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THE ROLE OF DIGITAL WELL-BEING SERVICES IN THE VALUE CHAINS OF ACTORS IN THE WELL-BEING FIELD – CASE VIAESCA

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ABSTRACT

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This master’s thesis pursues to examine and find the most promising inter-organizational cooperation opportunities between larger firm and startup offering digital well-being services. The research aims to discover the current state of the well-being markets in Finland and to determine the role of a startup offering digital well-being services in it. The study is executed as qualitative study with grounded theory approach including multiple case analysis. The data was gathered from seven semi-structured interviews from potential partnering firms from insurance, food sales and health care industries, as well as from the interviews with the case company, ViaEsca, offering nutritional coaching. The research builds framework of inter-organizational cooperation between startup and larger firms concluding of three main dimensions: ecosystems and integration of services, service effectiveness, and trust and reliability. Ecosystems or integrating with partner’s services are the cooperation forms through which digital well-being services are recommended to be provided. Service effectiveness is important prerequisite for the digital well-being service. Major criteria for successful inter-organizational cooperation are trust and reliability on both the cooperation partner and their service functioning. The research provides six concrete opportunities for strategic value creation with inter-organizational cooperation and digital well-being services: 1) integrating digital service to partner’s rewarding programs or products, 2) creating service packages or rewarding programs for groups, 3) white labeling, 4) integrating recipes into online grocery store, 5) part of an ecosystem, and 6) guiding to each other’s services.
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1 INTRODUCTION

This master’s thesis pursues to examine and find patterns on inter-organizational cooperation for value creation opportunities between startup offering digital well-being services and larger firms. It thesis has two main goals. First the scientific analysis is introduced on three main topics related to business entrepreneurship: inter-organizational cooperation, digital services and value creation. Second, the empirical analysis is conducted by studying the most promising inter-organizational cooperation opportunities for a startup offering digital well-being services to create value for partners and the customer.

The introduction chapter starts from describing the research background, objectives and questions. They are followed with the definitions of the central concepts as well as the limitations and structure of the study.

1.1 Research background

The main focus of the thesis is on the service sector that includes all industries except goods-producing firms. Hence it can be defined to conclude of “transportation, communication, public utilities, wholesale and retail trade, finance, insurance, real estate, other personal and business services, and government”. (Kutscher & Mark 1983, 21)

The service sector has been growing rapidly since the 1990s and has become the largest sector, addressing 70,6 % of Finland’s GDP in 2016 (Statista 2017). One reason is higher living standards that have moved demand towards services and increased customer needs and expectations. Especially personal services, like well-being services, have become more and more popular. (Barrett, Davidson, Prabhu, & Vargo 2015) Well-being in general has increasingly raised a lot of attention in the news, workplaces and life, among people, organizations and the society.
Current living standards have shifted Finland’s welfare state’s focus towards health problems, related to lifestyle diseases, mental health problems, and loss of functional capacity (Vaarama, Karvonen, Kestilä, Moisio, & Muuri 2014, 12). These well-being issues affect the overall performance and happiness of people and thus, well-being has drawn high attention also from firms to contribute on well-being matters and gain competitive advantage out of it. Customers are more eager to promote and pay for their own health and well-being and thus, the demand and markets grow steadily.

Well-being markets are growing continuously and have a lot of potentiality in the future. One example proving this is how one of the main Finnish health care firms bought recently a smaller health service company by 30,1 million euros even though the bought firm currently creates around 400.000 euros of operating profit (Pihlajalinna Oyj Stock Exchange Release Mar. 12, 2018).

Simultaneously, rapid technological development has created novel opportunities for companies to offer well-being services, with improved quality and value propositions. Especially the technological development has a great role in Finnish economy. Technology firms are constituting half of the Finnish exports, employing almost 300 000 Finns and having approximately 700 000 people working in the sector, and covers 70 percent of all the R&D investments in Finland (Technology Industries of Finland 2017).

At the same time with the technological and digital development, customers have gained broad portfolio of diverse services, and the possibility to be able to compare these alternatives in the markets, online and offline (Teece 2010). This trend emerged together with growing opportunities of technology and digital business both in business processes and customer value creation services. The competition also increases, and the markets have faced novel environment with more complex and varied conditions (Miles & Snow 1992). Firms offering digital services are therefore,
encountering significant decisions about their service, its features, their markets, distribution, marketing, or pricing etc.

An example of digital well-being service is the one by ViaEsca. This startup offers a service that is acting online with customer’s mobile app and wristband and generates data out of customers background information and actions while using the service. The company focuses on increasing the customer well-being by utilizing technology and digital service.

A general trend to gain competitive advantage in digital business has been the cooperation and networking with other firms searching new business models, service portfolios, and aggregating platforms. Currently, the focus of modern markets has shifted from firm-level rivalry (Porter 1985) towards network-level rivalry (Ketchen & Hult 2007), as well as from tangible material provisioning towards relationships, partnering, networks, service provisioning and value thinking (Lusch, Vargo & Tanniru 2010). Also, particularly when considering SMEs, the stress has shifted from market entry towards network entry (Varamäki & Vesalainen 2003).

Second, this master thesis focuses on the analysis of the interconnections between digital service sector and business entrepreneurship. Business entrepreneurship refers to business that has started a new venture and is less than forty-two months old (Van Stel, Storey & Thurik 2007). This paper aims to study how new ventures or digital service startups adopt inter-organizational cooperation to develop their business models and grow in the emerging digital well-being markets.

Digital services are coming increasingly popular in any field because they offer multiple solutions and approaches to different processes, systems and offerings. In the literature the digital services are often referred as e-services. Benaroch and Appari (2011, 534) define these as “the use of information technologies (IT) via the Internet to enable, improve, enhance, transform or invent a business process or
system to complete tasks, solve problems, conduct transactions or create value for current or potential customers”.

Empirically this master thesis covers the specific features of collaboration opportunities of a startup company (referred as startup) with larger firms. This is interesting approach due to startups’ different attributes and capabilities compared to larger firms. It is generally startups that are most often operating in the service sector and offering these technology-utilizing and information-intensive services (Prime Minister’s Office 2016). Thus, this thesis allows the examination of a common market situation when discussing about digital services and inter-organizational cooperation.

Startups are often having lack of resources and stable relationships (Baum, Calabrese & Silverman 2000). Inter-organizational cooperation can help in improving competitive stance by enhanced capabilities, competences and resources with sharing information, and transfer as well as technology attainment in collaborations (Knoben & Oerlemans 2006). Therefore, inter-organizational cooperation plays an essential role in startups. Philips, Lawrence & Hardy (2000) define the inter-organizational cooperation to be relationships between organizations that are not dependent on or intervened by market mechanism or hierarchical mechanism. Thus, there is no legitimate authority guiding the cooperation and it is not just pure buyer-supplier relationship.

The case company in this master’s thesis is a startup called ViaEsca. It is a new venture and limited company, founded in Helsinki in 2016 with the main goal to improve customers’ well-being through facilitating daily nutrition related decisions and actions. The business model is based on digital well-being service and application that takes into account the personal energy consumption and need, utilizing activity bracelet information. The service includes decided recipe packages with possibility to have ingredients also with home delivery.
Studying this topic is valuable to be able to better comprehend the complex and manifold issues of both the well-being industry and its cooperation opportunities. The potential partnerships are having different features, motives, practices and objectives and thus, need to be considered as a compatible fit for the startup. These require examination and in-depth analysis of the opportunities.

Also, the perspective of well-being is in the core of the study because there is numerous technology- and information-based services that do not possess the same aspects as digital services focused on promoting customer well-being. Even though these digital well-being services have become increasingly popular, there is not sufficient research about them in the context of business entrepreneurship and inter-organizational cooperation. This study intends to address this research gap of the intersection between digital services, business entrepreneurship and new market opportunities, and inter-organizational cooperation (Figure 1).

![Figure 1: Presenting the research gap connected to main fields of the research](image)

Theoretical implications of the study are the broader insights of startup collaboration factors and features to be able to analyze the value creation for collaborators and customers in the well-being field. Implications are providing insights about the specific features and state of the well-being markets in Finland, and the detected requirements of digital well-being services in these markets.
Practical implications on the other hand are aimed towards digital service startups operating in the well-being markets that are intending to broaden their collaboration portfolio or network. This thesis intends to give guidelines about the factors that need to be considered in the digital service offering and cooperation propositions. Also, managerial implications are provided to both larger firms and startups, in network and dyadic relationship perspectives. Potential opportunities are proposed in hand with their considerations and requirements about choosing, planning, implementing and monitoring the cooperation.

1.2 Research objectives and research questions

The research problem in the thesis is the startup's position and role in a new and growing market of digital well-being service sector in Finland. The main goal of the startup is to become a great provider of the digital well-being service for customers, also through larger companies that are connected to health and well-being issues and interested in promoting customer well-being to create new value in the markets.

Thus, there is a need for examination in order to understand the current state and future trends of the digital well-being markets that are simultaneously creating opportunities and challenges for large firms as well as to new ventures to enter, succeed and gain competitive advantage.

ViaEsca desires to create a network with companies that think alike, have common interest to help people with their well-being and are open for sharing information between partners to develop together. Purpose is to find out whether there seems to be space and need for digital well-being services in the markets and understand its position as well as demanded characteristics.

The objective of this research is to find out what is essential and relevant for a startup partner and its service offering in the development and success of a business in this field. Therefore, goal is to find the right angles to comprehend the market and
whether digital well-being services have a role, or what kind of role they have, in there.

Thus, the main target of this study is to find the most suitable value creation procedures from inter-organizational cooperation between a startup and larger firm to create value for collaborators and customers in the well-being industry and the digital markets. The main research question is therefore:

What are the inter-organizational cooperation opportunities by which a startup offering digital well-being service can create value together in the well-being field?

The aim is to understand what are the opportunities that a digital well-being service startup has when exploring new inter-organizational cooperation. In practice, this master thesis will bring guidelines for practical implications on how to create value in the digital well-being markets through different forms of inter-organizational cooperation (refers to inter-organizational relationship defined earlier by Phillips et al. (2000)). Greater value can also be created for customers when creating novel service combinations and packages with cooperation between companies.

This examination includes issues about developing and improving the digital well-being service features according to the market expectations and demands. Also, purpose is to gain a view about the stage of well-being markets inside each industry. Therefore, the following sub-questions are addressed:

1. What is the current state and importance of digital well-being services in the well-being markets?

2. What are the essential features for digital well-being services to create value for partners and customers in the well-being markets?

The main target is to examine the potential partner firms’ views and timeframe for well-being issues and digital services, as well as their compatibility for cooperation
with a startup offering digital well-being service. Simultaneously, the idea is to recognize the value creation aspects as well as possible challenges and risks arising from these issues. These are addressed by the following sub-questions:

3. What aspects affect inter-organizational partner selection of a startup offering digital well-being service in larger firms?

4. What kind of value can be created with inter-organizational cooperation for partners and customers in the well-being markets?

5. What challenges can be related to the cooperation between a startup offering digital well-being service and larger firms?

Purpose is to detect the potential partnering firms’ criteria and demands for a startup and its service to start a collaboration with them. Sub-questions two and three address these issues. All the research questions will be answered with the analysis based on the empirical data, contributed by existing literature and management theories.

1.3 Delimitations and structure of the thesis

The focus of the thesis is on the digital well-being services, and startup and larger firm collaboration. Main focus is on the opportunity recognition of cooperation opportunities in order to create value for both parties as well as the customer through digital well-being services.

A firm can promote well-being issues both to their own employees as well as for their customers. Thus, the limiting factor in the participating cases is the concentration on only to the customer well-being perspective. Therefore, the study excludes the perspective of internal employee well-being of the interviewed firms. This way, the role of digital well-being services in the value chains of potential partnering firms can be examined from the perspective of service offering. Anyhow, some firms examined here are operating also in business-to-business environment,
where the final customers can be employees of the customer firm and thus occupational well-being. Nevertheless, the focus remains on customer well-being.

Also, the digital services can be utilized in internal processes and to enhance operations. Nevertheless, these are excluded from the study, and the study is limited only to the digital services offered for the customers. The core of the examination is in the digital well-being services for customers, and if and how they can create competitive advantage in the firm’s value chain.

This study is also limited to three industries in Finland: health care, insurance and food sales. The well-being markets and their stage are analyzed inside each of these included industries.

The structure of the thesis is the following. After the introduction to the research, the thesis is constructed by theoretical and empirical parts. Theoretical part is divided into three sections. First theoretical part examines the existing inter-organization relationships literature consisting of business networks, dyadic relationships and partner selection theories and literature. These are the lenses through which the concepts of value chain, value creation, and digital services are observed.

Thus, the second theoretical part reviews the value chain model and digital services literature. This section contains the issues of service value chain and value networks, as well as the current state of value chain model literature and considerations of value creation and value capture. This part also discusses the literature about the features, possibilities and considerations of digital services and their value creation. All these topics are reviewed emphasizing the environment of e-business, and information-based services. Third theoretical part, the summary, concludes the main points from the literature review including the key arguments, criticism, identified research gaps, and contribution of the current study. Throughout the thesis, well-being acts as central perspective.
After the literature review, the empirical study is conducted. First part represents the used research methodology consisting of presenting the research approach and methods, research techniques, and justifications of the used methodology. The second empirical part covers the presentation of the well-being field and cases, comparative case analysis, as well as main results of the empirical study. After that the discussion covers the reflection of findings and previous literature according to research questions. Finally, the conclusions summarize the main results, implications of the study, propose future research topics, and finally elaborate the reliability as well as limitations of the study. According to these, the research framework is illustrated in the Figure 2 below.

![Figure 2: Research framework](image-url)
2 THEORETICAL FRAMEWORK

In this section, the theoretical framework of the master thesis is built. The literature review is constructed by introducing the selected theories related to how businesses and new ventures set up new inter-organizational networks, partnerships and alliances.

This includes three main overlapping theories: business networks, dyadic business relationships, and partner-selection. These are selected due to the central topic of analyzing potential partnership opportunities and the considerations related to choosing suitable partners for value creation.

Dyadic business relationships and partner selection are focusing on one-to-one relationships, but the cooperation decisions are often dependent on the wider overall picture of firms’ other relationships too (Anderson, Håkansson & Johanson 1994). Therefore, also the network perspective is important to review, to take into consideration the influence of external relationships outside the focal relationship too.

On the side, there is constantly following the aspect of value creation, because value is essential part of firm’s promising opportunities and creating successful business. Thus, the value chain model and related concepts regarding value creation in inter-organizational cooperation are reviewed from the existing literature.

The study is focused on startup offering digital services, and therefore the view of digital services and its value creation are discussed in the latest section of the literature review. The emerging considerations and challenging issues about cooperation, value creation and digital services are covered in each section. Finally, the conducted literature review is summarized. The theoretical framework of the thesis is illustrated in the Figure 3 below.
Figure 3: Theoretical framework of the thesis

The Figure 3 shows how the theory is covered by considering both startup and larger firm aspects and perspectives in the cooperation to be able to identify promising opportunities. These opportunities are focused and aiming on value creation for each party as well as the customer. Nevertheless, also cooperation, nature of digital services and ambiguity of well-being markets are having challenges and important matters to be considered. Thus, these are also pointed out in the theory section.

Now first the literature of the inter-organizational cooperation is covered. This section includes the literature review of business networks, dyadic business relationships and finally partner selection.

2.1 Approaches to inter-organizational cooperation

Inter-organizational cooperation has been studied in multiple research fields in management and organizational sciences already for decades. There are various point of views of factors affecting to these relationships, and of the desired number and quality of them.

Most popular research areas in this topic have been the analysis of the concepts (e.g. Håkansson & Snehota 1989; Gulati, Nohria & Zaheer 2000; Larson & Starr 1993; Miles & Snow 1986; Street & Cameron 2007), selection criteria (e.g. Emden,
Calantone & Droge 2006; Hacklin, Marxt, Fahrni 2006; Sarkis, Talluri & Gunasekaran 2007), success factors (e.g. Kask & Linton 2013; Ketchen & Hult 2007; Littler, Leverick & Bruce 1995; Mohr & Spekman 1986), reasons for failures (e.g. Gulati 1995; Miles, Preece & Baetz 1999; Miles & Snow 1992), and desired outcomes of the relationships (e.g. Sarkar, Aulakh & Madhok 2009; Wang 2016; Westerlund & Rajala 2010).

The newer trends of service-centric and technology or information driven offerings of firms are adding novel features to be taken into account (e.g. Alter 2008; Basole & Rouse 2008; Baum, Cowan & Jonard 2010; Chuang & Lin 2015; Lusch et al. 2010; Pagani 2013). Traditional manufacturing supply chains are not so valid anymore for most firms in today’s more complex, service-oriented, and agile business world with increased customer needs and expectations.

First, the concept of inter-organizational cooperation refers to commercially oriented linkages between two organizations (Street & Cameron 2007). The more comprehensive definition of them by Oliver (1990, 241) is as follows:

“Relatively enduring transactions, flows, and linkages that occur among or between an organization and one or more organizations in its environment”

Inter-organizational cooperation can be studied through different theoretical approaches: (1) business networks, (2) dyadic business relationships and (3) alliance-partner selection.

Next, the existing literature of the central theories about inter-organizational cooperation is reviewed. These are embedded theories and therefore they are presented by starting with broader phenomenon of business networks, continuing towards dyadic business relationships, and finally concentrating on partner selection.
2.1.1 Business networks

Business networks and inter-organizational networking itself is not a new trend. It became popular in 1980s, around the same time as Porter’s value chain model was first introduced. Networking gained its popularity due to the novel requirements and opportunities that were generated by the increase of global rivalry and rapid technological development. These changes demanded more efficiency, and thus companies started to focus more on their core competences, outsourcing more and more activities. (Miles & Snow 1992) The appropriate strength, features, and number of these relationships differ from organizations, environments, industries, and objectives, and thus, the findings from the existing literature need to be adjusted to the conditions of the analyzed object.

Fundamental papers in the business network theory have been among others by Thorelli (1986), Anderson et al. (1994), Miles & Snow (1992), Håkansson & Snehota (1989), and Larson & Starr (1993). Organizational networks have been defined in many ways in the literature. One of the most popular influencer is the research conducted by Anderson et al. (1994), where they generate a leading conceptualization of both business network and dyadic business relationships. First, the concept of business networks should be defined. These authors use the definition by Emerson (1981) as:

“A set of two or more connected business relationships, in which each exchange relation is between business firms that are conceptualized as collective actors.”

When a firm is affected by other relationships outside the focal relationship, it is integrated into this web of linkages between identifiable actors; the network (Håkansson & Snehota 2006). Important is to realize that parties of one relationship most often have other relationships, including to larger business networks. The collaborators can also have external relationships with same actors. Nevertheless, the boundaries of a network of individual firm is practically impossible to define. The
network horizon on its part is easier to see and it signifies the extent to which a firm sees the network. Boundaries of this horizon are changing constantly by for instance experience of the firm and network structure. (Anderson et al. 1994)

In the network theory, the functions between organizations are viewed from the network perspective. Each function of business relationship involves actors, activities and resources. Theory identifies primary and secondary functions. Primary functions refer to positive and negative impacts in dyadic relationships, whereas secondary functions similarly, but in the network level, concerning the indirect and direct linkages between organizations’ other relationships. Secondary functions are therefore also known as network functions. Network functions regard to broader view, with more than two actors, considering chains of activities, constellations of resources, and shared network perceptions. These network functions can have as strong or even greater influence than primary ones. (Anderson et al. 1994)

Previously, organizational network theme has been popular among non-profit companies. Thorelli (1986) brings attention for networks to act as an important growth factor for also for-profit companies. He provides a comprehensive network management view, and concludes that for enabling growth, the network demands both firm-level and network-level strategic planning.

The structural type of organizational network depends on its characteristics. Miles & Snow (1992) divide these between stable, internal, and dynamic networks. In today's more competitive business environment, the dynamic networks are answering more to the firms’ requirements to serve customers better and thus, are more and more often the case of inter-organizational networks.

Dynamic networks are more agile, innovative and efficient due to the higher number of firms collaborating genuinely together through firm boundaries, which also allows the more flexible assemble and reassemble of the components to react to the environment (Miles & Snow 1986). The dynamic nature of these relationships
explains the non-existence of mere one-to-one relationships between firms (Anderson et al. 1994). Even though the relationships are bilateral, firms are affected by each other's other connections too, and therefore are both included in the business network (Anderson et al. 1994). Only few companies can prosper as isolated from other firms.

