same, each approach originates from a distinctive background.

Agile approach dates back from the 90s when software development needed move from top-heavy waterfall model where a design cycle was massively long until anything was able to be released to public (Ashmore & Runyan, 2014). By the time the product was ready, it may have not suited for customer needs or otherwise worked as planned. Agile approach meant software developers would start releasing to the public in a much shorter time span and features would be designed in sprints. Hence Agile is the most engineer driven of the approaches focusing on speed of delivery, potentially leaving business or product development in a supporting role. (Ashmore & Runyan, 2014)

Lean is considered as a product management model, originally designed for Toyota manufacturing process optimisation, where the key is in value creation and reducing waste in every part of the process (Mather 2019). In essence lean is suggesting starting with minimum viable product and build on it with learnings from the real environment. Lean is focusing on creating efficiency in operations that delivers value (Mather 2019).

Design thinking as a framework is taking a step forward with the approach that makes the process more customer centric. Anderson (2018) outlines three key principles in design thinking process, firstly process emphasising on users rather than organisational stakeholders, meaning that this is really about customer problem solving. Secondly, design thinking aims to lower barriers to come up with practical creative ideas. Thirdly, principle of learning by making, suggesting that feedback of the prototype of a product is more valuable than predictions we would have made prior testing. (Anderson, 2018)

Despite the type of organisation or the problem needed to solve by utilising any of these approaches, it is suggested that there are more commonalities than differences. Agile, lean and design thinking all aim for quality improvements, amplify learning, empowers people, and strives for continuous improvements (Yin 2016). Many famous companies openly celebrate their development methods, whether it is one of the above or something similar they have adapted to suit specifically their own needs. All global consulting companies have at least one, which they use in their customer work and all big data companies have their own, as an example, Google has been actively utilising their version of design thinking what they call Design Sprint (Fernandez, 2016). Gothelf (2016) recommends companies to start with working in short cycles and reviewing the process

after each cycle. He argues that putting the customer in the centre of everything will help refocusing when problems occur (Gotheld 2016).

2.7 Concluding theoretical framework

This chapter will conclude the most relevant research in relation to build digital business capabilities for a B2B organisation. Literature covered both digital business framework and organisational capabilities related models. Theory gave partly answers to both research questions, but many topics were left unsure how they apply to B2B sector in general. This conclusion will be utilised as a bases of designing the primary research to gain understanding of how B2B companies view this topic in practice and how applicable these concepts are for them. Majority of the topics will be further researched through primary research, to assess how these concepts work in the context of B2B companies.

2.7.1 Digital business categorisation for B2B businesses

As a starting point theoretical framework concluded research on digital business and relevant concepts to understand what digital business is. Bones & Hammersley (2015) outlines three different types of digital business; digital as a product, digital as a disruptive innovation and digital as a technology that changes the way the product is delivered to customers (Bones, Hammersley 2015, 3). Bones and Hammersley do not take stance on whether the defining factor as a 'digital business' is actually the fact that there needs to be a digital channel to sell from, prior to call is a digital business, however that's what their categorisation suggests. In B2B sector, majority of the companies fall into the third category, but perhaps it needs to be understood in a broader way than how writers intended or create a fourth category instead. For this thesis, I would define digital business for B2B businesses as digital impacting the business from production or manufacturing to customer experience. Given the thesis limitation, I am focusing on digital business from commercial perspective only and development visible to customers, not development bringing only efficiencies. Technology is driving change from manufacturing to customer experience, and the most challenging part is that there are still existing structures in place which need transformation. This type of digital business includes majority of traditional B2B companies, where transformation has the biggest challenges, change is the most prominent, and capabilities are needed to understand how to succeed with the change in hand. As a conclusion, technology is one of the main drivers for organisations to build capabilities around.

2.7.2 Digital business terminology

One of the challenges in this research topic was the ambiguity over terminology around digitalisation, digital business, digital strategy, digital business strategy, e-business, and e-commerce; there are no universal definitions. Especially the area of e-commerce and steering digital business lacks perspective from traditional B2B sector where digital efforts may be wide, but sales channel remains traditional. It depends from the person, his/her background, seniority, current job position and organisational background, who is speaking. Hence it is important to investigate this further in the primary research area and get local view from Finland's perspective, how to best describe the challenge to our B2B companies in need to ensure their digital capabilities. As there are no unanimity over terminology, in this thesis I have selected to use 'digital business strategy' over 'digital strategy', to emphasise the commercial viewpoint of this thesis. Also, I will use the term digital business to describe opportunities relating to digital development visible to customers and use the term 'digital business capabilities' when describing the organisational capabilities related to advancing digital business opportunities.

2.7.3 Developing organisations

The main interest from digital business perspective into organisational capabilities relates to how companies can turn their digital business strategies into action in their organisation. Alongside technology driver, I would conclude organisational development as another key driver to build capabilities for. Learning is an important part of taking advantage of new opportunities and modern companies build their way of working to support learning on every level. Five disciplines by Peter Senge (1999) on organisational learning outlines the complexity of learning in an organisation; not only an individual need to learn, but teams need to create an environment that encourages learning together according to company vision and values. Additionally, management must be able to convey the vision and values, where we are heading and able to see how the organisational system one part affects another. (Senge 2006) As digital is a new knowledge to have, people in an organisation can be in very different levels of understanding the benefit. Though primary research, I am seeking for more information on how learning is visible for B2B companies' day to day work.

One of the most concrete aspects of learning in digital business context are different agile methods and processes designed to deliver digital concepts and services on the market. Agile, lean, design thinking, or any of the variations or combination of them all include the same principle: as the world is unknown, let's try and learn before making big investments over something that does not work for the customer. In these models, learning is one of the key components of the process. How these process methods are adopted to B2B

organisations is an interesting topic to understand further in the research.

As a final element of analysis from the theoretical framework is Teece's dynamic capabilities, which is the most recent piece of theory presented. By dynamic capabilities, Teece (2010) means capabilities needed to drive in the changing markets. He has divided the capabilities in three clusters – sense, seize and transform, all which are hard to build, hard for competitors to copy and building them strong, helping to shape the business environment (Teece 2010). When building digital business capabilities, this is a very relevant perspective to evaluate how the existing capabilities can adapt to further change in the market. However, to build the capabilities in the first place, I would argue that this is a very corporate driven approach, compared to customer centric approach. To drive company strategy and decision making from customer viewpoint deserves more emphasis. Developing digital business and building capabilities around it, Teece makes a valid general point in suggesting planning capabilities adaptable rather than fixed and hard to change. This is also supporting the fact about agile planning processes discussed earlier.

3 Exploratory study approach

Next, I will outline research approach and research methods to carry out my primary research and to evaluate the findings. Before going into a chosen approach and methods, it makes sense to outline the principles and process for scientific research. Science is public, and objectivity, systematicity, self-criticising, independence and impartiality are considered the basic criteria of scientific research. There are many assumptions on which a researcher may base its view on knowledge, nature of information and perceptions of how the world is (Puusa, Juuti, & Aaltio, 2020, 23-24). When approach is chosen, the underlying philosophy and its assumptions are identified, researcher will select methods to carry out the search. There is plethora of methods, qualitative and quantitative, which need to be selected to reflect research purpose and the approach. Knowledge gained by research then is tested in real environment, and depending on the science philosophy, successful empirical test may give new information more credibility. (Puusa et al., 2020, 23)

3.1 Research approach

Research approach is a holistic way of how the research aim and purpose are evaluated and presented (Ojasalo, Moilanen, & Ritalahti, 2014, 36). Business and management as a field of discipline, emerged in the twentieth century, representing a combination of many research fields, such as sociology, economics, psychology, humanities, arts and applied sciences (Saunders, Lewis, & Thornhill, 2016, 126). For the purpose to outlining this research approach based on theoretical framework of business and management disciplines, there is a need to make choices between different philosophies, paradigm, choices in approach to theory development, methodological choice, leading eventually to research strategy and procedures for collecting and analysing data. This way of contextualising research holistically was first introduced by Saunders, Lewis, and Thornhill in 2007 and called it the 'Research onion'. (Saunders et al., 2016, 124 - 126)

There are three key philosophical assumptions to explain the way we see the world; Ontology referring to existence or being, epistemology referring to nature of knowledge and axiology coming from values perspective (Saunders et al., 2016, 127). This thesis will embrace the epistemological starting point about knowledge, as it can incorporate different types of knowledge and data, which is highly relevant to management and business studies (Saunders et al., 2016, 127). By evaluating the research objective to identify capabilities and to create a model to evaluate those capabilities, it is evident that research is a true mix of multiple fields of disciplines. The complexity of the organisational field is making me lean towards pragmatic approach for various reasons. Pragmatic approach focuses on problems and solutions, considering different theories in the way

they present themselves in the actual context of the research (Saunders et al., 2016, 142-143). I do not believe in extreme objectivist or subjectivist in the business research, commercial context, and do not find the categorising useful in relation to this research topic. From my viewpoint, these assumptions complicate and steer away from the actual issue the research is aiming make sense. Pragmatists are interested in the actual useful outcome, creating something for the future without limiting its options, methods of choice based on formulated theories and their assumptions (Saunders et al., 2016, 143).

By following a deductive approach, I started with a literature review. In deductive research, the theory review will guide the focus of the primary research and its topics, therefore also affecting its analysis and results (Russel, 2015). One of the characteristics of deductive approach is that literature review will guide the hypothesis based on existing theories. My motivation for this research comes from the assumption that traditional businesses are not capable of taking advantage of digital business opportunities. I have evaluated this based on theory and planned the research based on the type of information needed to verify or falsify the hypothesis (Saunders et al., 2016, 145).

The objective of this research is to identify capabilities needed to succeed in digital business and find a way to evaluate those capabilities to develop as a company. As a research strategy I have selected exploratory study, suitable for topics which aim to find new insights and view topic in a different way (Saunders et al., 2016, 110). As B2B sector is a wide audience to research, exploratory study is the first step to gain understanding on how to build digital business capabilities in this field of business. Exploratory study of often followed up by more specific research as this approach is broad, and more narrow view is taken to further progress research topic (Saunders et al., 2016, 111). Methodological choice to gather this understanding is to conduct qualitative interviews, which I cover more precisely in the next chapter.