Popp et al. (2014) talk about so called "whole networks" that are created purposefully between more than two organizations and have specific government and goals. They find that these are useful especially in the health-related fields where effectiveness, created with multiple actors and their efforts, is needed.

Larson & Starr (1993) present a network model focusing on startups. They propose the process of creating a new network organization by acquiring needed resources with networking activities. It starts from finding crucial dyadic exchange relationships and turning them into an intensive web of manifold business relationships. They highlight the importance of choosing the appropriate individual relationships that suit their own business. The authors promote the leverage of resources and that by choosing the narrowed set of these most suitable relationships, firms can create a "network of essential ties" that mobilizes the resources effectively.

The optimal strength of each relationship inside these networks has been a popular topic in many studies. Next the findings and propositions of the previous research about the strong versus weak ties -theory is presented.

**Strong versus weak ties**

When studying business networks, many authors bring up the theory of strong and weak ties. The theory has been first introduced by Granovetter (1973) who analyzes the interpersonal ties and their impact on distribution of information and influence, mobility opportunities and community organizations. Granovetter, unlike most previous researchers, focuses on the importance of weak ties that can offer more agility, fluency and adaptability. He concludes that weak ties are crucial for one's
access to opportunities, and adaptation into communities, whereas strong ties lead easily to smaller concentrations that aid incoherence in the network.

Lusch et al. (2010) state that the agility and adaptability to better answer to the changing customer needs demands competency alignment, which can be better achieved with weaker ties. This way firm is more able to create unique and targeted value propositions. Thus, they can increase their bargaining power inside network by being a vital part of the customer-perceived value in the network.

On the other hand, Ketchen & Hult (2007) argue that both types of ties are important for networks; strong ones for enhanced reliability and weak ones for better flexibility. Nevertheless, they wonder how different combinations of these ties influence the network preferences like alignment, competitiveness and flexibility. Correspondingly, Street & Cameron (2007) are proposing an argument by suggesting that optimal strength of the relationships should be pursued according to the targeted outcome (like learning, resources, market access etc.).

Varamäki & Vesalainen (2003) argue in their study about SME cooperation, that when the cooperation becomes more intensive, it creates more attractive outcomes but simultaneously adds the requirements for successful collaboration and thus, increases the risk of failing. These requirements are varying depending on the form of SME cooperation, but trust and commitment play an important role in strengthening the collaboration ties.

Also Popp et al. (2014) emphasize that both types of ties are necessary in business networks because they have varied objectives. Stronger ties to bring closer and create connectedness as well as greater trust between collaborators, whereas weaker ties to bring in novel point of views and ideas.

Wang (2016) discovers that the optimal set of strong and weak ties should strive for a balanced set that ensures sufficient network exploration and exploitation. Stronger relationship ties in a network first enhance the knowledge creation through greater
cognitive and relational capital, but when the average strength becomes higher and passes certain point, it finally turns into lower cognitive variation (see Figure 4 below). This is harmful for the formation of new ideas in the network that can be ensured better with enough number of weak ties too.

![Figure 4: The optimal set of strong and weak ties in business networks (illustrated according to Wang 2016)](image)

Wang (2016) recommends that the skewed tie strength distribution, in contrast to normal distribution, supports the balanced constellation of the ties. In other words, when there is more variation and difference with weak and strong ties and not just mostly ties with about the same strength, the explorative and exploitative possibilities are better achieved. This is important for this research because the companies need to plan a suitable form and strength of cooperation, and it affects the overall company performance.

Wang (2016) emphasizes that weak ties are important for explorative practices and knowledge creation for the firm and for the network as a whole. On the other hand, exploitation of these benefits is characteristic for stronger ties and therefore the network requires a sound combination of both types. The author supports variability in the strength of the ties because he realizes that when the tie strengths have less variability, the strengthening of all ties (i.e. increasing the average strength) leads to more significant effects both first in a positive way but also later in a negative way.
Networks are also studied in the context of small and medium sized firms, also referred as SME networks. The previous literature about SME networks and influence of firm size in the networks is regarded next.

**SME networks & small firm perspective**

Even though the size of a firm affects its performance and capabilities, the analysis of the effects of firm size on networks is often neglected. The studies in this area of inter-organizational cooperation has focused on small businesses (e.g. Wincent 2005; Street & Cameron 2007) and startups (e.g. Baum et al. 2000; Hitt et al. 2001; Kask & Linton 2013).

Wincent (2005) studies the SME networks by generating a framework about the effects of company size on the behavior and performance in strategic SME networks. The author defines the SME networks to include both small and binding larger companies that boost the network cooperation most with their better abilities and competences.

Wincent (2005) finds that larger companies have essential role in SME networks by being the connecting and maintaining element between firms and collaboration. At the same time when they enable broader possibilities for smaller firms with their more extensive resources and capabilities, they can also gain themselves due to possibilities that the position and possession of these resources and capabilities enable. This observation supports the one by Pagani (2013) who detects that greater and critical position in the network provides better opportunities to impact on the operations and division of benefits.

Street & Cameron (2007) analyze the nexus of small business’ inter-organizational relationships and resource access in their comprehensive literature review. They find that smaller firms are more often the ones creating and needing cooperation with larger firms. Thus, they need to make themselves lucrative for the larger firm as also Kask & Linton (2013) argue in their study. Kask & Linton (2013) bring up the
small firm perspective focusing on invention-based startups and marketing partners. They remind that small firms cannot just choose a partner of their interest, but they need to make themselves tempting for the other companies they want to create a relationship with. For that, the authors recommend startups to align their internal and external conditions to the environment and target firms.

Similarly, Street & Cameron (2007) point out that smaller firms are appealing larger firms with their special resources. Small firms can benefit in these collaborations by improving i.a. their competitive advantage, market value, expansion and growth, and learning. Reliability and coherence in these relationships can have significant importance for small firm's endurance in the long run. Advantages for larger firms are the special resources, maybe lower risk, and the possibility to grow and broaden their business.

According to the review by Street & Cameron (2007), challenge can be the assumption of smaller firm to assume more risk in the cooperation. Other problems may arise from the risk of larger firm intending to conquer the small firm for itself. Also, for a small firm losing independence and control in the collaboration or to become too dependent on a partner. Thus, the authors stress the importance of clarifying the objectives and compatibility with the larger partner as well as creating multiple relationships and collaboration network. Crucial for small firm is to ensure the protection of their resources by creating the necessity for the larger firm to exploit them through the relationship. Thus, small firm needs to be careful not to lose its power over those resources.

Basole & Rouse (2008) argue the necessity of networking for startups that are particularly based on an invention. This is in order to gain for example marketing knowledge and customer access. Also, Miles et al. (1999) emphasize that even though the small technology centric firms are generally needing the support of other firms in leveraging the benefits of their offering, they should avoid too high dependence on one partner or alliance. This type of reliance on one partner can
result in weaker outcomes than when having wider partnership portfolio with more options. Thus, it can be said that partner portfolio serves as decentralized safety net for a small firm to survive with its small bargaining power.

Varamäki & Vesalainen (2003) concentrate in their study about SME collaboration to explain the criteria or requirements for successful multifaceted SME collaborations and ways to achieve the benefits. They highlight the importance of acknowledging beforehand the pursued form of collaboration in order to be able to plan, promote and build the cooperation to wanted direction. They recognize five types of cooperation differing by their intensity and tightness, which can at least be the bases for the more tailored collaboration forms. In ascending order concerning the tightness, these forms are development circle, loose cooperative circle, project group, joint venture, and joint unit.

Varamäki & Vesalainen (2003) also find that particularly when considering SMEs, the stress has shifted from market entry towards the higher importance of network entry. Thus, the authors point out that cooperation often facilitates future cooperation prospects by gaining connections to other networks too. This indicates that the first collaborative agreements are both crucial and challenging regarding SMEs’ future partnerships. Similarly, Hitt, Ireland, Camp & Sexton (2001) promote the access to network ties and knowledge as crucial.

Startups are failing in their business more probably than larger previously established firms. According to earlier research, this is mostly due to the startup’s low amount of resources and connections. Baum et al. (2000) study which are the differentiating reasons of startups to fail, considering the early stage performance and alliance network establishment when founding a firm. They find that appropriate network formation in the time of founding has a determinant role regarding startup future success by covering the lack of resources and stable exchange relationships.
They stress the social, technical, and commercial resources that small and/or new companies can gain from external relationships without years of operating in the markets first themselves. Hitt et al. (2001) and Street & Cameron (2007) also emphasize the benefit of small and/or new firms to achieve competitiveness through networking without first acquiring all the needed resources for themselves. This all aids the innovative performance, which is one main contributor for success in the competitive markets. When the network is properly established, and relationships are appropriate to the firm, Baum et al. (2000) find that the main advantage gained is the innovative performance, especially for new and small firms.

Barrett et al. (2015) find in their study that larger firms are often utilizing the services to enhance their economic growth. Therefore, the collaboration with startups and small firms that most often are the ones offering these technology-utilizing and information-intensive services (Prime Minister's Office 2016) is beneficial for larger firms too.

2.1.2 Dyadic business relationships

Dyadic business relationships literature is strongly linked with inter-organizational networking. Nevertheless, Popp et al. (2014) argue that inter-organizational networks should be viewed also from the perspective of its dyadic business relationships that are creating the network to understand how the network functions.

Dyadic business relationships are literally relationships between two actors (Popp et al. 2014). They can emerge from market needs, where government of the relationship is often based on legal contracts. On the other hand, they can also be created from contracts based on social agreements, where government is based on trust that works through norms of reciprocity.

The concept of dyadic business relationships (Anderson et al. 1994) are strongly connected with the network theory. They are the core that form the wider business network and are seldom independent and unaffected by other network relationships.
Therefore, the aspects and factors found to affect to these individual relationships in the literature will be discussed here even though some of the notions are related also to networking.

Recent studies about the dyadic relationship theories and their factors have come to similar results as already Anderson et al. in 1994, who summarize these primary functions of relationships to bring:

- **efficiency (focus on core competences, novel practices)**
- **leverage of resources**
- **mutuality on self-interest of actors**
- **learning**
- **new combinations, innovations**
- **increased benefits for each participant**

These outcomes have raised a lot of interest and motivated researchers to examine other attributes of business relationships too. Next, the literature review covers the motives and benefits of inter-organizational cooperation.

**Motives and benefits**

Oliver (1990) examined inter-organizational networking through motives and determinants of relationship formation. She proposes examples of networking motives like reciprocity to achieve mutual benefits and goals, efficiency, asymmetry of resources, and stability.

Most authors bring the leverage of resources to the podium as the core and significant benefit from these relationships (e.g. Hitt et al. 2001; Street & Cameron 2007; Hitt, Dacin, Levitas, Arregle, & Borza 2000; Gulati et al. 2000). Often other benefits gained from cooperating are result from the utilization of resource leverage of different tangible and intangible assets. Other often identified benefit is the risk sharing between partners (e.g. Feng et al. 2010; Hitt et al. 2000; Gulati et al. 2000; Varamäki & Vesalainen 2003).
One of the main motives found in multiple studies about business relationship is observed to be learning (e.g. Baum et al. 2010; Hitt et al. 2000; Gulati et al. 2000; Varamäki & Vesalainen 2003). Among others Basole & Rouse (2008) as well as Gulati et al. (2000) highlight that by exploiting networks, companies can concentrate on their core competences by outsourcing some steps of the firm’s value chain. That streamlines the actions and creates more possibilities through increased resource and asset access and their combinations.

Feng et al. (2010) study the co-development alliances and find that main reasons for the formation of partnerships are most often new product development, pursuing goals that cannot be achieved alone, quality improvement, cost efficiency, sharing risks, and speeding up R&D. Baum et al. (2010) also indicate that the partners can gain simultaneously both distant information and reliable partners when focusing on the improvement of learning and innovation in the network.

Gulati et al. (2000) find that external relationships, especially strategic networks consisting of long-lasting and strategically important inter-organizational ties, are a possibility for companies to access information, resources, markets, and technologies from their relationships. These would allow better opportunities for learning, economies of scale and scope, and other strategic goals like cost and risk sharing. Thus, strategic networks are an effective way to perform in the increasingly competitive markets of today and important is to realize that each firm’s performance is affected significantly by these networks.

Varamäki & Vesalainen (2003) suggest that possible benefits to gain, and motives for inter-organizational cooperation, can also be cost efficiency, reaching critical mass, synergy advantages, new business potentiality, and credibility.

To summarize the previous literature about inter-organizational cooperation motives and benefits, reasons for starting cooperation can be: reciprocity to achieve mutual benefits and goals; pursuing goals that cannot be achieved alone; asymmetry of
resources; stability; leverage of resources; cost sharing & cost efficiency; risk sharing; learning; innovations; co-development; speeding up R&D; focus on core competences; economies of scale and scope; efficiency; increased resource and asset access and their combinations; quality improvement; (distant) information access; reliable partners; credibility; market access; reaching critical mass; technology access; increased competitiveness; new business potentiality; and synergy advantages.

**Determinants affecting outcomes**

Estimating the outcomes of a cooperation relationship has its difficulties. Oliver (1990) detects that determinants affecting the cooperation outcomes can be for example external threats or constraints, compatibility between participants, relationship costs and benefits, and environmental uncertainty and risk.

Also, Wang & Rajagopalan (2015) study the alliance outcomes and reasons for the diversity of these results. They propose the main explaining factor to be the various capabilities possessed by firms. Different capabilities are needed in pre- and post-formation stages of alliances, and the capabilities will, and should evolve as time passes.

Examples of these capabilities identified by Wang & Rajagopalan (2015) in pre-formation stage are information search and processing, codifying routines and processes, governance, negotiation, and contract design capabilities. On the other hand, in the post-formation stage examples are coordination, communication, learning and information transfer practices, problem-solving, reassessment of established practices, as well as adoption ability, and monitoring capabilities. They analyze these capabilities by their effect on value creation and value capture. Value creating and capturing generate multiple opportunities and challenges that both demand various capabilities in the alliance and individual firm levels.
Sarkar et al. (2009) examine the firm-level overall outcomes from inter-organizational networking and note that they are troublesome to assess due to variance in the network. Main reasons are distinct operational position in the value chains or company life-cycles, as well as diverse strategic significances and governance structures. Separate linkages inside a network can create value that is either overlapping or affecting negatively or positively to other outcomes in the network. Therefore, the overall outcomes should be reflected by examining the net value of the whole network, considering both negative and positive influences.

When researchers study the outcomes of inter-organizational relationships, they often focus either on the success factors, or the identification of probable challenges, negative consequences and reasons for failures. These are discussed in the following section.

**Success factors and reasons for failures**

Hitt et al. (2000) study success factors of strategic international alliances using resource-based view and organizational learning theories. They underpin knowledge transfer as crucial factor in inter-organizational relationships. The study indicates that deeper relationships might boost the tacit knowledge transfer between companies. This will probably increase trust and improve overall communication between partners which can enhance, among other things, the learning processes.

Mohr & Spekman (1994, 135) discover that the main success factors of partnerships are “commitment, coordination, and trust; communication quality and participation; and the conflict resolution technique of joint problem solving”. They recommend that these features should be secured in business relationships and their managerial considerations.

Oliver (1990) points out that understanding each other’s objectives and purposes in the network helps the whole network to move towards common goals and successful
performance. Feng et al. (2010) remind that desired outcomes should be pursued systematically because these are motivating companies to engage in partnership.

Also, Pitta & Laric (2004) state in their value network study, that in order to flourish, the organizational relationships must be effective, reliable, sustainable, and aim to same direction. Basole & Rouse (2008) point out that the customer perceived value is central and therefore important is the openness and information sharing, integration of actors, as well as flexibility for change in the relationships, in order to have less inconveniences for the customer.

Unfortunately, partnerships are not always successful. Multiple studies find that, actually most of them fail or are seen as unsuccessful by partnering companies (e.g. Hitt et al. 2000). Especially, according to a popular study conducted by Gulati in 1995, strategic alliances are often seen to contain risk, because companies are vulnerable to changing environment and partner’s opportunistic behavior. Also, Oliver (1990) finds that different motives of cooperators might disturb the common operations, and opportunistic behavior can harm the whole network.

Many authors stress the usefulness of constant information flow between organizations but realize also its downsides and challenges (e.g. Emden et al. 2006). Also, Hamel (1991) points out that information gain can be one reason for relationship creation, but it is not un-equivocal to only benefit the company. Challenging and possibly negative side in inter-organizational relationships is also the fact that each party in the network has an impact on the results, by for instance functionality, reputation, or quality (Pitta & Laric 2004).

When engaging with other firm, it is crucial to ensure the productivity and utility of the relationship. Otherwise the relationship takes resources and may prohibit the cooperation with more productive and beneficial firms. (Gulati et al. 2000) Especially, when concerning small new firms, their partnership choices have a large impact on their business, and therefore should be chosen carefully. Nevertheless,
due to the limited amount of contacts and habit to trust mostly on their existing social relationships, small firms often tend to narrow down their range of potential partners (Baum et al. 2000).

Littler et al. (1995) argue that especially when concerning new technologies and co-development projects, about half of the collaborations are prone to fail. This is due to the nature of higher risks and costs that come together with the possible greater benefits of these kinds of collaborations. Nevertheless, they remark that careful partner selection assists in avoiding the failure.

To summarize the previous literature about the determinants affecting outcomes, the main issues arising are external threats or constraints, compatibility between partners, relationship costs and benefits, environmental uncertainty & risk, variance in the network, operational positioning in value chains and life-cycles, strategic significance of partners, governance structures, overlapping, partner characteristics, firm and alliance level capabilities (information search & processing, routine and process codifying, governance, negotiation, contract design, coordination, communication), as well as learning & information transfer practices (problem-solving, reassessment of practices, adoption ability, and monitoring capabilities).

To gather together the main success factors according to previous literature are: (tacit) knowledge transfer; trust; openness and information sharing; communication quality and participation; commitment; coordination; conflict resolution technique; joint problem-solving; understanding each other’s objectives & purposes; systematic pursue towards desired outcomes; effective, reliable and sustainable relationships; aiming to same direction (mutual/compatible goals); integration of actors; flexibility for change; ensuring productivity and utility of relationship; and careful partner selection.
In conclusion the main detected reasons for failures in inter-organizational cooperation according to earlier literature are: partner’s opportunistic behavior; different motives; vulnerability to environmental change; information leak; negative influences of partner or its network (e.g. service functionality, reputation, quality); inefficiency in terms of usefulness; reliance on narrowed set of earlier connections; as well as higher risk of new technologies and co-development project’s.

Next the existing literature about business partner selection and its determinants are reviewed. This section focuses on the attributes that are recommended to be checked of the potential partner before starting cooperation, as well as to the process of partner selection.

2.1.3 Alliance and partner selection

Business relationships and terms related to it, like alliances and partnerships, are often used interchangeably in the literature. Nevertheless, in some papers, there are clear distinctions between these concepts and their nature for instance on the level of commitment, risk and cost sharing, as well as control over other’s actions. Actual partnership between organizations can be defined to include mutual sharing of risks and benefits deeper than a commercial relationship (Commission of the European Communities 1989). In this paper, the partner selection concentrates on any inter-organizational relationships and supports the perspective that the strength of these relationships should be determined according to the objectives of the collaboration.

Partner selection theory has evolved mostly from the 1990s by different fields, resulting to a discovery of wide range of different factors and criteria affecting to the formation and emerge of partnerships. Authors have offered different emphasis by focusing on forms of international partnerships (e.g. Hitt et al. 2000; Geringer 1991; Glaister & Buckley 1997), by focusing on the relational aspects (e.g. Parkhe 1991; Hitt et al. 2000), or like organizational learning literature has concentrated on know-how transfer (e.g. Hamel 1991; Parkhe 1991; Hitt et al. 2000; Baum et al. 2010).
Many researchers use partner selection with the concept of co-development (e.g. Mohr & Spekman 1994; Littler et al. 1995; Hitt et al. 2000; Emden et al. 2006; Feng et al. 2010). Also, innovations are often linked with literature about partner selection (e.g. Granovetter 1973; Hitt et al. 2001; Baum et al. 2010; Kask & Linton 2013; Pagani 2013; Chuang & Lin 2015).

Geringer (1991) is one of the firsts aiming to particularize the criteria of complementarity for partner selection when he studied international joint ventures. Previous literature had acknowledged the significance of partner selection criteria on the firm performance, due to the variety of resources and skills acquired, as well as the capability to achieve strategic goals. Still, the determinants for them had been ambiguous.

Geringer (1991) proposes identification of specific task- and partner-related variables and weighting their importance to help determine the suitable criteria. This is done by careful examination of own current and future capabilities to find out the needed complementing skills and resources to achieve targeted capabilities from the partnership in short and long term. Glaister & Buckley (1997) divide partner selection also into task-related (e.g. access to distribution channels, knowledge of local markets, knowledge of local culture, and linkage with major clients) and partner-related (e.g. relatedness of partners’ business and reputation, and trust between management) criteria, but they stress the mutual partner need.

Hitt, et al. (2000) differ from previous literature by not emphasizing partner characteristics, but rather underlining the role of resources. Complementarity of resources as well as opportunities to learn new skills or capabilities to support their own competencies and competitive advantage are considered as significant success factors when choosing an appropriate partner. They also find that firm’s strategic orientation is important, as well as earlier alliance experience, industry attractiveness, cost of alternatives, and speciality of competences and skills.
Especially, when constructing a strategic network, it demands careful consideration of chosen relationships because of their long-lasting nature. Gulati et al. (2000) underline five essential insights of these networks to be taken into account. These are inimitable resources and capabilities, industry structure, positioning within an industry, contracting and coordinating costs, and dynamic network constraints and benefits. On the other hand, Hitt et al. (2001) emphasize social capital, previous network and alliance experience, as well as complementarity as essential factors when selecting cooperation companies for network.

Hacklin et al. (2006) on their part distinguish the strategic, cultural and structural criteria in the partner selection. They recommend applying partner selection process on one-to-one basis as well as proper partnership portfolio management in order to gain successful results out of partnering, especially when regarding technology-intensive firms.

Baum et al. (2010) study the partner selection in the context of innovative networks. Previous studies about partner selection have mostly concentrated on social capital: structural and strategic fit of organizations. In contrast, Baum et al. (2010) emphasize the knowledge base of each party. They highlight the essence of deeply understanding each other’s capabilities to be able to assess the knowledge range of each other and therefore choose compatible partners.

Selection method for co-development alliances is also suggested by Feng et al. (2010). They highlight previously little neglected factor of collaborative utility and its attributes (motivation and goal correspondence, overlapping knowledge bases, resource complementarity, and compatible cultures) on the side of individual ones (capability to access new markets, financial health, technology capability, knowledge and managerial experience).
One popular model is presented by Emden et al. (2006) who conduct a theory building study to aggregate different emphasis and views together to a more comprehensive united theoretical model. In addition to the structure and content, the model suggests and justifies the order in which the process should be proceeded based on the previous theory. Their framework is focused on partnerships co-creating new products. This model is illustrated in the Figure 5 below.

![Figure 5: Partner selection process (modified from Emden et al. 2006)](image)

It divides the process into three phases: technological, strategic and relational alignment. Each of these steps require a decision that determines the progress of partnership creation. First decision handles creating a common view of technologies and their market influences. Second decision concludes of designating a team for cooperation project. Third decision deals with organizational agreement and ascertaining financial and legal matters. Finally, the process ends with selecting a partner with synergistic value creation potential.

Hence, based on the main goal of this research the study of inter-organizational cooperation brings three main dimensions that are adopted in the analysis of the case. These dimensions are: 1) business networks, 2) dyadic business relationships, and 3) alliance and partner selection.

Next chapter discusses the state of value chain model and digital services from the previous literature. This section includes the service value chain and value networks perspectives as well as value creation possibilities of the digital services.
2.2 The concept of value chain model and digital services

The second main set of theories adopted in this master thesis is the analysis of the value chain model and digital services. It is important for this research because the intention is to gain understanding of the opportunities of strategic value creation in the specific context of digital services.

Value chain is a traditional business framework and widely used in business strategies. Porter (1985, 33) created the value chain model to illustrate systematically all the main activities and their interlinkages throughout the whole chain of company’s processes. Value chain model is a strategic management tool to acknowledge the strategically most significant activities of a firm, to gain understanding from key value creation points, cost drivers, and differentiation possibilities. Thus, the model demonstrates the added value and identifies the main sources of competitive advantage.

The generic value chain consists of primary activities (inbound logistics, operations, outbound logistics, marketing and sales, and service) and support activities (firm infrastructure, human resource management, technology development and procurement). The support activities are enabling and advancing the main activities by taking care of the needed inputs and infrastructure. (Porter 1985, 36)

The stages in analyzing the value creation with value chain model can be to define strategic business units, critical activities and products, as well as the value of the activities. Two essential considerations are to figure out which activities the company should perform and in what ways, as well as what is the assembly of the activities needed to add value and be able to compete. (Amit & Zott 2001)

Nevertheless, there has been opposition to the traditional value chain view. Peppard & Rylander (2006) find that traditional value chain is not as applicable to service sector due to more cooperative and tangled nature of service industry. The value chain model is based on chained activities that produce the final product, but in the
current markets and due to increased customer requirements, the chain includes more complex aspects that create the overall value. These authors propose the network perspective to be included in the value chain considerations. In other words, they praise the value chain model for its effects on pointing attention on value and value creation, but still state that the augmented popularity of inter-organizational relationships demand modified version of it.

Similarly, Basole & Rouse (2008) find that Porter’s generic value chain model is not valid anymore with its linear functions between bilateral actions. Instead, they argue that organizational networks are replacing the traditional view of the value chain. They suggest that in today’s more diverse, complex and fast-paced environment, the perspective of networking considers the manifold linkages of multiple companies, and also the relationships of partner’s partners. These connections affect the whole network and therefore the concept of value chain should be adjusted to fit for these attributes.

Also, Merchant (2012) challenges the applicability of value chain model to social era where the focus has shifted more and more towards networking, cooperation, flexibility, and co-creation. She argues that the model is more suitable for homogenous mass-production companies aiming to cost-efficiency, than to the nature of services that are impacted by customer throughout the process. Nowadays e.g. quality, uniqueness, customer service are more important factors in the creation of competitive advantage, instead of just volume and price.

Thus, the value chain model needs modification in order to meet the features of today’s service-oriented markets, novel business environment, customers’ influence on processes and activities, as well as the widely popular trend of networking and cooperating between firms. The main steps in the value chain analysis can be adapted to novel business models. That way, the strategically relevant business units, activities, products, services, and value of an activity can be defined as Amit & Zott (2001) proposed with traditional value chain analysis. Nevertheless, the
identification of them and planning their execution can be more complex, and be outside the company: from other organizations, or even from customers.

To approach the value chain model from the network theory perspective, Porter (1989) suggests that firm has only corporate and business unit strategies and therefore his study does not consider the novel business world and the strategies needed also for partnerships and networks. His main concepts of corporate strategy, which are practice-portfolio management, restructuring, transferring skills and sharing activities, are still applicable and current also to the network and partnership strategies. Thus, his model could be modified to network perspective by applying the concept to search external organizations to fill certain abilities, knowledge and activities needed and spread the synergies from just intra-organizational collaboration between units to inter-organizational collaboration with other firms.

The value chain model has evolved in line with the trend of economic sectors: towards services, as service value chains. In the existing literature, the concept of the value chain has also approached the value network. Next the features of these service value chains and value networks are unfolded.

2.2.1 Value networks and service value chains

Nowadays the business is shifted towards services, promoting value and perceived benefits. This has created interest towards novel types of organizational networks. Especially the concept of value networks has been presented by many researchers (e.g. Peppard & Rylander 2006; Pagani 2013; Lusch et al. 2010; Pitta & Laric 2004; Basole & Rouse 2008). Value networks are accurate for this paper because the focus is on information and technology-oriented service offerings, which have been more and more linked with networking and value creation.

When earlier the network and value chain considerations covered mostly just an efficient supply chain, more recently, the attention has moved towards creating value. One result from this orientation is the term of value networks. Value networks
are aiming to collaboratively provide and exchange service offerings, and co-create value to the customers, by being adaptive, and developing service eco-systems (Lusch et al. 2010).

Peppard & Rylander (2006) suggest a framework of network value analysis to be useful for digitalization-oriented companies. The framework highlights final offering and its value as a center in the planning and forming of the network processes. They highlight the composition of network actors in the chain to be organized regarding the needs of the final offering. Thus, complementarity of actors, as well as each actors’ role and effort are emphasized when shaping the value creation process. They also promote to think network in its entirety.

Regarding the value creation, Pagani (2013) also studies value networks and highlights the identification of control points within the chain. These points signify the places where the value or power is resting inside the value network. Those power concentrations denote to firms possessing this position to have larger impact on the network operations and division of benefits.

One important industry in this paper is the health care sector which has raised interest on network researchers due to its complexity. One of these researchers are Pitta & Laric (2004) who underline the customer perspective in their network study. They use the concept of value chain and demonstrate it in this context as a network that consists of actors delivering the value (value delivery network), and the customers.

This is illustrated in the Figure 6 below demonstrating also the important points where value lies. Value delivery network includes all the inter-organizational relationships required for the value delivery. It pursues to quality, to increase customer-perceived value, and to evaluate each customer’s lifetime value. The final
target is to be able to satisfy the customer needs, as well as customer expectations of the benefits. Here, relationships with customers are in an important position.

Basole & Rouse (2008) focusing also on health care sector, created a conceptual model to illustrate the service value creation in networks. The main idea is that the service value is created by many actors that enable and provide the service, supported with auxiliary enablers that can increase the value of the service. All these actors are linked with end-customers. The authors argue that network structure and dynamics, as well as customer expectations, are the main reasons for the intricacy of a service ecosystem. Also, the number of actors and technology used in organizing processes, affect the complexity of the network and value delivery.

Basole & Rouse (2008) stress that the service should be effortless for the customer and thus requires integration, information transparency, and preparation for change inside the network. Their suggestion for health service value networks is to concentrate on health outcomes and their costs as core of the actions, enabling new value propositions. Hence, the innovation of novel offerings and combinations seems to come to the table again.

One kind of value creation networks are so called innovation networks which are targeting on learning and innovation over individual capabilities of a firm (Baum et al. 2010). Westerlund & Rajala (2010) conduct a study concentrating on these learning oriented inter-organizational networks, its effects on the collaboration, and how the co-creation of innovations influence these networks. They propose that this co-innovation enhances the learning processes as well as network collaboration. Especially, when concerning product innovations, the inter-organization learning
and collaboration play higher role, than in process innovations where intra-organizational learning is found to be more essential.

Pullen, de Weerd-Nederhof, Groen & Fisscher (2012) studying SME collaboration, find that main source of innovative performance is not the product innovativeness and the initial innovation, but the configuration of network, and its characteristics. Small firms have usually the need of creating novel value for the customer in an efficient way despite their restricted amount of resources. Thus, innovation and cooperation have usually a major role in their business.

The service value chains are a modification of traditional value chain aspects to apply on service business models. It does not have a general commonly used model but most authors in the field have in common the customer centricity and process heterogeneity. Quality and perceived customer benefits are also emphasized.

Pitta & Laric (2004) argue that the main differences between traditional value chain and service value chain are the level of customization, degree of participation of outsiders (organizations or consumers), as well as higher uncertainty of processes. Thus, complexity and more ambiguous metrics are general features of service value chains since they usually include networks and hence multiple value chains enabling the service. This concept can also be seen as earlier mentioned value networks.

Alter (2008) uses service value chain framework (Figure 7) to illustrate the phenomenon in general, with intention for it to be applicable to all service systems. He defines the concept as including the “service-related activities and responsibilities of both the service provider and the customer”. He points out that there are three timings for these to happen: before, while, and after the service delivery. Thus, the main steps in his model are the awareness, negotiation, and service delivery including setup, request, fulfillment and, the follow-up.
All the steps are happening in connection with the customer. The overall satisfaction comes from the perceived benefits including also other aspects than just satisfying the need, like for example service politeness and policies, as well as pre- and after-sales actions. The overall customer benefits and satisfaction are created through service activities, experiences, and responsibilities. This differs from the earlier mentioned standpoint of Peppard & Rylander (2006), who put the final offering to a podium and suggested that other actions are just ways to answer to the needs of this final offering.

Thus, the value networks and service value chains are central in the analysis of this research because the study focuses on strategic value creation in the inter-organizational cooperation in the context of digital services. The focus is on the value chains and networks built by multiple companies and not just inside one firm.

2.2.2 Digital services and value creation

The aspects of e-business and digital services have also generated own path of value chain thinking, because it differs vastly from previous business models and demands more hybrid cooperation with firms. Thus, this chapter deepens into the characteristics of e-business value creation in the digital era.
Business concentrated on digital services, also referred as *e-business*, has raised popularity during recent times mostly due to rapid technology development. The number of firms utilizing Internet in their business has increased vastly since it has opened new ways for firms to create value. This development has been stable since the beginning of the wider utilization of IT in the business since 1990s (Fleisch & Weinberger 2015). Especially, the themes of digital innovations, customer participation, as well as data utilization are often related to this topic in the literature.

Amit & Zott (2001) pursue to address the sources of value creation in the e-business era. They define e-business as a business “that derives a significant proportion (at least 10%) of its revenues from transactions conducted over the Internet.” The authors find that e-business is totally renewed business model that demands new exchange and transaction procedures and constructions. They create a model of e-business value creation addressing four sources of value creation possibilities. These are efficiency, complementarities, lock-in, and novelty (see Figure 8 below).

![Figure 8: Digital service sources of value creation](image)

Later, the same authors have made a highly popular study continuing about the value creation and value capture inside activity systems (Zott & Amit 2010). They suggest looking for the dominant value creation drivers that are binding and organizing the elements of activity systems. The value creation possibilities should be considered through rethinking network content that defines *what*, structure that answers *how*, and governance that covers *who* and *where* activities should be performed. These are often related to these four earlier mentioned sources of value creation in e-business (Figure 8 above).

Value creation with digital services through *novelty* means doing something new as products, processes, delivery, marketing etc. that others have not done earlier. In
other words, implementing a novel content (what), governance (who and where), or structure (how). Lock-ins on their part tie third parties closer to firm’s business, like with high switching costs or network externalities and programs. Complementarities create value when the combination of activities generate higher value than doing them individually. These can be realized in more comprehensive and multi-level service or with more efficient service experience and cheaper overall expenses through e.g. decreased time that the customer uses for searching, comparing and decision-making (Amit & Zott 2001). Finally, efficiency creates value by decreasing transaction costs through rearranging activities. (Zott & Amit 2010)

Fleisch & Weinberger (2015) concentrate on digital innovations through business models and their implementation in the digital age. The authors draw an illustrative figure of the development of digital business model patterns from the 1990s to this day (Figure 9 below). The figure shows the main trends of Web eras, with examples of their typical business models. It has started from the possibilities enabled by basic digital infrastructure towards including the contribution of a customer, and finally the opportunities enabled by sensors.

<table>
<thead>
<tr>
<th>Web 1.0</th>
<th>Web 2.0</th>
<th>Web 3.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web as Business Infrastructure</td>
<td>Web as Social Media</td>
<td>Internet of Things</td>
</tr>
<tr>
<td>“When users add value”</td>
<td>“When sensors add value”</td>
<td></td>
</tr>
<tr>
<td>E-Commerce</td>
<td>User Designed</td>
<td></td>
</tr>
<tr>
<td>Freemium</td>
<td>Crowdsourcing</td>
<td></td>
</tr>
<tr>
<td>Leverage Customer Data</td>
<td>Long Tail</td>
<td>Digitially Charged Products</td>
</tr>
<tr>
<td>Open Source (Software)</td>
<td>Open Source Content</td>
<td>Sensor as a Service</td>
</tr>
<tr>
<td>Digitalization</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 1995 | 2005 | 2015 |

Figure 9: Development of digital business model patterns (Fleisch & Weinberger 2015)

Fleisch & Weinberger (2015) find that all these business model patterns usually include the trends of (1) integration of users and customers, (2) service orientation, and (3) core competence analytics. Integration of users to the value creation chain is efficient and useful for firms to share some of the activities with the final customer. The service orientation offers the possibility to enhance the after-sales practices
through digital contact with the user. Finally, the core competence analytics give essential information about the transaction and user data which are extremely useful for service modifications and design, as well as pricing and sales strategies.

The foundational idea behind the digital services is the value creation, which requires specific business models to exploit the novel possibilities that digitalization and e-business offer. Fleisch & Weinberger (2015) especially point out, that lean startups can benefit in the digital world due to their need and ability to operate efficiently and co-develop with their business networks.

Also, the data achieved from applications is valuable asset for firms, containing both opportunities and challenges. The data can help in e.g. improving the offering, developing novel ones, customer segment optimization, responsiveness, qualifying revenue logic, as well as flexible adaptability of the offering. But the downsides of this data include at least the regulation and data security issues, as well as data ownership considerations. This highlights the importance of having clear and transparent understanding about the use and management rights of the data in the business relationships. This contributes the overall benefits in the value chain, including partners and customers.

Huberty (2015) proposes three types of value creation with big data. First is through gaining the (1) profits from advertising by offering cheap or free digital service for the customer. Second type is the (2) efficiency and power achieved by the owned data, to be able to analyze the future trends of the market and optimize own actions to the predicted customer needs. Third way is to (3) avoid the digital exhaust and overspill of useless data by focusing on creating specific data for certain purpose. Here the aim is to solve particular challenge. This data is most often concentrated on the data gathered from firm’s own offerings and thus, serves the actual intention of the data exploitation to create value.
Teece (2010) discusses the e-business by analyzing the profit generation of information-based services. He focuses on the assembly of a value chain, as well as to value proposition, and value capture mechanism. His framework assists on identifying the main paths and important attributes on how to form functioning business model and revenue logic for capturing value. This process is illustrated in Figure 10 below. Important consideration is the positioning in the chain, and how each activity is desired to be executed: by themselves or by external parties.

**Figure 10: Forming a business model for capturing value in e-business (modified from Teece 2010)**

Due to the huge and fast development of ICT, the services have become more difficult to price, especially if the service is about providing information. Information can be achieved from many sources for free and therefore a firm needs to create substantial value for the customer to be ready to pay for it. Also, comparison between different offerings has become easier and therefore calls for clear value propositions. This requires understanding of the main factors affecting the pricing of digital services. Crucial questions are: how to earn revenue from the information offered for the end-customer, and as importantly, how to deliver value and capture it during the process. (Teece 2010)

Barrett et al. (2015) concentrate in their study on partnering and service innovations in the digital age. In addition to novel possibilities for small firms, many larger firms are searching growth from the area of these e-services. Companies can find new combinations and ideas for innovative services through collaboration with others. They can create totally novel value offerings for the customers by complementary resources and offerings.
Similarly, Chuang & Lin (2015) focus on e-service innovations with the use of networks and partnerships. They find that reconsiderations of service offerings and delivery processes are important factors for e-service innovations. Technology plays a dominant role in improving efficiency of the delivery process, enhancing R&D processes, and in adjusting to diverse customer needs. Complementing capabilities both in e-services and in collaboration between partners are crucial when pursuing for successful e-service innovation. To better meet needs of the customers, they propose to harness new information technology-based services, also referred as e-services, to reinforce their service. E-services are often performed in contact with customer, which provides the firm additional essential customer information e.g. through increased communication.

2.3 Summary

To conclude the literature of inter-organizational networks and cooperation, seems like main topics arising are innovations and novel offerings through increased resources and assets and their combinations, as well as learning opportunities from knowledge transfer. Also, the customer perspective and value creation have been in a central role. The challenges of the networks concentrate mostly on the management and structure of the network or partnerships, alignment, and opportunistic behavior. Also, many point out each actor’s influence on the whole network and that it can create also negative impacts that can affect the overall reputation.

Multiple authors identify foundations of relationship as critical factor that affect to the success and development ability of the cooperation. Thus, the selection of a cooperation partner has an important role, especially in the more vulnerable position of new and small companies.

All in all, the form of cooperation with other firms depends mostly on the cooperation objectives and capabilities. Multiple views about partner alignment and compatibility
in partnership formation has been proposed. Nevertheless, one of the most recognized models, combining also previous partner selection frameworks, promotes following technological, strategic and relational alignment in order to find most promising synergistic value.