To make more precise suggestions for a particular company based on this research, exploratory research should be followed up with more specific research to address the particular industry's market landscape.

3.2 Interview as a research method

Interview is widely used research method as it is a relatively fast method to receive in-depth knowledge of a selected topic (Ojasalo et al., 2014, 106). The essence of interviews is to build a comprehensive picture of the chosen topic and interviews work exceptionally well when aiming to explain abstract phenomena, given that the researcher is able to formulate the questions to respond the ambiguity of abstractions (Puusa et al., 2020, 102). Interviews also give a possibility to give attention to non-verbal

communication around the topic or bring emphasis of the language related aspects, such as terminology used and its significance within the interviewees (Puusa et al., 2020, 100).

Interviewing is a flexible research method, as the data gathering can be directed to people who have experience in the topic of choice, and the people chosen represents a purposeful sample. Hence, the flexibility in the research method drives from the interviewing situation where the researcher has the possibility to direct data gathering based on the relevance of the research question. Flexibility also comes from the possibility for a researcher to ask interviewee to specify his/her saying, which may be important. (Puusa et al., 2020, 101-102)

There are various kinds of interviewing methods, and it is important to reflect what kind of information interviews are supposed to create to contribute to research topic (Ojasalo et al., 2014, 106-107). It is often recommended that the questions or themes of discussions are given to interviewees in advance to build the most holistic picture (Puusa et al., 2020, 102). How structured the interview is and how the actual situation is organised has a big impact into what kind of data can be collected (2014, 107). Fully structured interviews with ready-made question forms are used when there is a large sample and the aim is to minimise the impact of the interviewer, resulting a fact-based data including information only on topics researcher selected (2014, 107). Semi-structured interview gives more room for interviewee opinions, but only theme interview encourages interviewee to address his/her opinions and experience with the most flexibility. Starting point for theme interview is that interviewee has prior knowledge or experience of the topic and researcher has immersed into prior research and literature and drawn pre-selected themes, which are openly discussed in the interviewing situation. Theme interview as a method is therefore emphasising individual's own subjective perception and interpretation. As a process, the literature review is creating the building blocks of for the theme interviews and themes are then open for interviewee interpretation. The role of researcher varies, depending on interviewee responds, motives or way of expression. Some may need more encouragement; some may benefit from more specific questions in the middle and all situations are different. (Puusa et al., 2020, 107-108)

Interview, as a research method also poses limitations and challenges. It is challenging in general to research meanings and beliefs, therefore the more experience the researcher has, the better the expected analysis of the topics can be expected. People may give socially accepted answers or have difficulties understanding researcher topics. Jargon may conflict the understanding on researcher and interviewee, resulting social distance in the situation. Researcher's responsibility is to create a trusting environment and prepare for emotions arising from the situation for example unease with recording systems, or

nervousness. In qualitative interviews, it is essential to accept that interviewee has a unique and subjective experience, which means that no-one can represent an absolute truth, nor can researcher expect achieving it. (Puusa et al., 2020, 103, 104) The purpose of utilising interviews is to clarify and deepen understanding of digital capabilities and how to build them. I have selected theme interviews to be the primary source of qualitative information.

Qualitative research credibility is often evaluated through the validity of the study. Validity means simply that the research findings represent truthfully the phenomenon in question (Silverman, 2005, 220). Silverman (2005) also argues that researchers should not be too defensive for their study as there is no absolute truth in justifying validity and validity of a qualitative research can always be disputed. Therefore, to increase the validity of the research it is important researcher can evaluate his/her own subjectivity and its impact to topic in question (Puusa et al., 2020, 179). Professional researcher always reflects on the validity of the study and for example justifies the sample to be close to the study topic itself to gain insightful information (Ojasalo et al., 2014, 105). Another way to improve validity is to combine opposing viewpoints, findings, or even multiple researchers, in research terms called triangulation. (Ojasalo et al., 2014, 105; Silverman, 2005, 212)

3.3 Conducting and documenting theme interviews

As a deductive study, the content of the interview was planned based on theoretical framework presented in Chapter 2. Summary of the theoretical framework raised several topics from the literature that would benefit from deeper understanding from industry experts. Overall ambiguity over terminology and what digitalisation means for B2B organisation from commercial perspective needs more practical understanding

To gain deep enough understanding of the topic, I selected to have two different types of interviewees; persons that come from an agency background and persons coming from B2B company who had been a part of digital development projects. Persons coming from an agency side were selected for their significant number of years of experience in working with different organisations digital projects and their role has been either consultative or project leadership. Persons coming from B2B organisations been working inside the organisation and are part of the organisational culture and ways of working, having an impact into their reflection of the capabilities. In research terms, having these two types of backgrounds could be called triangulation, in the aims of providing information from opposing viewpoints (Ojasalo et al., 2014, 105). Table 1 below presents the list of participants in the interviewees chosen to present their views in this research.

Table 1. List of interviewees

Company type	Title	Area
Agency	CEO, Managing Director	Nordics
Agency	Vice President, Client Services Director	Global
Agency	Chief Business Officer	Finland
Company	SVP, Marketing, and corporate communication	Global
Company	Director	Global
Company	Director	Global

Each participant received a brief intro describing the thesis topic and objectives, together with interview instructions and confidentiality. Due to the complexity of the topics around digitalisation and digital business as discussed in Chapter 2, I found it relevant to give information prior the interview. Altogether six interviews were conducted during the period of three months, between August and October 2020. Interviews were performed via Microsoft Teams and lasted between 45 to 60 minutes. Recordings of the interviews were saved, and each interview was carefully transcribed into a written Word format. To protect the participants confidentiality, I will not publish the transcripts as they contain information where the participants company and position can be identified.

3.4 Coding the interviews

Transcripts were manually coded into an excel file where the information from interviews is in anonymous format and therefore shared as a part of the process documentation. Coding an interview is a part of analysing the qualitative data from a primary source. Coding means that the data collected from interviews is categorised theoretically in the aim of analysing it (Silverman, 2005, 377). When coding the data, I used an approach previously familiar to me with summarising each interview items I found interesting into an excel sheet. Interview items were initially categorised by person and by background from company or agency side, to be able to further analyse if the finding differ based on background. Each item was then linked with a theme, which was either raised from theoretical framework, or a new theme raising from the interviewee experience. Coding an interview this way, in a pilot data format, it allows me to look at the data from the perspective of any category inserted. All together about 230 relevant thoughts were coded from six participant and 17 different themes were found. In the appendix 1 I have attached examples for the data coding and categorising.

3.5 Interview analysis

I conducted interview content analysis based on the themes raised from the qualitative data and each theme will be reviewed and main points highlighted. As the interviews were conducted with people who are currently working in this field of business, a lot of the information was based on their true experiences working with a B2B company. Interviewees shared both good and bad examples and reflected them against the themes raised. None of the themes stand alone and there are overlapping with others depending on the viewpoints. Themes are also analysed from the perspective of how interviewees from agencies see the theme and how interviewees coming from inside the company. To clarify, further in this chapter I have used the terms 'agency interviewee' and 'company interviewee' to define the difference in perspective.

3.5.1 From e-commerce to digital business and digitalisation

To start analysing and describing the material from interview, natural starting point is to analyse an overview of the terminology. Firstly, it was evident that interviewees with agency background were much more prepared in explaining how they see the terminology related to digital business and B2B companies than company interviewees. Secondly, there is no truth in terminology and people used it as loosely as we saw in the literature review. As one agency interviewee put it *'All these words are just a way to look at your organisation and pick what's relevant for you and that becomes your reality'*. There was a wide understanding between interviewees that e-commerce as a term related to purely sales action – *'E-commerce is purely a webstore and actions related to that.'* E-commerce was also seen relevant for B2B business and the same principles apply, despite the shared understanding that e-commerce originated from consumer businesses. Agency interviewees were much better at giving examples of how e-commerce principles can support B2B business in a same way as consumer business. As one agency interviewee explained, what is visible from B2B sector is the low hanging fruits in digitalising sales processes, lead generations and client management, adopted directly from basic e-commerce and customer engagement principles. To turn this into an organisational capability, this means that B2B companies must be able to steer sales and marketing processes in the same way as B2C companies have done for years. I will address this in the results and findings.

Digital business as a term was not shared and was interpreted in many ways. One agency interviewee reflected as business today is digital anyway, there is only business that contains the digital within. Another viewed digital business the same as e-commerce. The most comprehensive meaning for digital business was that digital business contains e-commerce

but is larger in commercial scope and contain other digital service elements than just purchasing. Digitalisation on the other hand had mainly unified view described as organisations' ability to create opportunities what technology had brought. The benefit of digitalisation was described as possibility to gain significant cost savings, increase in efficiencies, or improved customer experience. Digitalisation was given the broadest definition that encompasses the whole company and digitalising processes. It is also note-worthy that when talking about digitalisation, interviewees from company background associated the term mainly to operative processes and there was little mentioning of digitalising commercial or customer facing processes.

3.5.2 Allocating resources and building an organisation

Importance of getting resources right for digital development was raising from each interview in a different way. Resourcing can be viewed from human resource (HR) perspective and financial resource perspective. Also, organisational structure has a role when analysing overall resourcing for a company. To ensure digital development is moving ahead, enough personnel was viewed as a key corner stone for success. Traditionally IT has been the source of digital resourcing, but most interviewees stressed the importance of resources across different organisational units. The critique for IT led projects from the participants was that they often lacked customer viewpoint and were too focused on technology. One interviewee from agency explained that few years back there was a boom for appointing Chief Digital Officer (CDO) to run all digital development projects, but now it seems that successful companies are investing have digital responsibilities across multiple teams and business units have regained back ownership of projects relating to their field of business. According to participants, this has a significant impact on company's success in digital development. Another organisational issue raised was when digital projects were run by procurement organisations where it becomes a purchasing exercise and not necessarily answering to business needs.