To conclude the weak versus strong ties research, the combination or amount of strong and weak ties in relationships has been questioned. Here, the targeted outcomes of a relationship matter significantly. When wanting more concentrated bilateral or smaller group cooperation with intense reliability, stronger ties can be recommended. But if the objective is to be innovative and ready to change quickly, all authors are supporting weaker ties. Nevertheless, a balanced combination of both types are seen to give greatest overall benefit, with balanced exploration and exploitation advantages.

To summarize the previous literature about the value chain model, it demands modification due to the rapid technological development to fit on the more service- and customer-oriented business models. The basic idea of value creation remains, but it demands adding the network and customer perceived value perspectives. Value delivery and service value networks emerge to answer better to customer expectations and considering the influence of network as well as end-customer throughout the processes. Important is to recognize each actors’ role and effort, as well as where the value lies in the chain, how it is created and how captured.

Main issues appearing in the literature about digital services and e-business, is that they create novel opportunities for firms with new business models and innovative solutions. Their value creation and revenue generation opportunities are distinctive, coming from among other advertising, data, novelty, lock-ins, complementarities or efficiency. Main characteristics of digital service business include customer integration, service-orientation, and core competence analytics. Especially, data, its ownership and utilization are important issues in the digital era.
Nevertheless, the existing literature is lacking the concentration to well-being markets, which is a research gap covered in this paper. Even though the service value chain, and cooperation considerations of health services have been studied, the perspective has been more focused only on the nursing or medical treatments. Thus, this current research brings attention towards the well-being field and well-being services for customers by concentrating on the special features and opportunities of digital well-being services.

In addition, the previous literature is not comprehensive about the position or role of new ventures (startups) on the value chains of larger companies. Thus, these considerations are discussed in this paper, covering what are the different ways and opportunities that startup can locate itself in partner’s value chain as meaningful and worth the cooperation. Also, when considering value networks, there are different views in the existing literature about whether the focus should be on the final offering or throughout the service process. These views are both aiming for the same, customer satisfaction, but from the different perspectives.

As a critic it could be said that the partner selection literature has extreme amount and variation of propositions for the criteria to choose appropriate partners. This creates ambiguity to the process and creates an uncertain picture of the topic. In addition, for the one-to-one partner selection complexity, the overall picture of partnership portfolio and network should also be included with its management considerations. Manifoldness of this phenomenon is not having the needed united and unanimous guidelines for a firm to apply on its business.

The contribution of current research is the focus on the digital well-being services for customers to discover the main issues affecting to these markets. The idea in this paper is to examine the state and opportunities of the markets and see where it is heading.
3 RESEARCH METHODOLOGY

In this chapter, the chosen research methodology is explicated to show the progress and execution of the empirical study. The research methodology illustrates the manner of how the research problem is addressed and concludes of all the techniques utilized in the examination (Kothari 2004, 7-8).

This is done by first justifying and explaining the choices of the used research approach, methods and strategies. Second, the data gathering and analysis processes are explained and reasoned including sampling, data collection and data analysis. Finally, the reliability and validity of the used methods are confirmed.

3.1 Research approach and methods

The research questions and objectives are demanding an exploratory and inductive research approach where idea is to gain empirical generalizations out of the data. This approach supports the choice of qualitative study as research method, including grounded theory. This explorative research approach facilitates looking the phenomenon from various viewpoints and therefore allows wider and more comprehensive findings from the studied, a little unfamiliar, subject of well-being markets and services (Baxter & Jack 2008).

The study focuses on the phenomenon of value creation in inter-organizational cooperation between a startup (ViaEsca) and larger firms, in the environment of digital well-being services in the well-being field, with selected units for examination that are different organizations from certain industries. These organizations are potential partnering firms that work as cases in the thesis. The main need of the research is to detect most potential cooperation opportunities and forms between the actors.

Qualitative research method is selected to study the phenomenon with in-depth interviews on multiple organizations. It is chosen because the intention is to gain in-
depth analysis and understanding of targeted phenomenon in certain environment by studying specific units (Swanborn 2010). Thus, the research strategy is chosen to be grounded with the company. It is framing an interview approach to multiple companies that are potential future partners of the startup, consisting of multiple case analysis. This strategy is decided since the research questions are focused on investigating different cases and cooperation opportunities, examined in their real-life environment (Dul & Hak 2007, 4).

Therefore, this study has also a practical approach: it is practice-oriented applied research that focuses on addressing certain research problem of an organization, rather than to formulate a new theory to contribute as broadly applicable generalizations to scientific knowledge as fundamental research does (Kothari 2004, 3). Of course, some generalizations are intended to make out of multiple cases handled to show the perceptions and observations from this data as is usual for inductive study.

Nevertheless, the main pursue is to create detections of a practical and specified problem and provide suggestions or solutions for it (Kothari 2004, 3). This problem in the thesis is how a startup offering digital well-being service can create value in inter-organizational cooperation with larger firm and what the prerequisites for it are.

### 3.2 Grounded theory

Grounded theory is a qualitative research design that is focused on theory building grounded in the data (Kolb 2012). This approach is strongly relying on the data and persists close to it throughout the research. Theory building is done through manifold phases of data collection, refining and categorizing (Kolb 2012). After data collection, the data is coded with emerging and repeating concepts that are organized and categorized into broader themes and finally aggregated into dimensions as core categories. (Charmaz & Belgrave 2007)
Idea in grounded theory approach is to be able to perceive repeating patterns and relationships between concepts to develop themes and finally dimensions to deeply comprehend the complete picture of the information of the data (Charmaz & Belgrave 2007).

Grounded theory is a useful way to structure and organize data with inductive procedures and to build a theory from perceptions and observations gained from the data (Charmaz & Belgrave 2007). This approach is suitable for the thesis because grounded approach is built in collaboration with case company and its needs. This way, the findings are slowly built right from the beginning grounded in the data, and not previous literature (Kolb 2012).

This model is chosen to take into account the social setting of the people actually experiencing and performing the phenomenon (in this case the business cooperation), and to detect concepts that point out characteristics of the phenomenon. Grounded theory is suitable method for the thesis because it relies on real-life situations and notices dynamic linkages between concepts and their classifications.

In this research the main target is not to build a novel theory but rather make deeper findings and perceptions from the data. Thus, grounded theory method is chosen to ground the analysis in the data and being able to create more comprehensive understanding of the phenomenon.

This grounding project was started with preparing to research and case interviews by interviewing the managers of ViaEsca. Here the protocol for the research was built together, including feedback process. Thereby the process could be developed according to the firms desires to reach the right sample and having appropriate interview questions answering to the targeted research questions.
3.3 Data gathering and analysis

In this section we introduce the processes of gathering data and analysis. These are provided by first introducing the sampling process of the case companies, followed by data collection practices and finally describing the data analysis procedures.

**Sampling**

The sampling of the companies is executed with the interests of the case company, ViaEsca. ViaEsca is a new venture that offers nutritional coaching for individuals and groups with their digital well-being service. The sampling of the potential partners for them, is selected through choosing specific industries and approaching their major actors operating in the well-being field in Finland.

The sample of the research consist of the main actors operating in each chosen industry in the Finnish markets. These industries are health care, insurance, food production, and food sales. These industries are chosen because they have well-being and/or nutrition linked within their business; food sales and food production through nutrition, insurance industry through medical expenses, disability pensions and working ability, and health care most obviously through general promotion of health and well-being issues. Thus, these industries are potential because the research object of the digital well-being service of ViaEsca concentrates on enhancing the well-being and health of customers with main focus on nutrition.

The industries as well as the contacted firms are being chosen due to having significance as well as potentiality on the well-being markets. To avoid too broad examination, four industries were suitable number of industries to be targeted even though possible industries could have been also for example sport related, body measuring technology firms or work restaurant firms. Because of not getting any responses from companies from food production industry, the study was then limited to include only three industries of insurance, health care and food sales.
Data collection

Primary data collection for the case analysis was conducted with semi-structured interviews. Semi-structured interviews are useful in this kind of research where the interviewees are different by their business and industry, and therefore demand flexibility and adjustability from the interviews (Noor 2008). Previously agreed questions that can be adjustable help with gaining varied and unique emphasis and dimensions from each firm that operate in different environments and with different strategic objectives.

Semi-structured interview is a beneficial method in this study also because intention is to gain deeper understanding of the phenomenon by achieving relevant information for both scientifically and for the case company (Eriksson & Kovalainen 2008, 115).

The interview protocol was built in cooperation with ViaEsca by first gathering together the main issues that needed to be covered. These were supported by the emphasis pointed out in the previous literature. The interview questions were first formed as a draft version, with little differences between industries. Later the questions were revised with the case company. After that the first interview was conducted. After the interview it turned out to be needed to modify some of the questions and they were modified a little in each interview according to the company, with keeping the main frame as it was. The general frame of the interview protocol with the questions can be found in the Appendix 1.

All in all, 17 persons were contacted by email and asked to participate in the interviews. First round achieved four interviews. After two weeks of sending the first email, a reminder email was sent to those who had not answered or agreed yet on the time for the interview. This gained three more interviews. Two more were ready to participate for interviews but their schedule was too late for the timeframe budgeted for the interviews. Therefore, these interviews were not conducted to
avoid the delay of the thesis. Thus, the interviews were finally performed for seven companies. Table 1 below shows numbers about the contacts and interviews by each industry.

*Table 1: Distribution of interviews according to their industry*

<table>
<thead>
<tr>
<th>Number of people contacted</th>
<th>HEALTH CARE</th>
<th>INSURANCE</th>
<th>FOOD PRODUCTION</th>
<th>FOOD SALES</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviewed</td>
<td>1</td>
<td>3</td>
<td>-</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Too late schedule, were not interviewed</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Did not have time or interest for the interview</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Did not answer</td>
<td>-</td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>5</td>
</tr>
</tbody>
</table>

The firms are referred as codes from A1-C3, where A regards insurance, B health care, and C food sales firms. Positions of the interviewees are listed on the Table 2 below. These were chosen either because interviewed person needed to be able to answer the firm’s status and intentions regarding well-being and digital services or because they had already been in contact with ViaEsca. Also, the length of transcriptions is reported in the same Table 2. The differences in the lengths of interviews are also partly explained by the stage of how familiar the interviewee was beforehand with ViaEsca.

*Table 2: Lengths of transcriptions and positions of the interviewees*

<table>
<thead>
<tr>
<th>FIRM</th>
<th>LENGTH OF TRANSCRIPTION</th>
<th>POSITION IN THE COMPANY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>1h 12min</td>
<td>CIO (Chief Investment Officer)</td>
</tr>
<tr>
<td>A2</td>
<td>34 min</td>
<td>Development Director</td>
</tr>
<tr>
<td>A3</td>
<td>54 min</td>
<td>Workability Management Director</td>
</tr>
<tr>
<td>B1</td>
<td>38 min</td>
<td>COO (Chief Operating Officer)</td>
</tr>
<tr>
<td>C1</td>
<td>19 min</td>
<td>Commercial Director</td>
</tr>
<tr>
<td>C2</td>
<td>35 min</td>
<td>Development Manager</td>
</tr>
<tr>
<td>C3</td>
<td>20 min</td>
<td>CEO (Chief Executive Officer)</td>
</tr>
</tbody>
</table>
The Table 1 shows that insurance and food sales industries were most ready and interested to participate. The reason or interest for participation can be dependable of the industry features or for example earlier contact and discussions with ViaEsca. Social connections with the founders of ViaEsca ease the approach and therefore has probably affected to the responses.

Therefore, reason for not getting any responses from the food production industry might be also because of the lack of earlier contact or conversations with ViaEsca which is not known by the author. Other explanation can be that this kind of digital well-being service is not seen to be useful, relevant or suitable for this industry at this time. Nevertheless, that is the reason why food industry is not handled in this thesis after all.

After agreeing on the interview time, the questions for the interview were sent to five of the interviewees in case the interviewees wanted or had time to familiarize with them beforehand. Two interviews were organized in such a short notice that they were organized without sending the questions in advance. One of the interviews was conducted in person but all the others were conducted as phone interviews. All the interviews were recorded and later transcribed.

Nevertheless, all the interviews were quite unique and demanded some modification of the sequence and forming of the questions. This is due to the natural flow of the conversation that affects to the content and order that the themes are discussed. Also, some questions are not so relevant for all firms or demand more restrictions on the area in question because companies are operating with such different environments, resources and scales.

This was already acknowledged before starting the interviews, at least on the industry level but it turned out to be needed in each interview. Therefore, familiarization with the interviewees’ firms, operations and offerings was demanded to gain some background information before conducting the interview. These
secondary sources of data were mainly from company homepages and other company web materials, news, web articles, as well as interviews with ViaEsca and their website.

Quantitative data was also considered to be used as supportive method for the data acquisition. Nevertheless, it was relatively quickly left out due to its need for larger pool to gain reliable results. Thus, that was not suitable for planned sample because the desire of the examination was to focus on narrowed amount of industries and companies to achieve deeper analysis. Next, the data analysis methods is explicated.

Data analysis

The data analysis is conducted with grounded theory model approach. First the analysis is started from analyzing the transcribed data from the interviews by individual cases and intra-industry. After this the cross-case comparisons are made between industries and in wholeness following grounded theory method. This facilitates understanding which issues are more industry-related and which are more company specific.

To support the analysis of the data as wholeness, the transcriptions were combined into one file according to interviewed themes and questions that facilitated the process of gaining the collective views to each issue and, in contrary, also the identification of the outlier opinions and perceptions. Idea is to find similarities and differences that help understanding both common and generalizable issues as well as unique and differentiated aspect of the cases.

The data analysis in this thesis started from recording and transcribing all the interviews. After this the analysis proceeded to codifying according to process by Gioia, Corley & Hamilton (2013), constituting of three stages. In the first stage repetitive and common concepts arising from the raw data were identified. These were all together 21 concepts. In the second stage, these concepts were organized
and grouped together with similar or interrelated concepts and compiled into larger themes and constructs that act as variables of the phenomenon. There emerged seven themes. Finally, in the third stage, these concepts and themes were aggregated by reviewing from different and manifold levels with the purpose of possibly finding some deeper patterns from the whole data. This stage resulted in three aggregated dimensions creating the main results from the empirical data (see figure 12).

3.4 Justification of the used empirical methods

From the reliability point of view, essential is that unconnected and random factors do not change the outcome (Varto 1996, 118). Thus, the trustworthiness of the used empirical methods can be discussed whether the results would be the same in different time and place. The interviews would probably have given varying results in different countries because well-being and digital services can be in highly different levels and state of interests according to country, city and environment.

Also, the timing has an impacting role. The current social, cultural and technical environment influence the results and thus, might give different outcomes in different timing. Current news or similar can affect to the data gained from the interviews.

The position of the interviewed person is also one factor that can affect the quality of the data gathered. The position affects to the perspective and knowledge that the interviewee possesses and therefore influences the opinions and answers. In addition, the use of semi-structured interviews might lead to different approach by the interviewed person because of understanding the question in different context when asked in different sequence or form.

The repetition of the interview process can gain novel views and observations when repeated to different industries, markets, firms and people in different positions and thus, have some variation in the gained information. Thus, the coherence of the
answers might be questioned when repeating the research (Eriksson & Kovalainen 2008, 309).

The used methods are valid in addressing the intention of in-depth analysis and understanding the phenomenon and detecting opportunities from narrowed set of potential partners. Nevertheless, scientifically the credibility can be discussed if it would be more confirmable and reliable and hence, have more scientific contribution by having more comprehensive data collection methods, including more cases and also some quantitative data.

Nevertheless, due to the desired small number of the pool of possible partners in question, the quantitative data collection was not seen as beneficial because the sample would have been too small. Therefore, the chosen empirical method can be said to be credible enough regarding the circumstances and specific focus on ViaEsca.
4 EMPIRICAL FINDINGS

In this section the findings from the empirical study are presented. First the findings are approached by describing the context of the study: the well-being industry. This is followed by the introduction of the central case firm ViaEsca, as well as each case industry and their firms participated in the study.

These are followed by the key findings from the empirical study. This is divided into first, analyzing the cross-case analysis results and the interviews codification process. Second, the results of the empirical study are demonstrated by first answering to the sub-questions, followed by addressing the main research question.

4.1 Context of the study: Well-being industry

The context of the empirical study is the well-being industry. It is globally about 3.700 billion dollars (almost 3.200 billion euros) (Global Wellness Institute 2016a). According to Global Wellness Institute (2016b) whole well-being economy can be divided in descending order by 2015 revenues as shown in Table 3 below.

Table 3: Global well-being markets 2013-2015 by revenue (converted into euros from Global Wellness Institute 2016b)

<table>
<thead>
<tr>
<th>WELL-BEING MARKETS</th>
<th>2013 BIL.€</th>
<th>2015 BIL.€</th>
<th>CHANGE €</th>
<th>CHANGE %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beauty and Anti-Aging</td>
<td>856</td>
<td>839</td>
<td>-18</td>
<td>-2,1 %</td>
</tr>
<tr>
<td>Healthy Eating, Nutrition &amp; Weight Loss</td>
<td>482</td>
<td>544</td>
<td>62</td>
<td>12,9 %</td>
</tr>
<tr>
<td>Wellness Tourism</td>
<td>415</td>
<td>473</td>
<td>58</td>
<td>14,0 %</td>
</tr>
<tr>
<td>Fitness &amp; Mind-Body</td>
<td>375</td>
<td>455</td>
<td>80</td>
<td>21,3 %</td>
</tr>
<tr>
<td>Preventative &amp; Personalized Medicine &amp; Public Health</td>
<td>363</td>
<td>448</td>
<td>85</td>
<td>23,4 %</td>
</tr>
<tr>
<td>Complementary &amp; Alternative Medicine</td>
<td>157</td>
<td>167</td>
<td>10</td>
<td>6,4 %</td>
</tr>
<tr>
<td>Wellness Lifestyle Real Estate</td>
<td>84</td>
<td>100</td>
<td>16</td>
<td>19,0 %</td>
</tr>
<tr>
<td>Spa Industry</td>
<td>79</td>
<td>83</td>
<td>4</td>
<td>5,1 %</td>
</tr>
<tr>
<td>Thermal/Mineral Springs Facilities</td>
<td>42</td>
<td>43</td>
<td>1</td>
<td>2,4 %</td>
</tr>
<tr>
<td>Workplace Wellness</td>
<td>34</td>
<td>36</td>
<td>2</td>
<td>5,9 %</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2887</strong></td>
<td><strong>3188</strong></td>
<td><strong>300</strong></td>
<td><strong>10,4 %</strong></td>
</tr>
</tbody>
</table>
The industry is growing extremely rapidly despite the general fall of global economy. When the whole industry has grown between 2013-2015 over 10.5 percent, the markets mainly related to ViaEsca, healthy eating, nutrition & weight loss markets grew 12.9 percent and workplace wellness markets grew 6.4 percent. Nevertheless, workplace wellness programs are estimated to be globally used for under 10 percent of workforce and thus, the market can have maybe the greatest growth potentiality in the future. (Global Wellness Institute 2016b)

When comparing medical and wellness paradigms in health continuum (see Figure 11), main difference between pursuing optimal state of well-being and prohibiting poor health, is the first one being more proactive, when the latter one is more reactive. Well-being seeking is characterized with being preventive, holistic, integrated to life, having individual responsibility and pursuing to maintain and improve health. Whereas medical paradigm is characterized with being corrective, episodic, having clinical-responsibility, compartmentalized and focused on illness treat and cure. (Global Wellness Institute 2015, 11)

![Health Continuum](https://example.com/health_continuum.png)

**Figure 11:** Health continuum (Global Wellness Institute 2015, 11)

In the future the well-being field is predicted to turn more into an extension of data economy. Other detected trends in the field are that the well-being and health care are going to get more blended together and that customer data management will be major field of expertise. (Global Wellness Institute 2016c)
4.2 Startup offering digital well-being service

In this section the central case firm ViaEsca and its purpose, situation and objectives in the well-being markets are introduced.

**ViaEsca and digital well-being service**

ViaEsca is a limited company, founded in August 2016, officially employing two people (Asiakastieto 2018). They offer a nutrition focused digital well-being service that has eating programs including variable recipe packages accompanied with activity bracelet, mobile application, online support, possibility for food home-deliveries and inbody measuring for corporate customers. Main idea is to gather information about customer’s consumption and energy need and then utilize the data to fit the eating habits accordingly.