There was a clear difference how traditional organisations and modern digital companies viewed HR. *'(In) Alibaba's logistics operator Cainiao, half of their personnel are coders'*, explained one interviewee. At the other end of the spectrum, one interviewee also coming from logistics company commented out of their total employees, less than 2% was dedicated to advance digital development. One interviewee also commented that for their transformation project there were huge amount of resources allocated inside and especially outside the organisation that did not feel at all efficient or necessary. These examples show how totally different the mentality may be. It was also acknowledged it was not easy to recruit digital specialists into traditional B2B companies, as other, more wanted employers were fighting for the same personnel. Another viewpoint raised was the perception of company culture in traditional B2B companies being hierarchical and outdated sometimes lived up to

expectations. *‘The worst scenario is that you manage to get the right person in (with strong digital competence) and your organisation is not able to support this person in the right way, the ideas he/she brings, and the person gets frustrated and leaves.’*

It was common that different levels of external resourcing were used in digital projects from management consultants to operative digital tasks. All interviewees from a company background were in a relatively specialised industry, hence their perception on management consultants was almost negative. Main critique was related to not following projects through – *‘they come along and cherry pick on what they can help you with without understanding the full picture’*, as one interviewee described. The same was also noticed from agency side – *‘It (digital development project) may end up being a preachy program, without being able to truly look at the problem areas for the clients with the right skillset at hand’*. Reason for this could be that agency field is too fragmented, and holistic skillset are not easily available for clients. On the other hand, this could be a result of siloed organisation where one business unit is driving the whole development, and agencies are not briefed to help with a whole problem, only half of the problem; Agencies can identify this but perhaps the client cannot, or is not able to do anything about it. Agencies listed various benefits to utilise them in strategic projects; consultants can shake strategic thinking and bring knowledge from outside the industry, partners can speed up the change process and identify low hanging fruits that companies don’t see themselves, and agencies were best to perform work which related to the start-up phase of the project, which required one type of skillset which was no longer useful for the company afterwards.

From financial perspective the difficulty to build business cases was raised as the biggest barrier to gain investments to advance digital development. One interviewee from company background explained investment to digitalise business processes were hard to get even though their value was a fraction of the amounts that they spent on digitising their manufacturing processes. This led to unbalanced digital maturity across the organisation. Building business cases to advance commercial digital initiatives was an everyday task an agency worked with their clients, how to present the potential business gains to receive budget. All agencies acknowledged that there is an element of leap of faith when it comes to digital development and often when fact- based numbers are not available, there is no courage to approve such investments.

Overall resourcing as a capability for an organisation to handle is complex and will be further addressed in the findings.

3.5.3 Finnishness in the organisational culture preventing change

During the interviews it was evident how much the company culture dictates the choices made in the companies. Culture is a hard topic as it relates to all other themes and can work as an

explaining factor to most phenomena raising in this study. There was one topic under culture which deserves to be looked at separately – ‘Finnishness’ in an organisational culture and how that is impacting how digital opportunities are followed through. One agency interviewee explained that due to our heritage as engineers, we build world class solutions but when it comes to marketing it to customers, things get difficult. *‘We have all the possibilities in the world to succeed but emotionally we don’t believe, or we don’t dare. The marketing side is missing. You must invest in marketing. When I look at Sweden, they are double the size in marketing efforts, they may not be that interested in the technical details.’* Also, interviewees had noted that in Finland, sales tend to be male dominated and marketing female dominated, which is not the case in Sweden or globally based on their experience. Few participants speculated if this factor had an impact on how marketing is viewed inside organisations and if the company culture still empowers men more than women in their work.

Additionally, what raised from the company interviews was the mentality of doing things by themselves. As one company interviewee described the scepticism towards external resourcing as a part of Finnishness in their organisational culture – everything had to be done in-house which led to homespun data collection, documentation and ways of working as there were simply no expertise to do it professionally.

Nationality aspects were visible across the interviews and culture as a factor in organisational behaviour could be another thesis topic. I chose not to further investigate Finnish culture as a part of this thesis but obviously what spontaneously came out from the interviews may be an impactor for any organisational capability, but alone it only gives a flavour.

3.5.4 Industry influence and collaboration

When evaluating company’s capabilities to take advantage of digital business opportunities, the industry framework is an interesting topic to discuss. Every industry has their own specialities how the market works and identified barriers and opportunities known within the industry. All company interviewees raised the point of industry cooperation and the lack of standards that are hindering the industry- wide development. There was a strong perception that more collaboration is needed to find solutions to reduce waste in processes is not a responsibility of one company but affects all sides of the respective supply chain, from manufacturer or service provider, to vendor, to buyer, to the end user. Often these supply chains are also influenced by authorities in a form of customs, legislation, specific industry, procedures, standards, and regulations.

On the other hand, it seems relying too strongly on collective industry development seem to underline the notion that B2B companies address digital development mainly from the operative perspective. One agency interviewee explained that Covid-19 has made traditional B2B companies to wake up from commercial perspective as the sales process of meeting customers and agreeing deals is no longer something they can do. Digitising sales process

from lead generation to account management to actual online purchasing is something that traditional B2B customer have not touched, but this situation is giving strong reasons to consider investments for example CRM systems and online booking systems. This kind of commercial development is irrelevant from industry standards. Also, all agency interviewees gave examples of how traditional business can be taken away in a heartbeat when outside industry a player enters the market and gives an alternative to the customer. Therefore, it may be a risk to wait passively for the industry collaboration to give such directions. Knowing your own industry, gives a company a starting point to build a strategy. However, it may also blind the company from seeing opportunities new or rare to your industry.

3.5.5 Learning and building competence

Learning was a difficult topic to cover as all participants found it difficult to identify learning elements inside their organisations. All interviewees viewed learning a partly an individual's own responsibility to keep their knowledge up to speed with development, and partly company's responsibility to organise. One interviewee reported on lengthy, company-wide digital learning program, which was introduced after a significant strategic change in digital readiness. The company had clearly identified the lack of digital expertise in-house. Most participants also shared the viewpoint learning is a mindset question and it is a wanted personality trait in recruitment tables. It was also acknowledged that too much is seen people reluctant to learn and drive change. This was not seen particularly traditional B2B company challenge, but sectors being known for having long working careers may be prone to stick with the old ways of doing things. One company interviewee commented that *'digital projects were done in small groups, meaning that only few people in the organisation were a part of them.'* This does not seem optimal, as there is a strong support from interviewees to include cross organisational stakeholders to take part in the projects. Another insight was addressing the transparency over projects and their results. It was stated that the best ambassador for digital development was open sharing of great results and lessons learned.

Despite this thesis focuses on capabilities rather than competences, there were few interesting points raising from the interviews which deserves some attention when analysing learning and competence in interview content. One participant was explaining how in their organisation any person could be given a task to lead a digital service or development project. There was a case where a person from client management was leading a big digital service project, without having an understanding or previous expertise in such field of business. *'What was interesting the person leading the project was in fact a professional in completely different side of the business than designer for a digital service funnel.'* This raises a question if to some extent there is lack understanding about what kind of competence is required to run such project or if this kind of competence is undervalued. Another insight on individual competence is relating to the dilemma of in-depth or diverse competence. One agency participant explained that what

they often see in recruitment situations that a person has a lot of in-depth competence in one area but lacking holistic understanding. What companies are looking for today in reference to digital capabilities is the horizontal competence, meaning that if the person had experience across different functions, they are more likely to succeed in digital projects imperative to have cross-functional teams. During the interviews it became evident that learning as an organisational capability was something to be nurtured.

3.5.6 Leadership is responsible for strategy

Leadership impacts on all aspects of the company. Leadership is also linked with most other themes having a significant on how companies develop their digital capabilities. Based on the interviews, how leaders create strategy, vision and how that was visible in day-to-day work was one of the most prominent topics. *'Purpose and vision must come from leadership.'* All participants shared the view that this is one of the most important jobs for a leader, hence it received quite some critique from participants. There were contradicting views on how leadership is fulfilling its task and how it has been done in companies today. Many shared a feeling that there is always one or two people in the top management who are the driving force in digital development. As most often in big companies it is Vice President in IT, development roadmaps have been done from single viewpoint, rather than addressing what opportunities digitalisation has across the organisation. One agency interviewee said that *'if your leadership doesn't understand digital, that's when you're ultimately going to fail'*. Another participant pointed out that too often there is a five year plan with development and then something happens, a merger, an acquisition or there is a change in leadership, which initiates great start being stopped and new leader re-evaluating the strategic principles and focused moved somewhere else, before after few years focus is returned back and the same work is done all over again. Another agency interviewee noted that *'it requires a lot from management to hire people more skilled and let them do their work.'* Too often there is still traditional, hierarchical viewpoint on management and leadership, and sometimes a dangerous pattern of creating strong internal competition rather than teamwork. As one agency interviewee describes *'Leadership is about support, discussion and enabling resourcing.'* I would argue that even though it feels natural to bundle leadership and strategy together, I see them as two separate capabilities. Strategic capability is about the substance and leadership capability is about how to deliver the strategy. These two capabilities are further analysed in the findings together with theory.

3.5.7 Digital transformation creating data

As described earlier in this chapter, digitalisation for B2B companies was strongly associated to transforming operative processes. Digitalising operations was therefore also a source of

data. Agency interviewees had strong viewpoints that data is one of the challenges B2B companies need to tackle. Either there was no collection of data which was leading to actions steering the business, or there was large amount of data that was not used. *'Company sets up these really huge goals of obtaining data but what do they do with the data is something companies were doing 10 years ago'*, said one agency interviewee. *'It is heart-breaking to see what is done with the data gained from activities and it's like pouring money down the sink.'* There was a notion of frustration from agency side as from their perspective a lot of opportunities were unused due to lack of comprehensive understanding of data, obtaining it, housing it and how to utilise it to create business opportunities.

Company interviewees approach data mainly from operational efficiency point of view. One interviewee explained that any mistake in data makes it useless, meaning that from operations perspective mistake can lead to a lot of manual work to correct it, hence correctness of data is key. Another interviewee pointed out that what digitalisation helps to get information faster to analyse, meaning that operations are led with data nowadays, compared to previous systems.

Data ownership was raised as a challenge for obtaining commercial data for B2B company. *'Owning customer data is an issue in B2B commercial efforts with partners,'* explained one company interviewee, meaning selling platforms create ambiguity over who owns the customer data. Another interviewee was able to give an example of how in a large raw material manufacturing company, they had been able to identify a business lead and follow up its customer journey across their different digital touchpoints and able to identify signs of company interest and eventually a journey of becoming a customer. This case was a victory for marketing capabilities to gain learning to steer customer behaviour in the future.

Being able to utilise data for business benefit is a capability companies should address. Data and e-commerce go hand in hand.

3.5.8 Development process frameworks

Insights around development process was very different when comparing thoughts from company perspective and agency perspective. One aspect was shared amongst all interviewees – there must be flexibility to tailor process framework to suit a company's structure and culture. From company perspective there was little concrete insight, but more confusing thoughts around if any lean, agile or any other ready process model could work in their organisation. All participants had experience using a process in a development project but did not considered as something they would use on a continuous basis internally, despite the experience being rather positive or at least neutral. The mentality of testing or use of pilot cases was already in use in all organisation, even though they were not identified as an essential part of the process frameworks. Also, what was interesting that company side participants had trouble evaluating pros and cons of using a determined process and it is difficult to analyse based on this material how the process was run in the first place.

Agency participants were all much in favour of having a designated process to run development. There was a clear unanimity that having a process framework helps companies to determine what it is that they are trying to achieve and to have all the right internal and external stakeholders assigned for the project and everybody is onboard with the framework. According to agency interviewees things tend to go wrong when there is no understanding the fundamentals of a process framework - *'Management need to acknowledge first what it means to be agile, not just simply wanting to a part of something they've seen discussed about in the Nordic Business Forum.'* One agency interviewee explained using a process framework often means leadership can no longer make decisions the way they used to do - *'Leaders want to buy the concept because it is trendy, but they don't want to give away the control. It cannot work. In a case like this, it only slows things around and frustrates everyone.'* *'What organisations should be able to evaluate is can they operate within the rules of such working model. In practice it outsources the decision making away from the leader and the team can make decisions within the given framework'*, explained another agency interviewee. Another viewpoint brought from process frameworks is that it tends to give room to customer voice, rather than only focus on internal, often conflicting goals by different teams. *'How to make it work is about redesigning the processes not from inside our but with outside in, from the customer's perspective, how they work together.'* Process as a capability received conflicting ratings from interviews but will be further analysed in the finding with theory.

3.5.9 Perspectives of bringing customer at the heart of business decision-making

Customer centricity was clearly visible in the interviews; however, it somewhat always tends to fade behind intra-company challenges and emotions arising from it. There was a consensus that any commercial development should always solve something relevant for the customer. A company interviewee explained - *'the best is when the pull is coming from the client.'* This means that digital development becomes easy if it is in the know what customer wants or demands. This is not often the case and as interviewee explained, that companies with a history of strong production lines dictate operations, those companies would need to adopt customer-centric approach instead of product-centric approach to take their business forwards much faster. One of the factors influencing on customer centricity seemed to be the building of the cross-functional teams, or sometimes referred as interdisciplinary teams. By having a range of relevant stakeholders present was viewed as the best way to guard the customer interest over team specific interest. As one interviewee said - *'Put the customer in the middle of everything and that's hard.'* One issue raised by an agency interviewee was the fact that there seems to be a lack of customer experience understanding in B2B organisations in general. This related to production-centric approach strongly present in traditional B2B companies. Other reasons why it is so hard to keep customer in the middle can be seen from ranges of themes already covered; If IT or procurement is responsible for a digital service-related project, focus is somewhere else than the customer, or; process framework is not used

and there are no clear customer related goals in projects.

Interviewees identified some of their best-case-scenarios and the key ingredients for success were customer centricity combined with teamwork. Based on the interview it is hard to ignore the enthusiasm when successful teamwork was explained; *'When a team like this goes after a vision or a roadmap, from the customer perspective, that's when results are achieved.'* *'We had designers, developers, marketing, sales, customer service involved, and perspectives taken into consideration.'* From the perspective of leadership, this is how leaders should want to hear from teamwork in their organisation.

4 Result and findings

In this chapter I will present my research findings and answer the research questions RQ1 – What kind of capabilities are needed to succeed in digital business? And RQ2 – How digital capabilities can be evaluated in an organisation? The main purpose of this study was to help organisations to gain insights into digital business capabilities and to help them to evaluate those capabilities in the future. All theories presented had a unique perspective to digitalisation and digital business. For this topic, it is hard to be fully inclusive. As today's world is digital, basically all business theories and all organisational theories could have been presented from the digital viewpoint. The aim was to collect from literature key theories that have a strong link with digital development in an organisation and draw a conclusion for the framework of digital capabilities. Primary research gave in-depth insight into B2B organisations and the challenges they are facing internally to know how to go about the digital opportunities.

4.1 Identifying digital business capabilities

In the literature review, Nussbaum defined capability as not being only a human development perspective, but a combination opportunities and personal abilities influenced by the environment (Nussbaum, 2011, 20). To identify capabilities needed to succeed in digital business, this research revealed factors in current digital business environment in combination to organisation's internal capabilities. In the previous nine chapters I have analysed the themes raising from the interviews. In chapter 2.3.2 I presented Westerman et al model where company digital maturity can be identified based on levels of leadership and digital (Westerman et al., 2014, 25). Interviews supported Westerman et al view but as having digital and leadership as the only capabilities felt limited considering the number of individual themes identified. Therefore, digital business capabilities have two key underlying drivers of change, technology, and organisational development. I don't see the driving forces exclusive from one another. These driving forces are building on top of Westerman et al (2014) maturity stages but specifying the concept of digital into technology and broadening the concept of leadership to include more holistic organisational perspective. In this chapter, I will discuss about the capabilities of highest importance for B2B companies and summarise my findings.

4.1.1 Strategic capability

Strategic capabilities are fundamental for building all other capabilities in place. Having strategic capabilities means that management has a clear vision of how technology can

impact its business success, so the main driver is coming from technological side. One option, but not necessarily the only one, would be to create a digital business strategy, aligned with overall strategy to specifically address the question of digital opportunities, as suggested by Bharadwaj et al (2013). To have a strategic capability to create a digital strategy, it requires understanding of technology, digital competence in general to understand how technology and data works and what can be achieved by it. There is a clear need to address digital business strategy from customer experience point of view as Westerman et al (2014, 30-50) described, in addition to operational transformation side, which seems to be the more natural viewpoint from B2B perspective (Westerman et al., 2014, 30-50). Strategic process must be comprehensive and inclusive to make sure the vision and purpose inside the organisation is shared and understood. Primary research emphasised vision and purpose must come from inside the organisation. Leaders are in key roles to enable this vision to become reality inside the organisation. This study is scoped to look at commercial, customer facing development. Therefore, raising customer experience at the heart of digital business strategy would support the findings in the interviews. From organisational perspective, customer voice needs more visibility in the strategic level to impact on intra-organisational processes that I will discuss more in chapter 4.1.3.

4.1.2 Optimising capability

Optimising capability is about broadening the idea of data capabilities. This is referring to marketing and e-commerce side of business and how technology can create business opportunities or optimise existing ones. Technological development is the main driver for optimising capability, but it also requires organisational support to function efficiently. I named this capability optimising capability due to its strong connotation to enabling actions, where data is a vehicle to achieve the goals. E-commerce, as a part of marketing own channel circle by Bones and Hammersley, drives results against any digital goals that company may have, from sales to usage of specific digital service elements creating value (Bones & Hammersley, 2015, 83). Having data is vital in having capabilities to optimise performance and establishing data flows between operations and commercial functions. In the primary research, agencies were particularly worried about capabilities organisations currently have, to utilise data to drive business results, the same view also shared by Härmäläinen and Schienstock (2017). As Veera Partanen, Vice President of Client Services at Merkle pointed out in her interview, it is like pouring money down the drain if data is captured for any lead generation action but not followed through in the sales processes, as so often is done. Optimising capability means that an organisation has systems to collect data across different functions, house the data with security and access to using it, and skill to draw commercial value from it. According to Anna

Wäyrynen (2020), one option is to create a holistic data strategy aiming to create new data driven business streams or simply innovate with the data (Wäyrynen, 2020). I could perhaps question if a separate strategy is really needed, given that within digital business strategy data aspect is comprehensively represented. In traditional B2B businesses, often e-commerce is not a significant source of sales, at least at the beginning but it can still benefit from optimising capabilities in delivering customer experience or additional service features prior factual digital sales.

4.1.3 Process capability

Process capability originates from both, technological and organisational drivers. Stowe explained in Esko Kilpi's research on Perspectives on new work, business is facing a new era with digital opportunities and it requires stripping down hierarchies, command-and-control type of processes and centralised decision making to gain the best value of human effort (Kilpi, 2016). From the interviews it was clear agency side supported the same view that digital in nature requires different ways of working as used to in traditional B2B companies. In the literature review, frameworks were presented on a basic level as there was no intention to evaluate if one framework works better or worse than others. All interviewees agreed that utilising a process framework successfully meant that it would need to be tailored to a company's own need. Especially agency interviewees suggested company leaders may lack comprehensive enough understanding of what a process framework could bring to their development, therefore use of them was not systematic. Documentation of the process was considered essential to help focus teams on what they are aiming to achieve. Veera Partanen, Vice President of Client Services at Merkle said, *'You'd build a circular map with initial strategy, design, your stakeholders, execution, feedback etc. and then strategy revision, without that, you did not achieve anything.'* Without a documented process framework, it is impossible to professionally advance a digital project with all relevant stakeholders, manage expectations upwards and make team decisions. This is due to a layer of complexity technology brings, forcing companies to find new ways as Kilpi suggested (Kilpi, 2016). One key benefit for an organisation to start building process capabilities relates to again, remembering to whom they are here for – their customers. For example, in design thinking, process framework is made for solving customer problem, it is not about the stakeholders (Anderson, 2018). Without addressing any particular framework, interviews highlighted that building interdisciplinary teams as a part of a process framework is a way to help organisations to focus on customer experience.

4.1.4 Resourcing capability

Resourcing capability drives strongly from organisations need to adapt to change posed by digital business environment. From the interviews resourcing capability was linked to human resourcing, financial resourcing, and organisational structure. There is also topic of recruitment I would like to raise in the same context. Being able to match resources according to what strategy suggested the company needed to achieve is the most relevant. In the interviews there were opposing experiences on having huge amount of resources available for something that did not feel efficient, versus very little resources signifying that it was not strategically important. David Teece in his theory about dynamic capabilities arguments that resourcing should be adjusted against the expected value from the customer (Teece, 2018, 44). This is supporting the finding in the interviews that volume of resources must fit with the actual goals of development. Interviews also raised the importance of organisational structure supporting digital development. Perhaps to put this in order words, it is about how to divide responsibilities about digital development across organisational units, rather than structure itself. Resourcing responsible for digital development was suggested to be built across different business units and steering away from the fading trend of focusing all capabilities in IT department or digital development unit. Jukka Sundquist, Managing Director at Nordic Morning argues that companies need courage to invest on digital that may not bring return on investment short- term, but are a must for long-term survival of the company. Financial resourcing is strongly linked with company's ability to build relevant business cases, which may be difficult especially if there is no data available to build those cases.