The intention is to provide an effective way to change eating habits towards healthier and balanced lifestyle by focusing both on the nutritional content, taste of the food as well as understanding own body, condition and consumption. Their service is based on normal food and variable ingredients, not special drinks or food supplements. The body measuring results (weight, blood pressure, cholesterol, fat/muscle percentages etc.) as well as perceived improvement in well-being and energy levels are proving the efficiency of the concept. These motivate the customer to keep going and engaging on the new habits and is the foundation for a sustainable change. Motivating factor behind the business owners is to be able to help more people achieve permanent healthier lifestyle, learn how to cook healthy and tasty food, and to realize how eating habits affect to the overall well-being.

There are many well-being services and applications existing already in the markets and new ones are being created continuously. They are focusing on one or many aspects of well-being like nutrition, exercise, sleep, mindfulness etc. The service product of ViaEsca is focusing only on nutrition but is supported with the data gathered with Polar activity bracelet. This bracelet takes into account e.g. sleep and
both exercising and daily physical activities to calculate the daily consumption of the user to give personalized service. If customer eats a meal differently as planned or takes additional snacks, they just mark them to the program and it adjusts the following meals accordingly.

The firm aims to expand the business by broadening its cooperation network by creating partnerships with appropriate companies. They desire to gain the general view of the current well-being markets to be able to acknowledge the time span, criteria, cooperation forms and pricing strategies for their service product as well as the position of digital well-being services in the value chains of possible partners.

4.3 Comparative case analysis

In this section the three selected industries and the firms included in the study are introduced.

CASE A: Insurance industry

This study contains three firms operating in the insurance industry, referred as A1, A2 and A3. Two of them are operating in the traditional insurance field offering multiple insurances from property, life, medical expenses and business insurances. One is an employment pension firm focusing on disability insurances and rehabilitation to gaining back the ability to work of the employees of customer firms.

In general, insurance industry is highly regulated and monitored, and it has some social responsibilities too. It is a little special industry, because some of their products are obligatory by law. Finanssivalvonta sets restrictions regarding what activities they can perform so that they do not disturb their main mission and responsibilities. Main considerations in the industry regarding well-being services, seems to be license and fair treatment issues. License issues are a little problematic regarding the prevention of health problems and they would need a by-work license
for it because insurance firm’s actions are relying on happened events, that are abrupt and unexpected.

The amount of life insurance compensations from Finnish firms has increased steadily between 2011-2016 from 3.568 to 4.289 million euros (Kauppalehti 2018a). Thus, insurance firms have an incentive to encourage customers for healthier lifestyle. Insurance firms’ purpose is to offer financial security, and that is affected also through customers health and well-being to his/hers working ability.

It seems that at least more traditional and older insurance companies are not as digitally oriented yet with their services, but more relying on just responsive websites with chat and general services. Nevertheless, the customers and/or the competition requires to catch up with digitality and thus, the companies are transferring towards digital world to not fall behind.

The industry trusts on inter-organizational cooperation in the fields that are not their core business. The approach for collaboration agreements differ between companies from high carefulness to openness to try open-minded new partnerships that could benefit the customer.

**CASE B: Health care industry**

Only one health care firm participated in the study and it is referred as B1. Health care industry is probably most obviously related to well-being issues. As B1 points out, well-being is intertwined with health and illness treatment issues because person can have sickness and still be well-being. Thus, the preventive well-being as well as corrective medical care actions seem to be interlinked in the industry and B1 sees that they are getting more and more tangled together.

The firms in the industry have generally multiple digital services for customers. It is seen that customers are already expecting digital services and to being able to handle their needs digitally and thus, digital services are required from the health
care firms. As being a significant actor with a lot of customer data and large customer base, health care firms are popular cooperation partners for other companies.

**CASE C: Food sales industry**

Three interviews were conducted in the food sales industry, where two were performed inside the same firm to interviewees possessing different positions. Food sales industry is highly concentrated on traditional food sales channels. This means that about 99.5% of the sold food goes through so called brick and mortar shops, and only a fraction is sold through online grocery stores. Thus, when speaking about the Finnish food services, the online groceries have a tiny part of the market, and hence the health and well-being issues inside them have extremely small target.

All the interviewees agreed that well-being is one of the main consumer trends and therefore has a significant and increasing meaning in the market. But the store is more interested on being able to provide good overall service by answering to customer desires and providing services and products to all needs. The ultimate goal is to facilitate customers’ life in any situation, as well as to keep them satisfied to keep them as their customers.

Firms in the industry have multiple digital services already. Nevertheless, these services are not directly well-being services, even though consumers can read ideas or advice from the content or campaigns but whether that actually leads them to change their habits and shopping choices remains uncertain.

Both firms have a lot of inter-organizational cooperation and see its importance on the customer’s service experience. Firms intend to provide a comprehensive and better service experience, facilitating customer’s life in multiple aspects and answering to their needs and desires. They are relying on partnerships especially in development and digital services.
So-called open ecosystem thinking is also mentioned by one interviewee where transparency and larger entity of service providers together are in the core. The firm does not make a choice who enters in the ecosystem, but the customers decide which firms are able to stay by purchasing the services. That is also the way how possible well-being or other digital services for customers could be gathered and linked to the business in this industry.

Nevertheless, firms point out that they must sometimes prioritize some collaborations that are in line with their strategy due to resource restrictions and the popularity to work as business partner. Next, the results gained from the data analysis of the interviewed companies are presented.

4.4 Cross-case analysis and data structure model

According to the empirical analysis and case comparisons between firms, industries and in entity, the data analysis results process was conducted as described in methodology in Data analysis section in chapter 3.3. This data structure is illustrated in the Figure 12 below that shows also the dynamic relationships between detected concepts, themes and dimensions. This figure shows the process of how the empirical results are achieved from the raw data. The results are obtained from the cross-case analysis where both common trends as well as dissenting views emerge.
Exclusive rights remain a little conflicting perception among interviewees because some are not supporting it while others, depending on the situation, ask for it. With exclusive rights the cooperation is more dyadic relationship than an ecosystem or value network. It also affects to data protection norms between partners. Thus, exclusive rights -matter is marked with a *-symbol in the data structure model in Figure 12 to demonstrate related considerations.

First level codification resulted on 21 concepts that were detected from the data as repeating and important concepts. These were analyzed and grouped together to find the correlations and relationships between the concepts.

Second level codifications resulted on seven concepts that act as themes for the grouped first level concepts. These demonstrate the main issues emerging from the data. These are palette or portfolio thinking, motives for larger firms, better targeting, data protection, capabilities, (technical) execution, as well as equality and win-win.
Thus, the third level codification resulted in three main dimensions that answer to the research problem as proposing the main recommended cooperation model, benefit, and criteria. First main dimension is the ecosystem or integration as a way to collaborate with larger actor in the field. This explains how the digital well-being service can be implemented to the field and has the best possibilities according to empirical data. Ecosystem refers to collaboration networks, led by one company or working as open ecosystem. The integration on the other hand can refer to integrating the service to partner’s systems (recipes to online grocery store) or alternatively as part of novel service offerings or procedures (reciprocal recommendations, well-being insurance products, group packages).

The second dimension is effectiveness, referring to the main benefits that partners pursue to achieve from cooperation with startup offering digital well-being services. This comes in two ways. First refers to efficiency when partner does not have to acquire the expertise themselves but can gain it from the wide network where startups concentrated on different well-being aspects can offer their service. Second is the service effectiveness demonstrated in results, and the concrete improvement in customer well-being. That benefits in all industries. In food sales the value is more just indirect as in all industries through customer satisfaction. In insurance and health care there comes also direct value. This direct value could come from e.g. having less compensation expenses in insurance firms or being able to provide preventive services that can ease the treatment needs and decrease queues in health care services.

The third dimension, trust and responsibility, refers to main factors or criteria that firms are requiring, and when cooperation has better potential to be successful. This refers to criteria both for digital service and the partner. These are elaborated more closely in the next chapter where these empirical results are presented by answering to the research questions.
4.5 Results

This chapter focuses on presenting the main results by answering the research questions according to the empirical analysis. The research questions are addressed in the same order as presented in the introduction, starting from well-being markets, followed by digital services, and inter-organizational cooperation. Lastly the main research question about most promising opportunities is discoursed.

4.5.1 Well-being markets and digital services

The first sub-question focuses on exploring the current well-being field and possible future orientations. The question is constructed as:

_SQ1: What is the current state and importance of digital well-being services in the well-being markets?_

All the companies regardless of the industry, acknowledge the well-being as one of the main consumer trends. Many see the dichotomy of the markets as well-being not being so interesting directly for companies but highly important through consumer interest and thus it is strongly a consumer market. A3 explained this situation as:

“Perhaps the challenge for firms is that the consumer is the one who chooses all the applications and devices that it uses, so it is important to provide different ways for them to collect data or attend to trainings”

Participants from all industries state that well-being is a trend that they have to be on board. Likewise, with digital services, the universal mindset seems to be that there are no other options than start utilizing and providing digital services to serve customers, because customers are demanding them.

As described in case introductions, health care and insurance firms do still benefit if the customer well-being increases. On the contrary, the food sales industry has its
interest based on mainly if the well-being services guide the customer to make purchases in their store. Nevertheless, all companies benefit mainly indirectly through satisfied customers.

Thus, food sales firms are most focused on just answering customer interests and demands rather than directly improving the well-being of the customers per se. Well-being has just risen as one of the main consumer trends at the moment and thus, raises interest among them too, but just to facilitate the lives of the customers and provide the things they desire.

Hence, well-being is just one of the multiple consumer trends in the food sales field that the firms have to and want to be able to answer. As well as C2 gives an example of if a customer needs help in organizing of child’s birthday party, the store intends to facilitate it. Similarly, here the objective can be linked with providing ways to get life to good condition with superior ease. These digital well-being services would facilitate customer’s desire for healthy lifestyle choices. But it comes from customer demands and interests, and the store tries to find ways to integrate the theme in their services to be able to guide customer to their store. Thus, the food sales market is highly customer-driven, and the digital well-being services need to be linked with purchasing from the store.

Firms see the huge potentiality of well-being issues and services but are not sure how to fit it into their business, licenses, systems and strategy. They see that there is notable interest among consumers and want to be able to provide well-being services too. They just are not sure of (1) what kind of, (2) when, and (3) how the well-being services should be provided and targeted to the right consumers to gain desired outcomes.

Health care and insurance firms perceive that separate and fragmented well-being services are maybe not as beneficial and do not alone affect concretely and on long term the wellbeing. Thus, these services need to form entities and selection that is
targeted to solve a certain problem. The root cause for worsened well-being might not be addressed by single well-being service because, for example, low energy levels and gaining weight can result also from the combinations of too much or challenging work responsibilities, bad eating habits, lack of rest or physical activity etc.

Thus, the markets seem to demand careful mapping of different customer groups that are in need of certain well-being services. Thus, the well-being services are seen more beneficial when combined together to tackle efficiently and successfully the main reasons that are worsening the well-being of a certain customer. They can work also as supportive service while addressing simultaneously the root cause for the problem.

Most of the interviewees believe that it has an increasing significance in the markets in the future. There lies a lot of potentiality that is not yet harnessed where the data plays an important role. Many perceive that the use and exploitation of data is still defective and has manifold opportunities. More and more people are using multiple applications, devices, wristbands etc. that gather and give information about their health issues. Like A1 reminded of a common phrase, “everything that can be measured will be measured”, people are measuring themselves to get some information about their health state and progress.

Well-being markets are seen to transform even more into the world where everything is measured, from food macros to own body composition and lifestyle etc. This is still under planning and consideration in many firms, how to find ethical and genuinely beneficial ways to utilize and perform it. These possibilities of data is seen to be potentially helpful in the future through providing better quality and personalized service or e.g. possibly lower expenses or conditions.

For example, C2 points out that food sales firms have the row specific information about customer’s purchases. The macros of the ingredients could be calculated,
and customers could get information about his/hers purchasing habits accordingly. This could be anything. If the customer wants, they could use it to do inferences about the data and provide information to the customer accordingly. This could be a beneficial operation model exactly for customer well-being matters.

A1 sees that medical expense insurance pricing could possibly have similar features as will be in car and traffic insurance: to use sensors, and the way you drive affects to the insurance payment. So, a possible trend in the well-being market could be that depending the way you live, what you eat, and what you do, the service (e.g. risk life insurance) could be priced accordingly too.

These are still just parts of the big picture, and some interviewees are wondering about the wholeness and who takes the responsibility about that. No one offers a digital well-being service on a broad scale that takes into account all the aspects of well-being and the way it could suit for all. This can be even impossible and not beneficial to even pursue for. Like A3 thinks about that as:

“Then it cannot be developed, cannot be involved in such a rapidly changing world if they are all in one large chunk.”

Rather, at least all of the insurance firms have an opinion that, any one party (digital well-being service provider nor larger actor in the field) should not even try to take this entity under the same roof because it would not be agile. Rather good actors should be gathered to some kind of ecosystem to cover diversely all the aspects of well-being and health issues. Because individuals are different, same service concentrating on one well-being aspect does not serve all. This all proves that there is great demand for different digital well-being service providers now and in the future.

A2 hypotheses that there might become clusters to offer the entity. Or then as both traditional insurance firms see insurance companies as a natural party to gather these actors together and act as so called “quality controller”. This would mean that
they have checked and accepted these digital services to be able to recommend them for the customers.

A3 and B1 remark that the general economic situation is directly reflected to the demand of well-being services. This is often the first thing where at least corporate customers are cutting expenses, particularly if they do not see the meaning and effect on the business.

In March 2016, Finanssivalvonta tightened the instructions of employment pension firms’ actions. The new instructions and reporting claims target to enhance the controllability of employment pension firms’ actions, competition and use of funds. Aim is to manage better that the money is not used for customer acquisition but to directly manage the working disability risk of customer firms. Simultaneously, the responsibility and funding of these activities of preventing and managing working disability risk is passed more to customer firms. (Finanssivalvonta 2017)

As also A3 mentions, this changed funding base determines significantly the market because previously the job well-being projects were done using a lot of this money by employment pension firms. Now on, the organizations have to find greater part of this money from their own business revenues. This can be perceived to have now, and in the future, a big effect on the market. Thus, for participating in these projects, the justification must be strong about how it concretely benefits the firm to put resources in these issues.

Insurance and health care firms also see that the health care funding base development as well as the Social and Health Care Reform that is currently searching its form in Finland affect significantly to the well-being market. As it can be seen from the materials of Ministry of Social Affairs and Health of Finland, the reform would open 5.75 billion euros markets for social and health care companies (Sote- ja maakuntauudistus 2017, 17). This affects the services that the health care organizations can offer and thus the demand for different health and well-being
related services too. The role of insurance companies will also be affected by the reform.

Insurance and food sales industries bring up the younger generation, the millennials, referring to people born after 1982 (Howe & Strauss 2009). They see their difference in the (1) attitude towards sharing personal data, (2) use of digital services, and (3) interest towards well-being issues. C2 and A1 observe that younger generations might be more ready to give personal data to a firm to gain some information back. Older generations can feel suspicious about the purposes of the gathered data and thus be more cautious about it. The millennials can usually also adopt more effortlessly and faster new ways to operate, like use of digital well-being service.

Some interviewees discern that younger generation is notably more interested in the relation between health and food as well as well-being matters. Whereas some see that probably all generations are generally on average as interested about well-being issues. This leads to the notion by some, that people are quite polarized regarding these issues. Some are highly interested and want to put money, time and effort on them. Unfortunately, usually those who are not so interested, would need them the most and consequently they are not participating or purchasing these services as eagerly.

Insurance and health care firms emphasize that they follow actively the well-being field about new startups, services and ideas to stay on the map with the offerings and trends. They see it to be essential to acknowledge what is going on and where the field is headed because it develops in such a rapid pace. In the Table 4 below the main findings of this section are summed up.
Table 4: Outline of the results of well-being markets and digital services

<table>
<thead>
<tr>
<th>SUB-RESEARCH QUESTION 1: WELL-BEING MARKETS AND DIGITAL SERVICES</th>
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<tbody>
<tr>
<td>One of the main consumer trends</td>
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<td>→ lot of demand</td>
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<td>- general economic situation affects the demand</td>
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<td>- polarized markets</td>
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<td>→ firms must be on board; rivals will be too</td>
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<td>→ companies follow the markets actively</td>
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<td>→ increasing significance in the future</td>
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<tr>
<td>→ Social and health care reform impacts the markets</td>
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<tr>
<td>All the firms do not benefit themselves</td>
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<tr>
<td>→ improving well-being bases on answering to customer interests and needs</td>
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<tr>
<td>Still emerging</td>
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<td>→ many questions open about the possibilities and services</td>
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<tr>
<td>→ what kind of, when, how</td>
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<tr>
<td>Demand personalization</td>
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<tr>
<td>→ careful mapping and targeting</td>
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<tr>
<td>Utilization of data, measuring everything</td>
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<tr>
<td>→ still deficient; how to find ethical and beneficial ways</td>
</tr>
<tr>
<td>Broad scale &amp; wholeness missing</td>
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<tr>
<td>→ one party should not intend to take all under the same roof</td>
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<tr>
<td>→ clusters, cooperation, networks</td>
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<tr>
<td>Millennials</td>
</tr>
<tr>
<td>→ more familiar with data protection issues and adoption of applications</td>
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4.5.2 Criteria for startup partners and digital well-being services

Next the second and third sub-questions about the criteria for both digital services and startups offering these services are addressed. First one of these is:

SQ2: What are the essential features for digital well-being services to create value for partners and customers in the well-being markets?

Insurance, and especially health care and employment pension firms underline strongly that digital well-being services must have proven effectiveness. The service must answer to the customer need and have effective results to the problem it addresses. All firms see that it should genuinely benefit the customer and be able
to solve the problem of the customer. In this case e.g. to create time savings or facilitate how to eat healthier.

When the service is perceived useful and as facilitating customer’s lives, also the concrete usage of the service by customers is more probable. That is also one criteria for continuing the cooperation and keeping the service as part of service repertory. When the service is launched, if there is no demand and not sufficient usage, they will probably stop the cooperation. Thus, some firms are relying on the feedback by customer usage, meaning that they can try and pilot many services and see if there comes usage, if not, the service is withdrawn. Therefore, the initial steps and gaining customer usage are crucial when piloting the cooperation.

Some are stressing the personalization of the service to different customers. Most do not believe in so called bulk or mass production of ‘everything for everyone’. Thus, the firms see that the digital service should be targeted to specified need and be adaptable and flexible to unique customer features. That ensures that customer can gain real advantages, proven effectiveness, results which can be achieved with good targeting. Services are desired to be provided in customer-specific basis which can be enabled with utilizing data more intensively. Thus, targeted and personalized service is desired in these industries. Otherwise that is, first of all expensive (in health care, employment pension and insurance firms), but also the desired effectiveness is not achieved.

All actors underline the quality of the service on the aspects of fluency and functionality. Thus, the technical execution of the digital service is extremely crucial because that influences the whole service experience and thus the image of the partner too. Many firms say that they want their whole service entity to work extremely well. Accordingly, multiple times emphasized criteria is the effortless user experience and ease of use. Many see that the digital service and cooperation should also be planned and executed so that it is integrable and blends well into the
partner’s own systems and services. Here, the one criteria pointed out several times, the agile development abilities of the service is essential.

Important aspect by some interviewees is that the service should be able to guide the customer to the partner firm’s services, like the certain food sales store, or to by the insurance or food delivery service of the partner. Thus, the service should include these possibilities to integrate and blend well to the service entity.

B1 makes a valuable notion about pricing. From multiple years of experience, the interviewee has seen that there are not so many people ready to purchase expensive or put a lot of money immediately to a digital service that they cannot be sure to be excellent. B1 has perceived that the service succeeds more probably if the initial price is low and when the customer gets excited and gets convinced about the service, they are ready to pay more for e.g. additional parts or services. These kinds of concepts are therefore seen more lucrative because they might have greater demand and easier to attract customers.

Because different people can have different perceptions, beliefs, understandings and learnings of what well-being is and how to achieve it, some firms see that the service is important to be based on scientific nutrition and well-being perceptions. Otherwise it may be challenging for firms to operate in this a little ambiguous area full of varied well-begin perceptions. This can also more probably lead to better results for the user which is good image for the partner too.