Additional challenge about getting resourcing right was linked with recruitment. Bones and Hammersley (Bones & Hammersley, 2015) identified a common dilemma, that often digital experts hired in a company have much less overall experience than rest of the management in the organisation. This scenario easily leads into a situation where top management and digital experts are not communicating in a same level and digital agenda is left aside. From the interviews, the challenge was viewed from the recruitment perspective, especially for traditional B2B companies found it difficult to find employees with the right kind of background that could advance organisation's digital strategy and internal capabilities. I find this recruitment scenario very interesting and would like to speculate whether this is truly the case. Perhaps this a leadership flaw where leaders do not want to hire right level of expertise. Antti Kallio, Chief Business Officer at Dagmar said, *'It requires a lot from management to hire people more skilled and let them do their work.'* Perhaps this comes down to very human behaviour of wanting to secure your own position in the company. Depending on a company, one solution I could suggest from the resourcing perspective is the use of external resources to at least at the start the journey.

4.1.5 Leadership capability

Leadership capability drives from managing the change that organisations face today. If we look at rest of the capabilities, it can be argued that for all other capabilities, it is leadership that makes decisions for them. Westerman et al (2014) model of digital mastery outlined leadership as one of the two quality elements to define maturity in digital business development. Another capability was digital, which in their view was describing company knowledge in technology. In essence what high level of leadership capability meant was that leaders were able to build a strong strategy and vision, supported by roadmap that is creating measurable business value. Low level of leadership meant under-using acquired tools and siloed or immature digital culture. (Westerman et al., 2014) Interviews supported Westerman et al view on what are the leadership responsibilities in a company – building a strategy and a vision that will make the company succeed. Peter Senge (2006) in his theory about organisational learning addressed leadership similarly from the perspective of creating a shared vision across the organisation.

Experiences from companies were less idealistic and the real situations of leaders managing short term goals and long term aims makes the leadership from my opinion very vulnerable. Interviewees told about companies where management style had initiated internal competition, leading to less fruitful teamwork. Leaders micro- managing processes and wanting to keep control of the decision-making leading to development team frustration. Such leadership does not sound like it would support the requirements a collaborative culture. I think leaders' ability to spread their belief in the strategy amongst employees is in key position to steer the business. From the interviews, it was clear that it may be difficult for leaders to take the leap of faith in the digital development and this uncertainly must be visible to the organisation. If there truly is a lack of belief or uncertainty, management may be likely to hinder on investment on making the transformation from good to great. As an example from the interviews, if a company is investing on digitalising operations and data housing but no investments were allocated to commercial side and marketing to make the data work harder, that could be a sign of disbelief from leadership and a route cause of other problems such as keeping digital expertise in- house or siloed digital expertise. Hence, leadership as a capability must address leaders influence not only in company success versus last year but how its culture develops and how individuals and teams are supported to get the most out of them.

4.1.6 Learning capability

Learning capability refers to organisational ability to develop itself over time. As technology is changing our working environment, it is posing challenges for organisations to learn to better and faster find best ways to live with the new world. There are two sides of the learning organisation, company responsibility to enhance learning at work and individuals own responsibility to keep up with the development in their own field of profession. Esko Kilpi (2016) said work is learning, meaning that there is no way to survive the change without changing yourself. Teece arguments that learning function, together with resource management and organisational design are the core organisational capabilities in this changing world (Teece, 2018, 45). Being dynamic, reflects the constant need to adjust operations, implement fast, test and refine the model (Teece, 2018, 45). Test and learn mentality raised from the interviews as one of the key elements of a learning organisation, also related to processes. Veera Partanen argued that test and learn feels old and today's big corporates are looking for test and scale approach, signifying the way to draw highest possible commercial value from development. This is directly linked with process capability as all framework approached development in this way. Test and learn approaches are linked with company's ability to innovate (Kilpi, 2016, 58). As Kilpi describes, learning and innovation are two different sides of the coin – '*Innovation is an outcome of a learning process*' (2016, 58). Lowering the barriers to come up with ideas is also in the essence of design thinking framework, embracing idea creation. Also, innovation should not be mystified and only linked with great success stories by digital giants like Google and Amazon. In the context of traditional B2B companies, innovation can be something borrowed from another industry and applied to another to bring value.

Individual learning and competence are where organisational learning starts (Senge, 1999). According to Senge a learning organisation is a sum of disciplines related company culture, teams working together, leadership but also nurturing individual ambitions and purpose. (Senge, 2006) During the interviews individual learning was considered as a mindset question and individuals own responsibility. The key question may be that how companies can nurture the individual learning that benefits both company and the individual. I would argue that companies where digital projects were done in small groups are particularly harmful for organisational learning. Even if the people included felt content and motivated, in an organisational level these secluded groups may drive siloed behaviour and hierarchical closed culture. The more transparent the development and participation are, the more individuals would feel included and motivated to build on their own learning.

4.1.7 Summarising digital business capabilities

Pragmatic approach requires the result to be useful and bring a solution to the research question (Saunders et al., 2016, 143). By identifying specific enough capabilities is beneficial as it can help companies to better apply them in their organisations. To summarise my findings, I have identified six capabilities, visualised in Image 4. Capabilities are placed in an envelope shape and driving forces pushing from either side. Capabilities that are originating from technological development are strategic capabilities, leadership capabilities and optimising capabilities. Technology driven capabilities focus on how to create operations that creates value. By addressing how value can be created through data or revenue models based on data is at the heart of technology driven capabilities (Bharadwaj et al., 2013). Capabilities that originated from organisational abilities and requirements posed by digital environment are resourcing capability, process capability and learning capability. Organisational driven capabilities derive from ability to build ways of working that support digital business growth. This is much supported by challenge posed by Kilpi, explaining that disconnect between competitive reality and traditional companies' structure, culture and leadership must be addressed (Kilpi, 2016). Interviews gave good insights and examples how this idea portraits in today's traditional organisations in Finland.

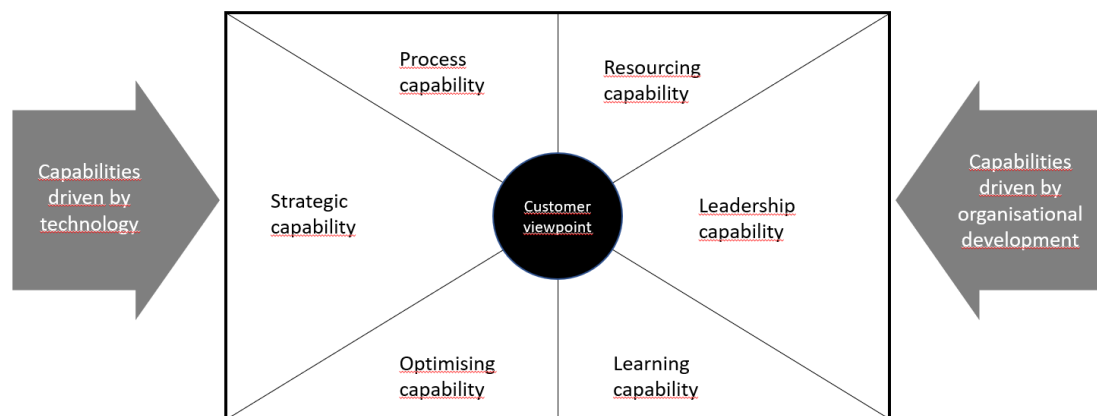


Image 4. Digital business capabilities identified.

At the heart of this image is customer viewpoint, which signifies another driver, affecting all identified capabilities. Customer viewpoint as a part of strategic capability is vital to make sure digital business strategy is truly aimed at solving customer problems. From leadership perspective, teams would need unified goals to increase customer experience and steer away from unit-specific and often conflicting goals. Optimising capability may receive data from customer behaviour, giving opportunities for a company

to steer their marketing and e-commerce actions. Process capability overall is helping teams to focus on what customers want, instead of organisation's internal politics. Market environment is changing together with customer behaviour and expectations are changing. Learning organisation can tap into opportunities and adapt their resourcing to better match with what customers want. Having good digital business capabilities in essence will change the way organisations can become more customer centric.

4.2 Capability evaluation matrix

In the previous chapter I have identified the capabilities needed to succeed digital business and answered my first research question. In this chapter I will be answering research question RQ2 – how these capabilities can be evaluated in an organisation? In previous chapter I analysed and identified digital business capabilities based on theory and primary research. In this chapter I will define criteria for evaluating digital business capabilities and outline an evaluation matrix.

4.2.1 Defining criteria for evaluation

There are many ways to build an evaluation model towards excellence in organisational capabilities. As in this research I have defined digital business capabilities for B2B companies, there is no generally approved criteria available. It is good to acknowledge that depending how criteria is built will give different value to different possible stakeholders (Malchenko, Gogua, Golovacheva, Smirnova, & Alkanova, 2020, 283). Malchenko et al (2020) have identified that value from evaluation can be measured from business perspective, individual level, or societal viewpoint. This research will look at evaluation criteria based on business value it creates and will not take stance on social or individual value. Although viewpoints are not exclusive and value for business can of course create value across levels. Westerman et al (2014) in their theory on digital mastery argued that one of the key drivers for success in building leadership capabilities and technological capabilities is shared understanding. I suggest that in this thesis digital capabilities would be evaluated through a) level of business value created and b) level of shared understanding across the organisation. Low capability means low business value and low levels of shared understanding inside an organisation, high capability means high business value created and high levels of shared understanding. Looking at the capabilities – strategic, optimising, process, resourcing, leadership and learning capabilities, each capability will be assessed based on business value and shared understanding. Material from the interviews included lots of real-life examples related to different capabilities giving valuable insight into how the scale is perceived against the selected capability.