Lastly, but still being one of the most important factors, is the data privacy and data protection. They were mentioned by all in different ways, stating its importance and considerations especially because the data protection regulations were just about to tighten during the research. In the Table 5 below the main findings of this research question are summed up.
Table 5: Outline of the results of criteria for partners and digital well-being services

<table>
<thead>
<tr>
<th>SUB-RESEARCH QUESTION 2: CRITERIA FOR DIGITAL WELL-BEING SERVICES</th>
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<tbody>
<tr>
<td>Quality of the service</td>
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<td>Personalization</td>
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<td>Technical execution</td>
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<tr>
<td>Effortless user experience and ease of use</td>
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Next, the second sub-question addressed here is:

SQ3: *What aspects affect inter-organizational partner selection of a startup offering digital well-being service in larger firms?*

There seems to be three different paths on thinking about partner selection (always dependent on the suitable timing):

a) Firstly, some are extremely careful and do a thorough background check of their partners. They stress continuous monitoring of all; the partner, service and cooperation. (A1, B1)

b) Secondly, some are ready to pilot relatively easily when it is possible if the basic reliability, functionality and technical issues are ensured. That does not indicate them to accept any cooperation, but it signals that they have readiness and interest to try new things open minded. (C1, C2, A2)

c) Third ones are relying on so called open ecosystem, free for any party to try the entry. The customer usage works as feedback determinant for
continuation. Thinking as a network where customers can choose suitable entities. (A3, C3)

Even though some put more, and some put less strict criteria for their potential partners, some common opinions about potential good partner characteristics can be detected from the empirical data.

All the firms are pointing out especially in dyadic relationships or as an aggregator of these services the reliability. This refers to multiple aspects: (1) firm continuity, (2) service functioning, (3) content, and (4) responsibility. Firm continuity is required to be demonstrated and checked by many interviewees. Especially, the financial stability and thus the capital supply should be stable and reliable to ensure startup’s ability to continue in the business in that sense.

Service functioning refers to partner’s technical capabilities and resources. They need to be sufficient to be able to respond to the demand and volumes for the service to work smoothly without interferences. Some emphasize that they want their whole service entity to work extremely well and many are requiring high standard from partner’s processes and technology too. Also, due to the nature of continuously evolving well-being markets, some are bringing up the service to have flexible development possibilities.

Thirdly, the content of the service must be reliable. Therefore, the expertise of the partner is important in being able to provide healthy well-being advice and support. Thus, many are stressing the quality of the service in this sense too. On the other hand, food sales firms do not see that as image affecting, especially because the nutrition advice comes from the outside. They are just offering a purchasing channel and thus not behind those recommendations and that responsibility.

Finally, the partner needs take responsibility of development as well as managing the cooperation. This means to have enough knowhow and resources to improve own service product taking into account the needs of the collaboration. Common
requirement for partner is also the responsibility of the cooperation process, planning and execution taking care of own responsibilities. Important is being a fully capable and equal partner so that collaboration is mutually beneficial regarding overall resource consumption and advantages for each partner.

Hence, the service and vision need to be ready and finished in the manner that the situation can be win-win for both parties. The service should not be a little unfinished draft that does not yet work fluently. Otherwise the company needs to put time and money on the development of the service and the smaller firm just relies on the resources of the partner.

In addition, sharing vision that is similar enough and fits the partner’s strategy were seen important by some firms. As is self-evident and also emerges from the data, all firms have limits for the number of partners to be handled due to the limited resources. Especially in smaller firms, like C3 that has less volume and scale, or in contrast in large extremely popular firms for partnering like B1 and C2, the firm needs to be more selective in partner decisions and prioritize some collaborations. A2 points out that they need to also investigate which areas of business are topical and most important for them and in which order they want to develop them and to choosing partners. In addition, they have to consider, which areas are the ones where there should be only one partner and where they should choose more.

Openness and sharing knowledge between partners was mainly seen as necessary and almost indispenable by all. Especially A1 and A3 from insurance industry emphasize that it is how the society will be managed in the future: with knowledge management. That requires the optimal gathering and exploitation of data where collaboration with partners is in intensifying and influential role.

Some were really open and ready to genuinely work together and kept the transparent and open communication as one of the main factors for successful cooperation and achieving targeted goals. Many are stating that it is important and
acceptable because that benefits the final target of community interest; to provide a great service experience for customers. Some are admitting that they could maybe improve in the openness and sharing knowledge themselves but still acknowledge the importance of it. As A2 says, when names are on the contract then the cooperation should rely on doing together.

Of course, trade secrets are a thing that should not be shared anyway. Nevertheless, A3 reasoned about the information sharing to not being harmful in competitive sense either:

"-- if you think that the competitor copies exactly same operating models. It requires so much internal management and targeting to customers’ needs. And if it is not understood or cannot be done, no added value will come from it either"

Thus, when the companies are genuinely working together to gain something bigger, revealing their operating models are not a danger because they are not per se useful for the partner.

In so called open ecosystem where the network is open for service providers, the readiness for network collaboration and merging data with actors that the customer wants to combine is seen beneficial and to create value for all actors.

In contrary, both traditional insurance firms are talking about the exclusive rights and the importance of them among insurance firms. Of course, they see that these considerations are always situation specific and depends on the strategical importance too but seems like shared data plays an important role in this issue. Insurances are not just bought by customers, but the firms really need to sell them, so the competition is tough in the industry.

Nevertheless, the employment pension firm sees that if they would demand exclusive rights, they would just be stupid to exclude good partners and ideas that could have provided brilliant outcomes in business and customer experiences:
“if the partner is able to bring it, did it then cooperate with anyone, then it does not matter”

Lastly, but one of the mostly mentioned aspects by many of the interviewees are the laws and regulations about data protection. All the firewall issues need to be ensured because some have experienced data leaks in earlier partnerships. Empirical data shows that some, often new firms, are perceived even to sometimes be too naive about the importance of data protection issues because they do not know the regulations and consequences so well yet. Hence, knowledge in this area is necessary, especially now when they have recently had major changes. In the Table 6 below the main results of this research question are illustrated.

Table 6: Outline of the results of the criteria for startup partners

<table>
<thead>
<tr>
<th>SUB-RESEARCH QUESTION 3: CRITERIA FOR STARTUP PARTNERS</th>
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<tbody>
<tr>
<td>Reliability</td>
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<tr>
<td>Firm continuity</td>
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<tr>
<td>→ financial stability</td>
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<tr>
<td>Service functioning</td>
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<tr>
<td>→ sufficient technical capabilities and resources</td>
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<tr>
<td>→ high standard in processes and technology</td>
</tr>
<tr>
<td>→ flexible development possibilities</td>
</tr>
<tr>
<td>Content</td>
</tr>
<tr>
<td>→ expertise, service must be ready</td>
</tr>
<tr>
<td>→ data protection: firewalls etc.</td>
</tr>
<tr>
<td>Responsibility</td>
</tr>
<tr>
<td>→ of the development and governing the cooperation</td>
</tr>
<tr>
<td>→ fully capable and equal partner</td>
</tr>
<tr>
<td>Clear vision</td>
</tr>
<tr>
<td>→ must be ready and similar enough to fit partner's strategy</td>
</tr>
<tr>
<td>Openness and sharing knowledge</td>
</tr>
<tr>
<td>Transparent communication</td>
</tr>
<tr>
<td>→ genuinely work together</td>
</tr>
<tr>
<td>→ ensure win-win for both parties</td>
</tr>
<tr>
<td>→ readiness for network collaboration and merging data OR exclusive rights</td>
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</table>
4.5.3 Inter-organizational cooperation

Next the fourth and fifth sub-questions handling the inter-organization cooperation benefits and challenges are answered. First one is the following:

\textit{SQ4: What kind of value can be created with inter-organizational cooperation for partners and customers in the well-being markets?}

All firms agreed that they need other firms and network to create and offer digital well-being services. They agree that it would not be reasonable to gather this kind of expertise and knowhow inside one corporation but rather believe that everybody benefits when all concentrate on their own core expertise and combine strengths through collaboration.

All the firms cooperate with from small startups to huge international or industrial firms and note that much of innovation is happening in these smaller firms. Hence, innovations is seen as one pursued value. As A2 says:

"-- if we think of an ecosystem with digital services, as long as the services are good, or brilliant, they can come from anywhere. And now, really a lot comes from smaller firms. But it also denotes that it is inevitable that it goes to this kind of portfolio thinking where there are firms with one or a few (well-being) solutions."

Also, small firm cooperation is seen as more agile which facilitates the development and changes. Main thing detected is still the expertise that they can offer especially in the new business areas, digital services and well-being issues. As A2 states simply that new things are easier to do with small firms.

By networking, firms can gain access to customer data that is often owned in this field by health actors due to the strongest arguments to keep register. They can also combine their patient data to it. Combining varied data from different actors like health care, well-being service providers, food sales firms, body measurer
applications, insurers etc., the utilization of this aggregated data helps e.g. targeting and increasing efficiency.

As detected in chapter 4.5.2, food sales firms see that this kind of cooperation where well-being or nutritional advices or recommendations come from external service provider is not seen as related to their own business and image. They rely on customer usage and put the service available for those who might be interested. If customers do not use or like the service, they stop offering it. C2 explains this as getting the recommendations from the outside, but they themselves are just easing customers everyday life by working as purchasing channel and facilitating the process of getting these products into their shopping bag in the online grocery store. Therefore, it is seen as “safe” way to cooperate and provide additional value to customers by facilitating the use and implementation of this well-being service.

The entity of services can create greater value together than what is the sum of its different parts. This is also the idea behind the mentioned open ecosystem by C3 where most important is not the individual service provider but what the community of organizations constitutes of. This is sought to integrate interesting assemblies for customers. Simultaneously it comes an efficiency channel for suppliers, which can be transformed into lower prices for customers.

Similar is found in insurance field. A3 imparts that they have also very open interfaces, while competitors have strong claims to do cooperation with a certain occupational health actor or similar. If the customer has concentrated all the errands to one service provider and gathered all personal data there, they might want to use that provider in all cases. When different customers can choose the most desirable service provider and service entity from the network, the network can create value as satisfied customers. If the network is ready to combine their different data together, all participants gain additional benefits through more personalized and targeted service solutions.
There is still other side in e.g. clinical pathway sense because the efficiency can be questioned. A1 and A3 are mentioning the expenses that the sickness absences make for the firm. Financially, one sickness absence day costs about 300 euros on average for a company (OP Press Release Nov. 10, 2014). Efficient treatment chain would guide the customer quickly to further actions and thus, shorten the recuperation. A1 is wondering how this clinical pathway can be most efficiently optimized and who takes responsibility of the entity so that customer is not bounced between different actors that have not agreed how the process should be most beneficially performed.

One example is Pohjola Health founded by OP Insurance in 2013, addressing this problem and gaining effective results from it (Pohjola Health 2018; OP Financial Group 2018). OP leads their customers to their own hospital (if customer wants to use others, it is possible) and their recovery or health treatment can be taken care of in one place efficiently. It has created effective results on shortening clinical pathway, which is partly explained by having fewer patients and that they come selectively through occupational health (Yle 2016). Thus, by having partners from health care sector, the insurance companies can streamline the chain and get faster treatment and cure. Still, rights to get customer data from other actors might be needed and freedom of choice must be offered.

Firms that have dyadic cooperation agreements or provide the service in-house create advantages mostly through knowing what partner does, what is agreed on, and what is pursued together. They have more clearly a common interest to streamline the treatment and not playing with, e.g. insurance money and thus putting to additional investigations for no reason. Also by acting beforehand with preventive well-being services, the need of these treatments decreases, and similar value is created. Thus, the prevention, shortening and minimization of sick leaves creates value for the employers, insurance firms, employees and the society through effectiveness that decreases the financial and physical consequences.
Empirical data shows that value can be also achieved through gaining new customers that would probably not be reached within own business area or would otherwise choose the competitor. When customer deals with other errands and runs into an add, recommendation or possibility to try the service of the partner, it can buy it easier. This can be from creating totally new need for the customer or that purchasing the already existing need is facilitated to buy from this partner of the service because customer does not have to go through searching options.

Many interviewees realize that only well-being related digital content is not seen sufficient to promote customer well-being and thus benefit the firm either. A digital well-being service that would concretely lead the customers to change their habits and lifestyle choices would be an added-value. A partner gains value if that service leads the customer to their firm to run errands or purchase services. The main findings of this sub-question are summarized in the Table 7 below.

Table 7: Outline of the results about the value that inter-organizational cooperation creates for partners and customers

<table>
<thead>
<tr>
<th>SUB-RESEARCH QUESTION 4: VALUE THAT INTER-ORGANIZATIONAL COOPERATION CREATES</th>
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<tbody>
<tr>
<td>Gaining different expertise and knowhow</td>
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<tr>
<td>Novelty</td>
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<tr>
<td>Agility</td>
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<tr>
<td>Combining varied data of partners</td>
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<tr>
<td></td>
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<tr>
<td>Efficiency</td>
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<tr>
<td>New customers</td>
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Now the fifth sub-question about startup cooperation considerations is covered and it is as follows:
SQ5: What challenges can be related to the cooperation between a startup offering digital well-being service and larger firms?

All the firms are cooperating with different sized firms, also a lot with startups. A1 and C2 were a little reserved when talking about startup cooperation but still also said that they are open-minded about cooperation with them if just certain criteria are ensured (these are discussed in chapter 4.5.2).

Startup needs to be able to answer to the large volumes that bigger companies have; some firms say that volume is one thing that sometimes surprises smaller firms. Some are also reminding that there may also become resource problems with startups; needed technology can cost too much or there are no resources to accomplish it.

Being able to trust on the partner is having great importance brought up by many interviewees. Also trust has diverse considerations. First, the startup’s ability to continue on the business was separately mentioned by insurance and health care firms. They stress that startup companies are often associated to their financial stability considerations. Also, A2 brings up the examples of startups having usually higher risk for e.g. key persons to change, company to be sold and the action that has originally interested the partner changes, money can end, or similar.

Challenges will also come up if the partner cannot trust on others promises and genuine cooperation willingness and pursuing for common benefits. Some firms have experienced previous collaborators to take advantage of them and having opportunistic behavior. Also, if the cooperation is not having a win-win situation for both, challenges or failure are seen to be inevitably emerging at some point.

Especially A1 and C2 stress the equal footing to be crucial. A1 also says that otherwise the one having lower importance for other needs to have something really superior to offer. That can balance a little the bargaining power differences. C2
emphasizes that the downsides from inequality can come in both ways between larger firm and startup and states that:

“So that it does not go there that a) we dictate – nor b) that other one brings a raw draft and waits for us to use a lot of resources and time and expertise, or our channels, to develop the service of this other firm.”

Thus, the startup should at least have responsibility of the own service offering and its development. Then firms can together work on finding most suitable ways to integrate business and find win-win outcomes for both. In addition, also A3 stresses that startups should also have responsibility also for leading the cooperation for it to gain better results.

Often after some time, the partner might change the agreed practices or other and thus, the quality and cooperation can change even radically. Some firms are prepared for this with continuous monitoring of how the cooperation is going (A1, B1). Health care firm B1 has strong opinion about this and stresses that without some kind of common operational model that steers the cooperation, challenges can be more probably faced. This leads to the opinion by B1 that without a regular steering group activity or monitoring it should not even be called as cooperation. Also, insurance firms have opinions about this. A3 says that clear objectives that are monitored are necessary for successful results and A1 notes that essential is to all the time to see a little further.

Insurance and health care firms remark that the performance and functionality of smaller firm’s service affects to the overall image of the partner company too. Thus, problems with technology, bad quality, or other aspects of startups service product and actions affect the whole service experience of customer. Larger firm does not want to be linked with bad service perceptions. On the contrary, the food sales industry did not take the content of digital services with such caution and image affecting. They regard it more in a way that they can just offer their customers the
possibility to facilitate the use of these startup’s services. Nevertheless, technical functionalities naturally affect the overall image.

A3 says that the effectiveness of the results by using startup’s well-being service might not be as high if the group using it is not in real need of it. As many of interviewees are stressing, without careful mapping of target groups for different well-being actions, as great value and efficient results cannot be achieved. When certain risk groups can be detected, the digital well-being service can be reasonably targeted and recommended for this group of people that more probably benefit from this kind service.

Related to the content of startup’s digital service, ethics and justifications can also bring up challenges. When considering e.g. insurance compensations, A2 sees a possible challenge in the willingness to provide equal service for the customers. That requires same standards for compensations also if digital well-being services would perform as health care tool after the malady or illness.

A2 reveals that for its clarity, the expenses have been compensated according to fair treatment recommendations. It might be difficult to justify why a doctor would recommend certain digital well-being services for some customers and why the insurance firm should compensate that ‘treatment’ method instead of fair treatment recommendations. A1 and A2 also wonder that the proof of who has used the service and in what ways might be difficult to demonstrate. Thus, this challenge also promotes the view of providing these digital well-being services as preventive services.

Then again come the same considerations in general, as also C2 ponders about these service recommendations for customers. The interviewee notes that it is difficult to point out who should take this service and who should not. The main results of this sub-question are gathered to the Table 8 below.
Table 8: Outline of the main results of the challenges related to inter-organizational cooperation (with startup)

<table>
<thead>
<tr>
<th>SUB-RESEARCH QUESTION 5: CHALLENGES RELATED TO INTER-ORGANIZATIONAL COOPERATION (WITH STARTUP)</th>
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<tbody>
<tr>
<td>Trust in production → responsibility of the development of own service offering</td>
</tr>
<tr>
<td>→ sufficient resources and competences to answer to large volumes</td>
</tr>
<tr>
<td>→ not following agreed practices (quality, communication)</td>
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<tr>
<td>→ image effects, reputation</td>
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<tr>
<td>Uncertainty of startup's continuity → changes in people in management or strategy etc.</td>
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<tr>
<td>→ startup fails</td>
</tr>
<tr>
<td>Opportunistic behavior → take advantage and exploiting larger firm's competences and resources</td>
</tr>
<tr>
<td>→ changing agreed practices</td>
</tr>
<tr>
<td>Inequality in cooperation → problem in both larger firm and startup perspectives</td>
</tr>
<tr>
<td>→ demands genuine win-win situation</td>
</tr>
<tr>
<td>Cooperation is not working in practice → lost resources, time and effort on useless or expensive partnership</td>
</tr>
</tbody>
</table>

4.5.4 Value creation opportunities for startup with digital well-being service

As final outcome of this research propositions of value creation opportunities are presented for startups, focusing on digital well-being services. The study connects them to the codification process, including integration and ecosystems, effectiveness and trust.

The propositions answer the main research question and focus on the concrete opportunities identified for a startup to start collaboration in the digital well-being field. Based on these propositions the study integrates a framework of inter-organizational cooperation for value creation in the digital well-being service between start-up and larger firms. Some propositions are more focused exactly on the nutrition concentrated digital well-being services, and ViaEsca. The question is as follows:

RQ: What are the inter-organizational cooperation opportunities by which a startup offering digital well-being service can create value together in the well-being field?
First of all, in the food sales industry main opportunities for digital well-being services are naturally more promising through digital channels and online grocery stores. The range and possibilities are more flexible in insurance and health care services.

Firms have varying attitudes towards whether they prefer strong or weak ties from their cooperation partners. Most of the firms have both ties which is already explained by their large and broad cooperation network. At least B1 and A2 are promoting stronger relationships because then the cooperation is often better organized and goal-oriented and thus, gains better results and are often more long-lasting. A1 and food sales have good experiences from successful and long-lasting partnerships also with weak ties, thus the functional cooperation form and pursued objectives need to be acknowledged when deciding the strength of the ties.

Hence, one opportunity is to start creating a cooperation model with strong, reliable and long-lasting business relationship. This would require tight engagement, and probably more resources and concentration on singular partner. If a potential win-win situation can be found, this can gain higher results, probably with higher risks.