4.2.2 Evaluation matrix

Six capabilities have been drawn into an evaluation matrix, found in the appendix two. This matrix contains stages from one to five, one being the lowest capability level, five the highest capability level. Each capability has low (1-2), medium (3) and high (4-5) levels. For each capability I have identified from theories and interview material identifying factors which explains the characteristics of that level, based on criteria – creating business value and shared understanding. As industries varies a lot, I found it meaningful not fix factors to all five levels and to give some flexibility to interpretate and validate the factors in the context of a company and industry. Therefore, combining lower and higher end of scale felt meaningful.

Strategic capability in lowest level means no common direction and no opportunities identified. Westerman et al (2014) and Lancry (2017) agreed that if company strategy does not address how technology can bring value, there is no strategic capability for it. Interviews suggested that there may be some level of competitor bench- marking done, or knowledge about where the industry is going, but no real effort to steer strategic direction. B2B companies have in the past focused on operative digital development and not addressed commercial development, due to limited digital sales, as identified by interviews. Companies increasing their capabilities are already beyond investigation phase and have created a strategy to follow. A company has digital as a part of their commercial strategy or they have created a separate digital strategy to support their commercial strategy. Being at level 3 means company is already gaining business value from improved strategy and developmental aspect of building opportunities to learn is visible (Malchenko et al., 2020). Having high capability levels 4 or 5, a company must have a long- term digital strategy and roadmaps implemented across different business units. Shared understanding of strategy is high, hence helping organisations focus on what customers need rather than team specific goals or targets (Anderson, 2018). Digitalisation has shaped the company's vision and purpose, being less vulnerable to be impacted by for example leadership changes, which was raised from the interviews as one of the reasons why digital development fails.

Process capability levels are low if companies work in silo's and there is lack of shared understanding what kind of value more agile and modern processes may bring. Interviews identified that companies in these levels don't tend to have any inclusive development processes in place and likely there is a small group of the same people taking part of intra-organisational development projects, often led by the top management. Hierarchical ways of working are considered old fashioned and hindering companies need to change with the development (Kilpi, 2016). Process capabilities are improving to level three by pilot

cases and testing frameworks to increase collaborative work. Projects are getting stakeholders across business units to better address the customer need from different viewpoints. When company is successfully using a process framework, they can raise to levels four or five in this evaluation matrix. Having a process framework adapted to suit their own business needs, creating measurably high level of business value, is something companies should aim at. High process capabilities are driving the development strongly from customer viewpoint, which is a result of collaborative ways of working (Anderson, 2018).

Optimising capability can be evaluated based on how data can be used to create commercial value and widely data is used inside the organisation. If commercial operations are run based gut feeling and no data to support, optimising capabilities are low. There may also be an ad hoc project of improving one data point, but no collective strategic effort made. Having data and using data is a key to drive better performance is an integral part of increasing optimising capabilities (Bones & Hammersley, 2015). The higher the analytical approach is and the more it has potential to create business value the higher is the level of optimising capability. Level three optimising capabilities means organisation can use data to build more precise business cases for their development needs, initiating more accurate calculations for return on investment and more business cases can be taken to development. Insight from the interviews suggested companies may be investing on modern data systems by all this data is left un-used, due to lack of capabilities to use the data to advance business. Therefore, to be on level four or five in optimising capabilities, it requires not only great data systems but also shared understanding of how the data will be used to increase business value (Malchenko et al., 2020) (Westerman et al., 2014). Having high level capabilities, company has advanced ways of using the data and utilise automation or AI opportunities to impact product development, customer management, customer communication or dynamic pricing, as identified in the interviews. This is no longer initial optimising tests but a robust system of trying to find commercial potential from data, or if a lengthy list already identified and following through the long-term development roadmap.

Resourcing capabilities are low when there is little or no resources for digital development. Teece (2018) argues that resourcing needs to match against business potential. Hence low levels of resourcing capabilities mean there is a wrong measuring of resources against what is needed to perform. Interviews gave examples both ways, having huge amount of resources and inefficient ways of development and no resources and high ambitions. If capabilities don't get evenly distributed inside an organisation, resourcing capability is also low. Resources could be focused on only IT and not for example commercial or customer experience expertise, as identified in the interviews. To increase

resourcing capabilities to level three requires resourcing to match with the strategy. Financial resourcing and ability to analyse business cases is needed. Highest level of resourcing capability is reached when resourcing has a long- term approach and future resourcing is carefully planned from volume and quality perspective. According to Teece (2010), resources should be quickly adjustable when market conditions change. Balance of internal and external resourcing is planned to benefit internal skills the most, to minimise risks and maintain the ownership. Taking advantage of external resourcing often benefits companies to gain other capabilities faster, as Jukka Sundquist, Managing Director of Nordic Morning suggested.

Leadership capabilities are low when there is disbelief in the strategy and difficulties in conveying the vision across the organisation (Senge, 2006). Westerman et al suggested that low leadership levels are the result of under-utilising acquired tools and siloed culture around digital opportunities (Westerman et al., 2014). Sometimes leadership capabilities go together with strategic capabilities sometimes not. Veera Partanen gave an example of a global company, where in the Head Quarters there are great strategic capabilities, but local leadership capabilities are not able to deliver the strategy on a local level. Another example for low leadership may be the extensive use of consultants to solve a business in trouble. This initiated that leaders don't have shared understanding of what digital opportunities so even though smart projects are being created with the help of partners, there is no ownership of it in-house. Higher level capabilities mean leaders can transfer the vision across the organisation and giving support to cross functional development teams. They also start gaining understanding of how to develop processes to further improve productivity inside their organisation. Interviews revealed leadership role can be challenging if there is a disconnect with understanding between digitally savvy employees and management who are holding on traditional reporting models (Kilpi, 2016). High leadership capabilities have developed towards discussion and enabler mode acting as promoters of development. Leadership is driving business value and steer development based on results and promoting processes.

Learning capability affect all levels of employee's general staff and management. Low learning capability means there are little collaborative ways of working and the company culture has fixed roles and responsibilities. Teams may develop at very different pace to identify digital opportunities in their field of business, and there are no processed to share experiences and learnings across teams. As Kilpi (2016) suggests that working is learning, meaning that today's work is not about what we know today, but what we need to know tomorrow. Interviews suggest that what companies are looking for are individuals who get excited about change and development, which is in essence learning as Kilpi (2016) describes. To increase learning capability means that organisation supports

individual and team learning, and digital development is shared across the teams. Being part of collaborative digital projects increases individual learning experience. Ultimately the goal of increasing learning capability is about ability to stay in the competition and create business value in the future (Senge, 1999). To have high learning capability organisations need to invest on creating learning opportunities at work, in a form of training, seminars for all employees. Learning capability is enhanced by process framework - test and learn mentality with shared learnings. Individual talents are managed through modern leadership, training and increasing opportunities to learn at work. Culture is rewarding curiosity and the learning mindset. (Senge, 2006) (Kilpi, 2016)

To summarise the evaluation matrix, use of such tool would help companies to identify what is the current level of each of the capability inside their organisation and help them to direct efforts towards systematic development of those capabilities. Ideally rising higher in levels would be also linked with improved commercial results, employee satisfaction and retention, improved employee image or any other metrics critical for the success in the industry.

5 Conclusions

This research started with my motivation to help traditional B2B companies to realise the potential they have with commercial digital opportunities. I had a feeling that companies did not have capabilities to take advantage of things that were every-day things for many consumer businesses. Coming to an end of this research journey, I have learned a lot about B2B company mentality and realities, but also gotten quite excited about how well digital business theories apply to traditional industries. This research identified key capabilities organisations must develop to take advantage of digital business opportunities and based on findings an evaluation matrix was developed to help companies to evaluate those capabilities inside their organisation. In this chapter I will reflect this master thesis journey in the context of research validity and give further recommendations to study commercial digital development.

5.1 Reflecting on validity of the research

To reflect this thesis validity, as described in chapter 3.1 it is appropriate to start from the beginning when defining the idea of this study. At the time I had just returned to work from maternity leave and I had changed my role at work from consumer marketing to B2B marketing side, in fact working for a subsidiary of the company. It was quite shocking how this subsidiary business had been completely in the shadows from all the development that was happening in the company side. The initial idea was to identify capabilities to succeed in digital business for my employer, but due to Covid-19 pandemic, our industry was hit hard and therefore any project taking resources from saving the company was not feasible. Validity is a way to evaluate how well research findings represent to what the research was aiming to study (Puusa et al., 2020, 179). As the objective of this study was to identify what capabilities are needed to succeed in digital business and to suggest a way to evaluate those capabilities, validity evaluation includes both sources of information - theory and primary research.

Theoretical framework was built from diverse sources to combine context around digital business and organisational development and to enhance possibilities to interpret the phenomenon from multiple angles. Validity can also be evaluated through how well the research phenomenon can be identified (Puusa et al., 2020, 180). In this research the nature of digital capabilities - how dynamic or ambiguous they may be perceived, added the complexity of this study. I think one of the main gains of this thesis is de-mystifying the topic and giving something concrete to work with. Primary research was designed in a way that it gave different viewpoints for the topic. Half of the interviewees were from agency background, having worked with multiple companies in multiple industries. The

other half of the interviewees were employed by traditional B2B companies, aiming to gain intra-organisational viewpoint into the mix. By selecting interviewees from different backgrounds was planned to increase the validity of the research. Interviews conducted were confidential, hence I was not able to identify all interviewees' quotes in the findings. Permission for quotes from interviewees from agency background was granted later, as their examples naturally related to an anonymous group of companies. Company side interviewees discussed often about the company they were currently working on; hence it was not feasible to reveal those sources in the findings to increase validity further.

To reflect on my own role as a researcher on a topic, it was sometimes challenging. Especially interview data collected from non-structural way, can be always disputed that the validity of the research is compromised by the researcher's own opinions (Puusa et al., 2020, 183). I was very conscious of my role as a researcher and was prepared with list of topics of discussion, depending on the person I was interviewing. As I am very close to the topic, it may be naïve to think that my previous experience did not affect the results and findings. I was also aware of possible effects of the topic having on interviewees as interviewees may feel that they should be in the know of the topics, therefore answering my questions with how they'd like the situation to be, instead of how it really is. This is somewhat accepted in qualitative research and the researcher can increase the validity of the study by incorporating multiple viewpoints in analyses (Puusa et al., 2020, 182). All interviews were transcribed and sent to interviewees to review that what was said was collected in a correct way, to ensure the correctness from the source. Data from the interviews started to show meanings when coded into themes and combined with theories presented in chapter 2.