As main result, the research presents six propositions. The propositions of the most promising inter-organizational cooperation opportunities are relying on the outcomes of the codification process. These results are gathered into Table 9 below. The relationships between propositions and outcomes of the codification process are demonstrated in the table, hence including the three main dimensions: integration & ecosystems, efficiency (in processes and well-being outcomes) as well as trust.
Table 9: Outline of the results of startup’s main inter-organizational cooperation opportunities

<table>
<thead>
<tr>
<th>MAIN RESEARCH QUESTION:</th>
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<tbody>
<tr>
<td>VALUE CREATION OPPORTUNITIES FOR STARTUP WITH DIGITAL WELL-BEING SERVICE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proposition</th>
<th>Benefits</th>
</tr>
</thead>
</table>
| 1) Integrating digital service to partner’s rewarding programs or products | → Integration of services and processes  
→ Efficiency of well-being outcomes  
→ Trust in continuity, capabilities and technical execution |
| 2) Creating service packages or rewarding programs for groups | → Integration of services and processes  
→ Efficiency of well-being outcomes  
→ Trust in continuity, capabilities and technical execution |
| 3) White labeling | → Integration of services  
→ Efficient branding  
→ Trust in responsibility of service development |
| 4) Integrating recipes into online grocery store | → Integration of systems  
→ Efficient use of digital well-being service  
→ Trust in technical execution and capabilities |
| 5) Part of an ecosystem | → Ecosystems in common platforms  
→ Efficient distribution channel and efficiency of well-being outcomes through complementing service offerings  
→ Trust in quality of the service provider if one company takes responsibility of the ecosystem |
| 6) Guiding to each other’s services | → Integration of systems and practices  
→ Efficient marketing  
→ Trust in partner and pursuing common goals |

Each of these six propositions are explained next, including examples of the cooperation model.

**Integrating digital service to partner’s products or rewarding programs**

The first proposition is integrating startup’s digital service to partner’s products or rewarding programs. This means that the digital service of a startup is included in the partner’s service offering and/or it can be included to encourage customers to use the service by gathering points. The points can then give rewards after certain amount is reached. These can also be totally new service concepts created together with partners.
Examples in Finnish markets from well-being related insurance products are already from LähiTapiola, Nordea Life and OP. All these insurance products are working in cooperation with Finnish well-being startups. They all have different reward systems for customers:

*Decreases insurance prices.* OP piloted OP-Syke insurance in 2015-2016 that decreases the insurance prices when customer reaches certain well-being goals according to one of the four selectable well-being applications created by Finnish startups (OP Group 2015).

* Increases compensation amount.* Nordea Life launched in 2018 a new additional service for their life insurance product called MyLife Go. It increases the insurance compensation amounts according to physical activity of a customer. The physical activity is followed by an application of Finnish well-being startup company. (Nordea 2018) If the product succeeds they plan on broadening the reward program towards nutrition, sleep and balanced lifestyle in general (Kauppalehti 2018b).

*Product includes factors promoting health and well-being.* LähiTapiola offers a Smart Life Insurance that is designed to promote customer health and well-being through multiple aspects: financial security, tracking tools, nutrition, exercise, rest and stress management. The insurance includes basic safety life insurance, electronic health checkup and self-training programs, activity bracelet or heart rate monitor, well-being information and benefits from partners, as well as mobile application gathering the data. (LähiTapiola 2018) It does not affect to the insurance prices or compensations (Kauppalehti 2018a). Nevertheless, the product has been successful, since after a year from launching the product, 7000 had bought the insurance and sales had increased by 10 percent (Schmidt 2017). Also, the customer base can be expanded. Middle-aged people with children or children on the way are mostly buying life insurances (Time Inc 2015). This kind of well-being promoting insurance product can lure also not-so-traditional life insurance -buyers; especially younger generation and women.
Even though these examples are from insurance industry, the same could be applied to other firms too. Creating a rewarding program to get for example discounts from services/products or just additional rewards for oneself or making it as a game in the customer community. Also as Nordea MyLife Go includes the possibility to participate in charities (Nordea 2018).

If concentrating on the industries included in the thesis, food sales firms could have a program inside their online grocery stores where the points from well-being actions can be displayed and according to that either offers or for example recommendations for food purchases can be made. But rewards can be anything, like offers for partners or own services, like restaurants, hotels, personal training, massages etc. As also C2 mentioned, they have extensive amount of data about customers and there lies potentialities to utilize it. It just needs to be ensured that customer wants and accepts that the personal data can be utilized this way.

These rewarding programs could also be developed from one-person achievements to probably even more engaging form, where same idea is applied to groups:

**Creating service packages or rewarding programs for groups**

Second proposition is creating service packages or rewarding programs for groups. This means similarly that startups might be able to create in cooperation with partners new service packages targeted for groups, where achievements are pursued together.

If a certain group, like gathered team from work, studies, hobbies, friends, sports etc. reach together a certain amount of points, the whole team would benefit or get the reward. If the target is to ensure that all participants are improving their well-being, this can be taken into account by requiring that all are reaching minimum points. Otherwise one that has not earned points themselves from e.g. exercise or sleeping does not promote own well-being. The options could be for example rewarding according to the sum of the group or by the average of group members.
Applied to nutrition focused digital service, this could be adjusted to personal goals like body composition achievements. If a functional manner can be created, why not also due to activity or food intake/quality etc.

Especially, A1 pictures it to work better for groups, through occupational health, or employee pension insurance firms. Group (pension) solutions or packages that could include the service of ViaEsca could be a promising option. If people forming these groups are genuinely excited about the program, they will engage to it better too. Also, the team spirit of a group promotes the engagement, and resilience to stick on the program.

A digital well-being service can also enter the markets with cooperation through marketing aspects. One proposed example by A1 is also:

**White labeling**

Third proposition is white labeling. White labeling refers to the situation where small firm produces the service but offers and promotes it under the brand of larger firm. Like “A1 well-being” that is powered by ViaEsca. The service would be totally produced by the service provider even though the customer would not necessarily know that. The brand would probably sell better, and it could be a firm or e.g. a sport team.

On the other hand, many see weaker ties having its benefits, by being quite effortless through light resource consumption especially in proportion with benefits. Some opportunities for weaker tie cooperation are presented next. In food sales industry there is already the possibility to select easily the products to the online store shopping bag from proposed recipes. This brings other cooperation opportunity as:

**Integrating recipes into online grocery store**
Fourth proposition is integrating recipes into online grocery store. This means that when customer does online grocery shopping, she can see the food recipes of the service of ViaEsca and select easily the needed ingredients to the shopping cart in the online store.

The selection possibilities in the outlook of customers in the online grocery store can have a quick and easy way to click all the ingredients needed for the recipes included in the nutrition focused digital well-being service. This could be possible for customers that are both (1) signed in to the online grocery store and (2) have bought the digital well-being service. This would facilitate their online grocery shopping when the needed ingredients are faster to order. Both partners are also benefiting if customers see this facilitating their life and will use it.

Food sales representative C2 gives example of their cooperation with two well-being bloggers that make ready weekly menus with recipes for customers. Firm allows customer to collect these more easily to the online store’s shopping basket and then gives some transaction for the blogger. Also company of C3 has already the possibility to select ingredients of certain recipes straight to the shopping bag. One insurance firm, A1, cooperates with a bank by guiding the customer to each other’s services if customer needs insurance- or banking services that they themselves cannot offer. There no money is moving between partners. In both examples the cooperation is really light but mutually beneficial. The latter one could be applied to nutrition service as guiding to partner’s services when a need for life insurance or desire for well-being improvements are detected.

Despite the fact that the digital well-being services are in relatively small role in insurance business at the moment, firms in the industry are pursuing to develop them because they believe in their greater role in the future. A2 sees that insurance firm should be able to offer its customers advice to stay healthy, and in today’s world it is not that there is some text in the website. Rather, it is through getting in to the circle of health and well-being services.
Thus, one opportunity with weaker ties and collaboration in the insurance industry is this several times mentioned:

**Part of an ecosystem**

Fifth proposition is to become part of an ecosystem. Many firms are having or developing service platforms that gather together different service providers. These can be owned and managed by one company. Then the company can choose which service providers can access the platform and the company takes responsibility of the quality of the service providers. Or it can be so-called open ecosystem where any company can enter, and customers can choose by buying which ones are going to stay.

Insurance firms see themselves as a natural actor to gather well-being services together for customers. Thus, this kind of platform, ecosystem, or palette where different well-being services are put available and recommended for the customers can be potential service offering for them. These kinds of platforms are under consideration, planning or development in these firms, especially in A1 and A2.

Getting entrance to these platforms is a promising opportunity for startup’s digital well-being service because the range of the services is planned to cover multiple aspects of well-being. Also the customers are different and not all services can fit for everyone. Thus, there is need for varied services, but still the amount is limited and thus needs to fit to partner’s strategy, vision and criteria mentioned in chapter 4.5.2.

A3 brings up an idea that this concept could work also with popularity and usage of customers. Maybe customers could also rate these services in the future, so that it would work a little like TripAdvisor or AirBnB.

The pricing and manner to offer this kind of service in the platform or ecosystem to be available for customer can have multiple options. As previously deliberated, e.g.
A3 ponders whether improving own health by using well-being service can be transferred to e.g. insurance prices, but nevertheless sees these considerations as emerging trend. A1 sees that it is still a long way there until these well-being service aspects can be implemented to insurance prices. A1 says that it does not come straight there yet but possibly in long run. That is why A1 is a little suspicious about its fit on their business and promotes more the occupational health and employment pension firms’ role with these services.

A2 does not bring up the pricing but rather discusses about insurance terms and its possibilities but sees it a little problematic too, due to the demonstration challenges or equal treatment. Anyway, the role of these services is found to be in the repertoire of the well-being services. A2 proposes three different approaches to include digital well-being services in insurance firm’s business model in their website. These are:

- available for all
- available for firm’s customers
- available for customer after event/illness as part of medical treatment.

Two first ones may have complexities with license issues, which makes the last option easiest in that sense. On the other hand, first two options are straightforward because they are available for all who want. The choice of how startup could be positioned should be based on laws and regulations but as well to mutually beneficial outcomes.

Thus, after this choice, pricing should be defined to benefit both companies. Some examples are that the service can be free or with discount for the customer if they already are paying for an insurance, insurance firm can pay a transaction to startup (for getting to put the service available or according to customers’ use), or customer pays normally from the digital service for startup.

Also, A1 sees this integration as possible because the idea is that these services can create greater added value because the customer gains access to something
that it does not get from other firms: in this case an effective well-being service. Their performance in A1 relies a lot on long term customers. A1 regards that they want to strengthen the community thinking, and thinks that with good auxiliary services, if the customers feel that this is personified for them, these can be quite significant things in the future

This platform or ecosystem thinking did not come up from food sales or health care firms. In these industries, more promising opportunity could be recommending this individual service. Larger firm is motivated for collaboration if it benefits them too. Health care firms are very popular in collaboration matters and thus the service and collaboration should be able to provide distinctive value for them too compared to other collaboration opportunities.

Similarly, in the food sales, the greatest objective could be for the service to actually lead customers to their store. C2 questions the concrete effect of their current campaigns, newsletters or digital content where consumers can read ideas or advice about healthier food choices but whether that actually leads them to change their habits and shopping choices remains uncertain. Thus, there seems to be a need for concretely advancing customer’s desire for healthier lifestyle choices and this kind of digital well-being service could have a role in that sense.

As mentioned, one opportunity for all industries, to integrate digital well-being service cooperation is:

**Guiding to each other’s services**

Sixth proposition is guiding customers to each other’s services. This refers to guiding customers of the digital well-being service to partners’ services when they could need the service of the partner (e.g. life insurances, online grocery possibilities, and health care services/checkups). This works then also vice versa, so that larger firm guides their customers to the digital service of the startup when a need is detected.
Many believe that just a link on the website is not beneficial or helpful way of collaboration. Some even say that it should not even be called cooperation, and for example B1 rationalizes that then being even partly responsible of the customer experience is more difficult. Also reaching customers is questioned, as C3 states:

“It could be said that the link (or banner linking) is the lowest possible level. But our cooperation targets to have a much deeper marketing collaboration and possibly ViaEsca’s presentation on our site as a partner and not just as a link. I have come to conclusion about linking that it is the easiest way to show cooperation, but the consumer often does not encounter it.”

Thus, the recommendation and steering to partner's services should come from other ways, more targeted and personalized exhortation when the possible need is detected as in the example of collaboration between insurance firm and bank. This would be potential way to guide people also to digital services. As C2 thinks:

“-- with the current model we are still moderately strongly so-called brick and mortar -driven industry, so it is perhaps a little challenging in a self-service market concept to support customer's well-being choices. But the more we get customers guided to the digital services and the well-being aspect brought to these services at different angles, so surely there is one way in which we want to develop our relationship with our customers”

When thinking about most promising opportunities, the pricing of the service should be taken into account. This is important also when considering the empirical finding mentioned in 4.5.1, that often the ones who are not so interested about well-being, would need them the most and thus the first step should be made as easy as possible. B1 has many experiences from how pricing is usually quite difficult for firms. The expectation that Finland has so many people that are ready to put several hundred e.g. in a month for this kind of service is challenging. Rather it should possibly be so that the threshold is low for first purchase, then the customer gets
excited and buys a bit more, like additional parts or services. That way it is seen more potential than just relying on the belief that customer is ready to pay fortunes by just trusting that it is excellent service.

Nevertheless, if the decrease of price is not possible, the threshold needs to be lowered in other ways. Some kind of satisfaction guarantee could also lower the threshold to try the service or then compensation from a partner or workplace that gives discount for the final customer. Finding a place in these kinds of arrangements is one opportunity to gain customers for digital well-being service.

Because there are plenty of different kinds of well-being services in the markets and new ones created continuously, especially by smaller firms and startups, the targeting of these services should be done carefully. This is brought up by most interviewees. The supply is huge and thus the digital well-being service needs to stand out from others. One way to create this competitive advantage is the data. If a startup is able to create additional and distinctive value with its data, there is a potential opportunity to justify its role in the inter-organizational collaboration with larger actor in the field.

Examples could be to collect data from succeeded and failed experiences from using the well-being services. Detecting which background, demographic, starting point measures or previous lifestyle habits factors as well as performance during the program affect the results and long-term effects, can give beneficial information for the partner too.

4.6 Timing as an important variable for cooperation

This research also shows how timing for cooperation is an important variable. The planning, implementation and management of cooperation demand time and effort from both companies. Thus, there needs to be optimal state for the start of the process regarding companies’ vision and strategy, but also current resources and capabilities.
When considering the timing for cooperation with the case firms, many are still just approaching or reforming digital service environment and building platforms. This postpones the readiness for digital service startup collaboration to little later. Even though no interviewee is worried about the resistance of change regarding digital services inside their organization, if there is no ready platform for integration, it takes time to adjust and have technical conditions ready. In already digital based environments of online grocery stores, both firms are solid that there is no internal resistance while other firms say that there is always some, and it is understandable.

In insurance firms, the timing for digital well-being services is not yet current. General view in the industry is that well-being is very interesting theme, and it is seen related and linked to the insurance industry. Nevertheless, the industry seems to be under transformation and therefore the timing for this kind of service is not yet current for these firms. At least in traditional insurance firms, it is denoted that first they desire to focus on health care services after the accident or illness has happened. Possibly after that these kinds of preventive well-being services are potential and can possibly come to their industry and own business later. But at least A1 does not see it to be there yet and thinks that this kind of service would possibly suit better through health care or employment pension firms.

Also, when regarding digital services in general, A1 expresses that their current operating model is quite ancient due to their age. Therefore, there is no sense to modernize it by transforming it to the digital world. Rather they are creating a parallel new digital environment where customers can move gradually on their own pace. This is not yet accomplished and can have timing issues too. Nevertheless, they have already established a new subsidiary, targeted as a platform for gathering different digital services from their network as their own ecosystem. Idea is to put available possibilities for customers to find good and recommended services easily and for example put out tenders and compare different services.
Nevertheless, they take the idea of well-being services positively and are ready to be in contact with service providers. They are interested in reforming and modernizing their business in the future and see an advantage from their centralized management and relatively small size, which supports the quick actions if they want and understand to do them. They just see multiple factors, like Social and Health Care Reform, license issues, and industry characteristics, affecting the decisions.

Also, A2 and A3 are both approaching this kind of network thinking of services. A2 is currently in an active phase in building a strong core and platform where the other services can be attached. But building first this solid base for this ecosystem of services takes some time, and thus the timing for expanding and starting this kind of ecosystem collaboration with digital service providers is concretely taking place more towards the end of the year 2018. That will be more active partner-seeking time for them even though they already have radar on and are willingly meeting and sparring potential partners.

A3 does a lot of projects with their corporate customers with multiple actors but thinks that possibly in couple years network actors might play genuinely together. A3 believes that these kinds of digital well-being services have an important role in the collaboration networks, because it is not probable for e.g. health care firms to start producing these services themselves but to exploit the network with core expertise. A3 is targeting to leading these networks efficiently and currently has in progress the building of tools for that. Thus, A3 estimates that it would take approximately couple years timeframe to achieving that stage of genuinely working together with the network to create best possible customer experience with shared data etc. They are aware that there are companies already building platforms gathering these services but do not see themselves there yet to start constructing one of their own.

B1 seems to be ready to try new partnerships even right away if the basic things like data protection, quality issues and financial stability etc., are met. Usually well-being
services have new innovations that they first at least try and then assess if they will possibly incorporate it or hold at partner’s side. B1 regards that developing business together, starts from defining a relevant target group that starts piloting the service and according to that it could be developed further. But just gluing on top a fragmented part of well-being solution like nutrition might not work per se but demands that it actually has to offer excellent customer experience with ease and effortless. B1 demands that conditions for success must be recognizable from the cooperation, and its model must be conceptualized, not just through website.

Food sales firm’s commercial manager C1 sees that timing is mostly depending on the schedule of technical challenges. Meaning that when it is technically possible they can, in principle, start a promising collaboration project right away. Usually there appears these kinds of technical questions and that way resource requirements which then move them to the queue. Important is to know, what the collaboration requires from technologies and resources.

Same firm’s digital service manager C2 knows that when concerning digital services, they are regrettable blocked and full. They are in the process of reforming their services and it determines pretty much what they have the chance to do, if anything, despite how small the thing is. Thus, they do not make changes to this old online grocery store. The schedule for the service-reform to be ready is open and they are just waiting for it to be complete or in a state that it can be published. Then they will be able to determine a little more precisely what kinds of development operations, cooperation models or whatever further development issues there will be and in what schedule. This will probably be around summer 2018 and then the cooperation can proceed in concrete. The data modeling of how the data of e.g. recipes would move in the system can be discussed beforehand. And that is practically the most important aspect from store’s opinion so that they do not have to make bigger changes to their largest systems.
C3 sees that the service of ViaEsca is absolutely a potential added-value service for them and they are ready to try cooperation. There the timing has been depending on the technical implementation. Their technologies are not bending on the desired cooperation model yet, but it is approaching it promisingly.
5 DISCUSSION

This master thesis contributes with empirical findings to explore the role of digital well-being services from startups being necessary part in the service entities of actors in the well-being field. This research shows how startups and digital services are important source of innovations, new business areas, special expertise and efficiency. In this discussion, empirical findings have been conceptualized and integrated to previous theoretical framework.

This part discusses about the proposed framework of inter-organizational cooperation for start-up and large firms that includes three dimensions: ecosystems and integration of services, service effectiveness, and trust and reliability between partners (Figure 13 below). These are discussed in the light of research questions.

![Diagram](image)

*Figure 13: Building a framework of inter-organizational cooperation for startup and larger firms*

First, the ecosystems and integration of services addresses the main research question about the most promising value creation forms of inter-organizational cooperation. Second, the service effectiveness discusses the issues of the second, third and fourth sub-questions about the features demanded from the partner and their digital well-being service as well as created value. Lastly, trust and reliability on partner and its service are the main success factors to create value and prevent
challenges in inter-organizational cooperation, that were discussed in the findings for the third, fourth and fifth sub-questions.

5.1 Ecosystems and integration of services as forms of cooperation

As main empirical result of this research is the most promising cooperation opportunities between a startup offering digital well-being service and larger firm to be ecosystems or integration of services. Ecosystems refer hear to companies operating in a common network and/or inter-connected environment to provide broad portfolio of services to the customers. Ecosystem thinking is based on comprehensive service offering, aggregating different service providers and their data. Similarly, integration refers here to combining fully or partly the actions, processes or services of business partners.

Ecosystems and integration did not come up as strongly in the previous literature about inter-organizational networks, but it resulted as very important matter in the empirical data. This is probably due to the specific context and environment of digital services in the well-being field.