I find it difficult to evaluate the generalisation of the research findings and the evaluation matrix presented. There is a definite need to pilot this model in practice with real companies to be able verify its usability in the industry and perhaps revise some thoughts to better with what companies need today. Additionally, I limited the thesis scope to traditional B2B organisations as that's where my motivation was at. In a sense there was an underlying hypothesis that capabilities needed for B2B and different from B2C. Looking at outcome and evaluation matrix, I am wondering how different the outcome would have been if I had not made the limitations of company type in the first place. Looking at the capabilities identified, I get the sense that after all capabilities are not that different from capabilities needed to succeed in digital consumer business. Perhaps B2B companies are not considering all capabilities identified as relevant for them as this research suggests. For piloting this evaluation matrix also with a consumer business could be one way to evaluate if this could be generalised also to B2C side.

5.2 To recommend and to conclude

I am finalising this master theses while the second wave of Covid-19 virus has posed globally severe restrictions, challenging traditional way of doing business. For B2B companies in Finland, especially those strongly playing in the global marketplace, it has been compulsory to think of new ways to do business. This time could be particularly valuable for companies to re-think their strategies and seek competitive via digital means. This study was designed as an exploratory study, which is a broad approach to discover new information on something that is not clear or widely understood (Saunders et al., 2016, 110-111).

During the interview process it became clear that transforming operations seem to be more familiar for traditional B2B companies than touching their sales processes. Given the time we are living today, it is becoming more and more important to pay attention to changing existing sales and service processes. These vital commercial processes are based on face-to-face meetings and Covid-19 has already forced companies to transform them to keep the business going. It is safe to say that there is no returning back to old ways and new normal means in the long run different solutions for changed customer needs. Reluctancy of changing sales and service processes in traditional companies would be interesting to investigate further, what are the underlying reasons for it? Is it so important that management don't have courage to try to shake things up, resistance from the employee side, or something else ingrained in the company culture preventing change? I have witnessed digital transformation sweeping through all other departments except B2B sales, putting the sales team in a different position from all other teams.

This research investigated Finnish B2B sector, but very clearly where there are similarities in companies with a long history in traditional fields of business, it is evident that different industries don't have the same challenges. Therefore, despite the findings are aimed to be generalised, further investigation would be interesting to make on a specific industry, to find out what factors are specifically influencing for example forestry or logistics industry, and if needed capabilities could be determined more precisely. From the companies I interviewed, there was a lot of emphasis put on holistic industry development needed to advance their own digital development. I interpreted this more being relevant for the operations or supply chain challenges, it would be interesting to see if industry is truly holding back on commercial development of a particular field of industry or is it just an easy excuse? One viewpoint could be commercial business cases in B2B companies simply not being as lucrative as operational business cases. Therefore, it is only natural to focus effort as companies simply cannot do everything.

Another approach aiming to further describe the current state of the digital capabilities would be to use quantitative methods to find out what is the difference between business types. There are quite a lot of argumentation and opinions that B2B companies are behind digital development, it would be interesting to confirm if they are behind or is it just a perception. It would be interesting to identify in which capabilities are they behind compared to companies in consumer business. Using quantitative methods to further investigate topics raised from qualitative research can prove hypothesis raising from qualitative information (Ojasalo et al., 2014, 104-105). For example, using surveys to ask companies about their digital capabilities would be useful to analyse the difference between industries, or perhaps analyse how resources reported to digital development correlate with their digital business success.

To conclude this work, I believe understanding more how to evaluate and build capabilities to drive digital business is vital for companies now and in the future. What I think we need more is reflection of capabilities versus business opportunities, collaboration and co-learning between companies and more courage to go out there.

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Appendices

Appendix 1. Interview data coding examples

A. Coded data examples

	A	B	C	D	E
	Person	Company type	topic/opinion	Theme	Type
3	KS	Company	Buzzwords make goals blurry, what is the actual aim?	Buzzwords	Other
4	VP	Agency	Leaders may get excited about one testing concept and that becomes self-fulfilling proficiency with no meaning in a	Buzzwords	Other
5	JS	Agency	IN a bigger picture, previously it was enough that you know your stuff but in the digital business you need the horizontal understanding of multiple topics.	Competence	Organisational
6	JP	Company	Their website was build on top of their sharepoint platform	Competence	Organisational
7	JP	Company	What was interesting the person leading the project was in fact a professional in completely different side of the business than designer for a digital service funnel.	Competence	Organisational
8	JP	Company	one thing I identify is that building digital booking capabilities is not considered as an expertise that requires specific knowledge and it is a different core business versus knowing all about the products you are selling or knowing about the clients	Competence	Organisational
9	JP	Company	Individual level part being native to digital, and being active in the arena, part being interested in what it is to have	Competence	Organisational
10	VP	Agency	clients often ran into issues of lacking internal skills and capabilities on understanding how to change the business	Competence	Organisational
11	AK	Agency	there are one or two people in the organisation who really know how and understand what it means to develop digital business	Competence	Organisational
12	JS	Agency	Everything was kind of self-made, with no real processes, no ways of working traits back to the company history, the 'way we do things around here' - not because there was no money to make things happen.	Culture	Organisational
13	JP	Company	We have all the possibilities in the world to succeed but emotionally we don't believe, or we don't dare. The marketing side is missing. You must invest in marketing to succeed.	Culture	Organisational
14	JS	Agency	Change in attitudes	Culture	Organisational
15	AK	Agency	Organisational culture, everything must be done in-house	Culture	Organisational
16	AK	Agency	production dictates operation	Culture	Organisational
17	AK	Agency	Work attitude important for learning at work	Culture	Organisational
18	AK	Agency	Finland is great technical capabilities, competence, readiness and infrastructure in place but what we are missing is the marketing side, we are engineers	Culture	Organisational
19	JS	Agency	When I look at Sweden, they are double the size in marketing efforts, they may not be that interested in the technical details.	Culture	Organisational
20	JS	Agency	global vs. Finland, we dare to build the engineer part of it and thereafter there's no belief and that's part of the Finnishness we have	Culture	Organisational
21	JS	Agency	as the stereotype is that marketing is female and sales is male dominated in Finland	Culture	Organisational
22	JP	Company	One corner stone can be that in B2B side it takes guts for marketing to show what they are capable of measuring in such a male dominated organisation	Culture	Organisational
23	JP	Company	Final point to raise is that Finland is very digital, raised by Nokia, vendor companies' decision making happens in the HQ located somewhere else, therefore that environment does not support perhaps the local team's feedback and input.	Culture	Organisational
24	AS	Company	Then you have people who look at the e-commerce side which is the consumer facing digital trading part of the org.	Culture	Organisational
25	VP	Agency	I think those companies platforms where that kind of thinking can be develop is a growth area, where new ideas can	Culture	Organisational
26	VP	Agency	Lot of competition in-house, little discussions	Culture	Organisational
27	AK	Agency			
	A	B	C	D	E
	Person	Company type	topic/opinion	Theme	Type
28	JP	Company	I think it is the culture that needs learning to make the whole company digital friendly	Culture	Organisational
29	JP	Company	The whole company needs to change	Culture	Organisational
30	JS	Agency	What's missing to make digital happen, would be the responsibility to gain understanding in-house	Culture	Organisational
31	KS	Company	Processes must be tailored to fit with the company culture	Culture	Organisational
32	JP	Company	The worst scenario is that you manage to get the right person in and your organisation is not able to support this person in the right way and the ideas he/she brings and the person gets frustrated and leaves	Culture	Organisational
33	KS	Company	Digital transformation is about delivering more value to customers	Customer understanding	Customer viewpoint
34	KS	Company	Digital must solve something for the customer to be relevant	Customer understanding	Customer viewpoint
35	KS	Company	understanding what customers want instead of what company wants will make a difference	Customer understanding	Customer viewpoint
36	JS	Agency	if it is a digital service related project, there is the customer experience side of stakeholders, but having said that, it is not like there is plenty of knowledge in these fields in organisations in general	Customer understanding	Customer viewpoint
37	JS	Agency	What should be done is that looking it from out-side in perspective, i.e. Customer perspective, from the point of view of the potential customer	Customer understanding	Customer viewpoint
38	JS	Agency	Simplistically you have marketing, services, customer communication and these areas need to work together to create customer experience. My view is from the context of our business area, of course it could be narrowed down or expanded	Customer understanding	Customer viewpoint
39	JP	Company	the buyer is so used to having everything in a digital format, and whether it is a pair of adidas trainers or few tons of raw material, buyers are used to, at least having the possibility for it	Customer understanding	Customer viewpoint
40	JP	Company	The best is when the pull is coming from the client.	Customer understanding	Customer viewpoint
41	AS	Company	And all this should be visible to our customers, both UX and CX perspective	Customer understanding	Customer viewpoint
42	VP	Agency	Put the customer in the middle of everything is key and that's hard	Customer understanding	Customer viewpoint
43	JS	Agency	Ability to see one step more and just to look at what's resonating with the consumers	Customer understanding	Customer viewpoint
44	KS	Company	Very IT driven digital projects lack customer centric perspective	customer understanding	Customer viewpoint
45	AK	Agency	companies with strong production lines which dictates operations - companies would take their business much faster	Customer understanding	Customer viewpoint
46	JS	Agency	How to make it work is about redesigning the processes not from inside our but with outside in, from the customer's perspective, how they work together. The technological ecosystem supporting these individual areas are key to have synergies and data flowing seamlessly	Customer understanding	Customer viewpoint
47	JS	Agency	The key here is interdisciplinary teams and from the POV of a customer.	customer understanding	Customer viewpoint
48	JS	Agency	This was done clearly from the customer perspective and having an agile way of working. Not to mention the interdisciplinary team driving the development.	customer understanding	Customer viewpoint
49	KS	Company	Owning customer data is an issue in B2B commercial efforts with partners	Data	Technological
50	JP	Company	The marketing side was able to follow this new client's customer journey online during the past six months, how many times they had downloaded some material and how many people from that particular company had visited the site, what was interesting them.	Data	Technological
51	AS	Company	that we have jumped into modern data systems and with old systems there would have not been a change to do that.	Data	Technological
			for digitalisation can be that we get more information faster to analyse, meaning that we lead our operations with		

B. Themed data pivot format examples

61	- Data
62	- Agency
63	commercially speaking, lead generation, which form the big bulk of activities a technology company did in the media space, is it heart-breaking to see what is done with the data gained from those activities and it's like pouring money down the sink
64	Company sets up these really huge goals of obtaining data but what do their do with the data is something companies were doing 10 years ago. And that is interesting.
65	I think the data aspect is something to highlight in this and basically, obtaining the data, understanding the data, housing the data, and so many companies do not have control over that
66	- Company
67	And that should be visible to our customers, right
68	any mistake in the messaging and data is useless nowadays, and by creating data online and being visible to all stakeholders, makes sense
69	for digitalisation can be that we get more information faster to analyse, meaning that we lead our operations with data compared to previous systems
70	Owning customer data is an issue in B2B commercial efforts with partners
71	selling platforms have entered the market, and we would not be able to take part in these new booking platforms if we did not have APIs from our systems to connect
72	that we have jumped into modern data systems and with old systems there would have not been a change to do that.
73	The marketing side was able to follow this new client's customer journey online during the past six months, how many times they had downloaded some material and how many people from that particular company had visited the site, what was interesting them.
74	Today we have 24h report which is constantly updating with all relevant operative metrics
75	we should have as easy as possible tool to make a booking, so that customer don't need to send requests to multiple vendors and wait for the response.
76	- external collaboration
77	- Company
78	creating a community where digitalisation is used to eliminate waste from processes.
79	industry collaboration across the whole supply chain would empower holistic development without everyone working in silos.
80	In-side industry cooperation is needed
81	The whole supply chain should all be involved and data should be correct from the origin
82	Therefore, in B2B sector, any solution should make efficiencies on all sides, buyer, vendor and service provider side.
83	- external impact
84	- Agency
85	A typical CEO in a B2B, what does he do when covid happens, he stops all marketing. Because it is the easy cost to adjust the balance sheet
86	Because what you know is comforting and what digitalisation has done it that what was true five years ago is no longer true
87	Often you won't understand what a small player you are in the global game and how fast something can take away your business, for example Stockmann vrs Amazon
88	traditional B2B sector has woken up. They've realized that sales don't come in and sales guys are not able to travel to Europe in industry fairs to deal business there, new ways are needed.
89	- Company
90	Alibaba - They provide material streams, APIs for partners to join in and they will make the integrations.
91	B2B side is behind because companies have too many vendors.
92	competitor having some focus into digitalisation, with comprehensive portals where we are just one player, and if our data is notthere correctly, we are not chosen full stop.
93	One day when they arrive to Finland and the Nordics, and we need to keep an eye on that. Half of the employees are IT. compared to 4/120 in our case
94	Therefore, the knowledge must come from us and the co-creation ecosystem.
95	they had just had a merger with two other companies and the growth had been done via this
96	whole industry started to develop at the same time
97	- External partner
98	- Agency
99	agencies are giving front-end solutions without looking at the back-end stuff, if that's what they are previously paid to focus on
100	B2B it looks different and it's about unifying your customer communication and how to link marketing automation and of course site development and online store, before thinking about investing in external marketing opportunities
101	But there needs to be an external person to identify where the problems are.
102	Consultants can shake strategic thinking
103	External consultants speed up processes and identifying low hanging fruits
104	For B2B, the quick wins are in the fields of marketing automation and digital customer communication side
105	marketing and sales automation and digitalised buying process
106	
117	- Leadership
118	- Agency
119	leadership pov it is always hard, you have short term goals and long term aims and there is always a wrestle between the two
120	company level, it is about smart leadership and some of people below that making things happen
121	if your leadership doesn't understand digital, that's when ultimately going to fail.
122	It is the leader's problem as marketing is seen as an expense, not as an investment.
123	Consultants can shake strategic thinking
124	Leadership is about support, discussion and enabling resources, success factor
125	Lot of competition in-house, little discussions
126	Management need to acknowledge first what it means to be agile and understand what it means, not just simply wanting to a part of something they've seen discussed about in the Nordic Business Forum
127	purpose and strategy must come from leadership
128	- Company
129	But what happened was that it was probably about a five year plan, but it prolonged for whatever reason and then the CEO changed, and the market situation changes and the following leader has a different view on priorities and where to invest
130	I was hired by the person who was running the CRM project to look after sales and marketing perspective, super digi- capable, on that project, but when that person moved on, I was the only one interested in commercial side of the project.
131	Micro management is bad management
132	Perhaps this was one part of the leadership understanding if they addressed digital projects so randomly.
133	product owner was from inside the organisation but there was a range of consultants helping to drive the product forward
134	With a new digital minded leader, they managed to build things, nothing amazing thinking about consumer business but considering their background they did very well and considering B2B side, considering marketing automation and CRM, measuring results.
135	- Learning
136	- Agency
137	**learning* This is a mindset question.
138	Building individual competence
139	Competence grown across the organisation not only in one digital team
140	I'd like to highlight the courage and willingness to learn
141	It is a must for the knowledge to be gained inhouse, in order to truly drive change.
142	Maintaining your own professional competence is a joint responsibility
143	More or less traditional ways to learn at work
144	Roadmap for competences we need in 5 years time
145	Too much is seen that people don't want to learn and if you've learnt something in the past, you don't want to learn away from it
146	Vice versa, you can also turn this the other way around, how cool it is that I can learn and do new things every day
147	- Company
148	Digital projects were done in small groups, meaning that only few people in the organisation were a part of them.
149	even better way to get people onboard is to share the great learnings inside the organisation
150	I think it is the culture that needs learning to make the whole company digital friendly
151	kind of training in the organisation for digi readiness and clearly it was acknowledged that there is a need for that
152	- Organisational structure
153	- Agency
154	definitely a leader appointed from HQ to run the project, rather than a democratic, head of sales, Head of e-commerce, head of marketing head of operations sitting together
155	First thing to change is that organisations tend to be built inside out by units, marketing unit, IT unit, customer service unit, which creates silos
156	it is not a labelled capability kind of approach, but I think it could become labelled if you know exactly what are the areas you're trying to change
157	The most common approach to digital business tends to be, viewed from an agency POV, so that it is the procurement or a buying department who run it
158	there are one or two people in the organisation who really know how and understand what it means to develop digital business
159	- Company
160	COO ran projects in the past, and now business owners have regained their responsibility in digital projects
161	I believe company mergers and acquisitions has a big impact. I think this is especially a problem for the traditional industries with long routes rather than agile new IT technology companies.
162	This initiated the company to create a team around digital platform and IT to be able to integrate and develop business to do about them.

Appendix 2. Evaluation matrix

Capability	Low 1-2	Medium 3	High 4 and 5
Strategic capability	<p>Digitalisation is not in the strategy and the journey has not started yet</p> <p>Current digital opportunities are acknowledged, competitor / industry benchmarks identified</p>	<p>Digital becomes a part of the commercial strategy and selected projects are piloted and roadmaps revised</p> <p>Alternatively a company creates a separate digital strategy to support commercial strategy</p>	<p>Digital strategy is clear and company wide understanding is shared with a concrete long-term roadmap</p> <p>Company purpose, vision and individual strategies address opportunities technology offers, bringing high level of commercial value</p>
Process capability	<p>Management run internal projects</p> <p>Only small number of employees take part in business development creating silos</p> <p>No process models in place or they are implemented without understanding of how they should work</p>	<p>Process models are piloted to find new ways to collaborate between teams</p> <p>Rising the culture of test and learn and scale</p> <p>Cross functional teams are formed across strategic projects and wider employee base takes part development projects</p>	<p>Company has its own, documented process model adapted to suit their field of business and company culture widely used across organisation</p> <p>Customer viewpoint is at the heart of the process, driving customer experience improvements and commercial value</p>
Optimising capabilities	<p>Lack of data to prove operations and their commercial outcome</p> <p>There is a disconnect with the data available and needs from the business. Some work is done to improve data speed, quality, sharability etc.</p>	<p>Organisation starts collecting data from their operations and investment are made to automise data collection and analysis</p> <p>Data can be used to create more precise business cases and case results can be more accurately measured.</p>	<p>Data is shared across teams and it is used successfully to improve commercial results through various activities eg. lead generation, customer acquisition and client retention manners.</p> <p>Strategy for data usage in place to help company to innovate with data and adopt advanced ways ie. AI or automation to draw commercial value</p>

Capability	Low 1-2	Medium 3	High 4 and 5
Resourcing capability	<p>Resourcing is poor and no financial or human resources available</p> <p>Resourcing acquired is in a junior level and not able to impact on strategy</p> <p>Resources are scarcely available in different business units - often focused only IT department</p>	<p>Resourcing is supporting commercial strategy aims and objectives</p> <p>Competence in digital business is acknowledged and acquired across different business units</p>	<p>Resourcing has a long- term approach and aligned against potential business value</p> <p>Long term resourcing is taking customer perspective into consideration, what our customers need in 5 years time</p> <p>Balance of internal/ external resourcing scoped carefully to minimise risks and keep ownership</p>
Leadership capabilities	<p>Leadership not believing digital future or not willing to do anything about its because it is difficult</p> <p>Leaders have different levels of understanding of digital opportunities and internal/ external experts involved to drive siloed goals</p>	<p>Leadership is supporting digital efforts cross different teams</p> <p>Leaders support pilot projects, and aims to implement favorable processes to support development</p> <p>Common targets set to drive development towards the same direction</p>	<p>Leadership moves towards discussion and acts as a promoter for new work and new processes</p> <p>Leadership is driving commercial results through enabling resources to increase business performance</p>
Learning capability	<p>No collaborative ways of working, culture is set with specific job descriptions</p> <p>Teams develop at different speed and no processes to share learnings across teams inside the organisation</p>	<p>Individual and team learning is supported through collaborative processes</p> <p>Strategic picture and direction setting directs organisational learning items and training opportunities</p>	<p>Learning at work promoted and through test and learn thinking, learnings are gained and shared across the organisation</p> <p>Talent pool is managed through modern leadership and opportunities to influence</p> <p>Culture is rewarding the attitude of learning and creating systematic learning opportunities</p>

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