The ecosystem concept is still connected to theory by having complementarities as source of value (Zott & Amit 2010; Barrett et al. 2015). Previous literature sees that some actors have a role of enabling or being auxiliary to the partner's service (Basole & Rouse 2008). In this research ecosystems concept emerged as a core dimensions to explain the most promising opportunities of digital well-being services.

In addition to ecosystems, integration is a second important concept emerging from the empirical data. The opportunity of integration to partners systems, processes or services (white label, recommendations, online store, rewarding programs) emerging from the empirical results can be seen to have all the sources of value introduced in the literature review: lock-ins, novelty, efficiency and complementarity (Zott & Amit 2010).
5.2 Service effectiveness as important criteria for digital well-being service

The second emerged dimension from data analysis is the efficiency and service effectiveness, referring to the benefits and motivating factors of inter-organizational cooperation between startup and larger firm. According to grounding process of empirical analysis, factors behind these effectivity impacts are data exploitation, new innovations, better targeting and engaging customers.

The empirical data emphasizes the service effectiveness as crucial factor and as added-value for both the customer and the companies. When the usage of the digital well-being service gives concrete results and actually has effectiveness and improve purposefully the well-being of the customer, the firms benefit too. Being able to improve the customer well-being has indirect value for all the included industries through answering to customer needs, but also some direct value in insurance and health care firms.

Inter-organizational cooperation is seen as an effective way to deliver value for the customer when each actor concentrates on their core expertise. Hence, the service experience and entity can also be enhanced. When more manifold aspects are covered with multiple services targeting the same goal (like well-being), the whole service entity perceived by the customer is more comprehensive and can create additional value. This network influence is also emphasized in the theory and stated that often the effects of the network are greater than from dyadic partnerships (Anderson et al. 1994). Thus, regarding today’s world, the theory encourages concentrating on entering networks rather than just markets.

Also, both theory and empirical data find that one great benefit from startups to larger firms are the innovations (e.g. Barrett et al. 2015; Pullen et al. 2012) and development projects (e.g. Littler et al. 1995; Feng et al. 2010) especially in the digital and technology intensive fields. New innovations can do same things more
efficiently or do totally new things that bring novel value. Notable value in inter-organizational cooperation with startup is according to empirical data also the more agile ability to change and develop processes and services. This is referred also in the theory as dynamic networks (Miles & Snow 1992) which is suitable and recommended in today’s highly competitive and changing business environments.

As the empirical data indicates, the utilization of data is still deficient. Also theory sees the manifold possibilities of data and proposes among other to focus the data gathering to a particular problem or issue (Huberty 2015). Defining these concrete issues that firms want to concentrate in the field, can result in better targeting and service effectiveness.

Empirical data stresses targeting and engaging customers as crucial factors in service offering. Both theory and empirical data remarks that utilizing data helps in providing targeted value (Huberty 2015). The customer engagement is probably more emphasized by the empirical data because the results of the well-being services are depending on the customer. The theory still mentions that characteristic for digital services is the customer integration in the process and outcomes (Fleisch & Weinberger 2015). Nevertheless, deciding who should use the digital well-being service can be challenging to determine and say to the customer.

5.3 Trust and reliability between partners crucial for successful cooperation

As criteria for successful cooperation is trust and reliability between partners. This research has shown how in digital services, building trust with partners is a key, directly connected with a reciprocal relationship and partners taking responsibility in the cooperation. Commitment and trust have been previously studied as important factors in network and value creation theories, especially when regarding startups (Varamäki & Vesalainen 2003; Mohr & Spekman 1994). The startup collaboration is seen in both theory and empirical data as containing a little more risk, due to the
fewer resources (which affect also capabilities), and business continuity considerations. In this type of cooperation, the risk is perceived to rely more on startup according to the theory (Street & Cameron 2007), while empirical data shows that large firm has more need to be careful in partner selection because the startup has usually more continuity, financial, resource, quality and capability uncertainties.

Thus, in the empirical results, trust issues emerged related to continuity of the relationships, and the capabilities possessed by the startup. It is also important notion that one main challenge in startup cooperation is the lack of startup’s responsibility of the development of its own service. In other words, empirical data reveals experiences of situations where before or during the cooperation startup believes that partner pays and uses its resources to the development of startup’s service (or initial version of it). This means that startup believes that it can exploit larger actor and its resources, which is not equally mutually beneficial cooperation.

Theory is consistent with startups continuity and capability uncertainties (e.g. Pitta & Laric 2004). On the other hand, theory also notes that often challenges in partnerships can come related to opportunistic behavior (Oliver 1990; Gulati 1995), unsuccessful network structure (Basole & Rouse 2008), management (Hacklin et al. 2006), or alignment of partners (e.g. Emden et al. 2006; Kask & Linton 2013).

While theory finds multiple compatibility requirements (technical, cultural, strategical, structural, relational) (Emden et al. 2006; Baum et al. 2010; Hacklin et al. 2006), the empirical data requires from partnerships mostly strategic compatibility, shared vision and possibility to integrate to partner’s systems. Thus, the startup should strive to align its features to fit into partners strategy and business model as well as have flexible solutions for technical integration possibilities.

Essential in the startup cooperation is being able to create a cooperation model that creates win-win situation for both partners. Empirical data sees the importance of genuinely working together which can be realized as communication, combining
data, regular monitoring or defined common operational model. Managing the cooperation and that also the startup takes responsibility of it, were seen vital. Also, the responsibility of developing own digital service is stressed in the empirical results. Theory also sees that pursuing for common targets, being genuinely willing to cooperate, and finding mutually beneficial solutions are important aspects for successful cooperation.

Also the results show that quality is required from the partner, its digital service and processes (technical execution). Theory also promotes that each actor as part of the entity or network affect to the overall reputation perceived by customer. Nevertheless, the empirical data shows opinions that even though the technical execution needs to be excellent, the content of the service is not always seen related to the image of the partner in food sales industry.

Both empirical data and theory are seeing also challenges and considerations in data protection issues: both in regulation and security issues, empirical results also in ethical issues, while theory mostly with data ownerships or management rights. Both see that there is need to define what kind of data is needed to be able to use it purposefully to create value, and enhance the business.
6 CONCLUSIONS

In conclusion, this master thesis has studied strategic value creation opportunities based on inter-organizational cooperation between large companies and startups on the digital well-being services.

The main outcomes show how digital well-being services are having an increasing role in the value chains of actors in the well-being industry. Most large actors in the well-being field have already some digital services in their own core business operations. Also, it can be seen how most of them are relying on networking, partnerships, inter-organizational cooperation and startups with new business areas, innovations and well-being services. In general firms are eagerly following the trends, new startups, and ideas in the field. When the right cooperation form and implementation can be planned and is topical, most are open minded for piloting or testing the collaboration.

Second, regarding digital well-being services, this research indicates that both the supply and demand are increasing rapidly, and customers are increasingly requiring, expecting and using them more and more. Hence, large firms should be able to answer these demands quickly and it is seen to be more agile with outside organizations. Challenging can be deciding the right channels to provide these services. Distribution channels are most effective when they are targeted efficiently to most promising customer segments.

Nevertheless, this research also shows how the purchase of well-being services is often more dependent on individual’s own interest, the customers are often the ones already caring for their health and not those that would benefit the most out of them. Thus, combining well-being services to e.g. some programs, occupational health actions or group packages, the customers needing the services can possibly be reached easier.
Third, empirical results are showing that insurance industry is slowly moving towards preventive and well-being services, at least after the license issues and permissions are checked. Measuring way of living and linking it to insurance products and prices was perceived from empirical data as potential future direction. Challenges and considerations are still brought up related to among others, industry restrictions, licenses, and equal treatment of customers. Also timing for these services was not seen topical quite yet in the interviewed firms. Occupational health or employment pension solutions were seen to be the first step to enter these markets.

Fourth, each industry has its own aspects. This research has shown how the ecosystem thinking is emerging the most from the insurance firms. That leads to the conclusions that insurance firms are seen as a natural aggregator of well-being and health service providers that checks and then recommends certain services for their customers. When the revenue logic for both the larger insurance firm and smaller startup or equivalent is determined, this can change the business enormously. These kinds of platforms are already under planning and provided in the markets. Thus, the future is promising for digital well-being services and entering these ecosystems and networks has great opportunities for startup.

In food sales industry, the results indicate that the most natural way of cooperation with nutrition focused well-being service is through integrating recipes in their online store’s shopping bag selection possibilities more easily. Thus, the actual way of benefiting both partners comes from this procedure that leads the customers to ordering the ingredients exactly from the partner. Improved well-being of the customers benefits food sales firms mostly with indirect value, that emerges from fulfilling customer needs and satisfied customers.

In health care industry, well-being is strongly tangled to the overall health and well-being of customers that the firms are intending to maintain. Thus, the digital well-being services can create significant value and complement their services. The digital service should be carefully targeted, have concrete effectiveness, and be
planned as suitable service concept to specific segments or groups to create lucrative value.

Fifth, in general in any industry, results show that there lie good value creation opportunities with weaker ties too, like recommending and guiding customers to each other’s service. This does not mean having just a link on the website or mentioning to be a cooperation partner, but concretely steering customer to choose the service of a partner when a need for partner’s services comes up. This means for example integrating the partner to service entity or recommending each other’s services in customer encounters.

Sixth, this research shows that some actors in the field are promoting openness for any partnerships and trying to get other actors see it more beneficial than leaning on exclusive rights and smaller concentrations. Focus on own core competences and utilizing the broader range of expertise and data of partners in the open network is beneficial also from the customer’s point of view. Then the process starts from customer interests and the customer can construct the service entity from desired parts and data of the network actors. Thus, the ecosystem and platform thinking seems like the future of at least those large firms that do not have resources or intentions to start acquiring the knowledge and expertise inside their organization.

Finally, the research detects that verifying firm’s reliability, trustworthiness, ability to take responsibility on cooperation management and own service development, capabilities to answer the volumes and technology requirements, taking care of data protection issues, and proved concrete effectiveness, a startup offering these kinds of services is a reckoned service provider. The partner needs to be able to trust to the quality, technical and practical execution as well as service effectiveness to be willing to link it with their services. Aligning to potential partner’s strategy helps in proposing lucrative cooperation possibilities.
6.1 Theoretical and practical implications

Theoretical implications of this study are mainly focusing on the special aspect and perspective of digital services in the well-being field. The results show that the well-being markets are quite complex and manifold. That requires multiple actors to work together to be able to cover the whole range of well-being aspects. Also, the personalization is required because different manners work for different people and their needs. Thus, utilizing data and combining it with different actors from different industries is reasoned to be beneficial for all actors. Therefore, the study indicates that even though there are a lot of competition and service providers, different actors are needed and should be joined together to create greater value together.

Also, the collaboration with a digital service startup and larger firm in this specific field is contributed as specific view. The results show that large firms have a lot of considerations regarding startup’s capabilities and continuity even though they see the great innovation and effectiveness advantages. Some large firms see that they are carrying a risk and thus are scanning startups carefully before starting a collaboration with them.

Thus, the study adds knowledge about digital well-being services having a significant role in the well-being markets. The trend is running high and it can be detected that the supply and demand of well-being services are increasing continuously. Therefore, firms related to the field but not producing these services are willing to be able to provide these for their customers. Mass production and all-for-everyone is seen as strictly not beneficial with these services and thus efficient targeting and personalization are generally required in the field. The results show that service effectiveness is demanded from the well-being service, especially when the industry gets direct value from the improvement of customer well-being.

As practical contribution for startups’ managers, the study recommends ensuring and being able to demonstrate their technical and resource capabilities, continuity
and data protection considerations. Also, as emphasized in theoretical implications, the service effectiveness is seen as one critical factor in these services. Thus, the concreteness of the well-being results and being able to prove them are issues that should be addressed carefully. The strategy of larger companies affect their interest in startup collaboration and hence, if possible, startup should intend to align their service accordingly.

Managerial implications for larger firms in this kind of collaboration is to take under consideration how the data could be utilized better. It has great opportunities and directing it to certain purposes can create novel value. Illustrating a service design that points out the main value creation factors can be useful in detecting the data needs. This can then help in gathering, allocating and utilizing data efficiently and for targeted issue. Also data can be exploited to predict future trends and customer needs and thus optimize own actions accordingly.

This brings to the practical implications in the network perspective. It is recommended to utilize data registers of different actors and being open-minded for creating open ecosystems or collaboration networks that genuinely work together. This would require shifting the attitude from rivalry and seeking just own benefits, to creating collaborative value that benefits all the actors and customers. It should be seen as not being harmful to share and combine data (in accordance with law and regulations) with the network. Rather useful attitude is seeking to create better service entities together, as well as greater customer experiences and value, because the result is usually greater than the sum of its parts.

When concentrating on dyadic relationships, practical contribution of the study recommends planning the cooperation form to be mutually beneficial and relying on trust. Regular monitoring practices are also seen necessary in these kinds of collaborations with stronger ties. If startup engages to relationships with exclusive right demands, it should take into account the possible downsides of losing other possible beneficial collaboration partnerships or networks. Too strong reliance on
one partner can results in weaker outcomes. Often in collaboration networks the outcomes are depending on the service itself and its popularity among customers. There, of course, reaching the customers works more with the rules of open market economy; regulated by free demand and supply.

Lastly, the overall outcome and entity of startup’s partnership portfolio or network need to be taken into account. Because of the lower amount of resources, they need to ensure that their service and managers are able to carry the multiple collaborations simultaneously.

6.2 Future research propositions and reliability of the study

For future research topics, one proposition is examining the suitable pricing strategies for these kinds of collaborations with digital well-being services. Firms are facing considerations on how to price the product first, (1) so that customers are willing to try it and second, (2) to benefit both actors when cooperating with other organizations. Research topic can be how to create a functioning revenue logic that is rewarding for both companies and gets the customer to try the service. This had to be excluded from this study due to research limitations but would be interesting future research topic.

Also one possible future research could concentrate on cooperation with larger range of different industries. The number of industries had to be limited in the study too but there are more opportunities and examinations possibilities e.g. in sports, body measuring, lunch restaurant and food production industries. Also the so-called value ecosystems in the well-being markets could be a potential examination area for further research to study deeper the factors creating the value and critical requirements for the value creation.

The implications of Social and Health Care Reform are also one proposed future research area because it can have major influences in the well-being markets in the future. Finally, the data exploitation opportunities of well-being markets can be
examined deeper in the future research to find out ways to address it purposefully to more concrete objectives to create novel value.

To assess the validity and reliability of the study, the results are strongly related to specific circumstances of the cases. In-depth analysis is gained regarding the specific cooperation opportunities of interviewed firms. These results are useful for these certain cases but cannot be securely and reliably exploited in whichever cooperation.

Nevertheless, the included firms, and positions as well as knowledge of the interviewees can affect the empirical outcomes. Even though some of the perceived value creation possibilities and challenges could be generalized views of the industries, it cannot be confirmed. One example is in the insurance industry where there already are insurance products linked with well-being services and affecting prices even though the empirical data showed suspicions on its possibilities.

Timing of the study can also affect to the outcomes. The topical news of Social and Health Care Reform and the new data protection regulations that came into effect during the study can affect to the discussed issues. Place of the study affects too to the validity of the results to be utilized outside of Finland. The well-being trend and needs are in different stages in varied countries and therefore can gain different outcomes if conducted in another place. Nevertheless, the results give indicative directions and can be useful outside of Finland too.

The results are recommended to be utilized with caution in different organizational and market environments because the validity of the study can have some restrictions because of the special context of the well-being field. If applied without situation specific consideration the results can have misinforming knowledge, recommendations and observations. Also, the results have limitations on the specific case of nutrition-based well-being service and concentration on only a
narrow sample of possible partners. Even so, some generalizations are made but they should be considered in their special conditions of the well-being field.
REFERENCES


Pagani, M. (2013). Digital business strategy and value creation: Framing the dynamic cycle of control points. Mis Quarterly, 37(2).


PDF MATERIALS


WEB SOURCES


APPENDICES

Appendix 1: General frame of interview questions

WELL-BEING AND DIGITAL SERVICES

1. What kind of significance well-being has in the current insurance/food sales/health care markets?
2. How the significance of well-being will develop in the future in the insurance/food sales/health care markets?
3. Well-being can have different meaning for different actors; what is relevant and essential in this concept for your company?
4. How relevant well-being issues for customers and engaging in them are currently in your business?
   a. How does it appear in your activities?
5. What digital services you offer to your customers at the moment?
   a. Are these focused on well-being? In what way?
6. What does the near future look like regarding your company’s engagement in well-being issues and digital services in your company?
7. How the digital services have been generally welcomed and started to use in your organization?
   a. Is there resistance to change?
8. What criteria and expectations you have for a digital service focused on customer well-being?

VALUE CHAIN AND VALUE CREATION

1. What value your company offers for the customers?
2. How do you differ from your competitors in your value creation? (competitive advantage)
3. What kind of role the inter-organizational cooperation has in your value creation?
   a. Do you intend to operate independently or with networking and collaboration?
4. Do you seek competitive advantage out of digital well-being services offered for customers?
INTER-ORGANIZATIONAL COOPERATION AND NETWORKING

1. What kind of cooperation you have currently with other companies?
   a. Which sizes of companies?
2. What kind of inter-organizational cooperation has turned out to be most successful?
3. What kind of inter-organizational cooperation has turned out to create most challenges and problems?
4. What criteria you have for your partners offering digital well-being service?
5. How ready are you for sharing information and to transparency with your partners?
6. What kind of benefit do you pursue to gain from inter-organizational cooperation?
7. How the inter-organizational cooperation will evolve in the near future in your company?
8. Would a digital well-being service, like ViaEsca’s, create a possible additional value in your business?
9. What kind of cooperation you wish from ViaEsca, offering digital well-being service?
10. What are crucial issues to take into account before starting this kind of cooperation?
11. What is the possible timespan for starting this type of cooperation?
Appendix 2: Key concepts

**Value chain** is a model that illustrates systematically all the main activities and their interlinkages throughout the whole chain of company’s processes. Thus, it demonstrates the added value created by the company, by identifying the main sources of competitive advantage. (Porter 1985, 33)

**Value creation** refers to the amount of subjective value perceived by the user and its transformation into the willingness to change it into monetary amount. Sustaining this operation demands the monetary amount to cover the producer’s costs as well as the monetary amount to respond the difference in value to user perceives to his/her current alternative. (Lepak, Smith, and Taylor 2007)

**Business opportunities** exist in different forms, but novelty is the central issue. Schumpeter (1934) identifies these opportunities as new products or services, markets, materials, organizing habits, or methods of processing. In the digital environment, Amit & Zott (2001) affirm the opportunities to also emerge from “new combinations of information, physical products and services, innovative configurations of transactions, and the reconfiguration and integration of resources, capabilities, roles and relationships among suppliers, partners and customers”.

The concept of **inter-organizational network** can be defined as having three or more organizations engaging in collaborative processes, with shared norms and structures, toward common purpose (Popp, Milward, MacKean, Casebeer & Lindstrom 2014).

The concepts of **partnership** and alliance are often confused and even used interchangeable in the literature. Nevertheless, in this thesis, partnership is defined by Brinkerhoff (2002) as “dynamic relationship among diverse actors, based on mutually agreed objectives, pursued through a shared understanding of the most rational division of labour based on the respective comparative advantages of each partner. Partnership encompasses mutual influence, with a careful balance between
synergy and respective autonomy, which incorporates mutual respect, equal participation in decision making, mutual accountability and transparency.”

In the literature the digital services are often referred as e-services. Benaroch and Appari (2011, 534) define these as “the use of information technologies (IT) via the Internet to enable, improve, enhance, transform or invent a business process or system to complete tasks, solve problems, conduct transactions or create value for current or potential customers”.

Different definitions and views are suggested for startup from e.g. size, novelty and age, technology usage, culture, mentality, growth pace, and orientation (e.g. Forbes 2013; Hämäläinen 2017; Prime Minister’s Office 2016). In this thesis it is defined as recently established, relatively small and independent company that is designed to grow and scale fast, possesses startup mentality, and is still owned by the founders.

Well-being can be defined in general as the state of individual’s social, mental and physical wellness (Global Wellness Institute 2016a). Seeking well-being is characterized with being preventive, holistic, integrated to life, having individual responsibility and pursuing to maintain and improve health (Global Wellness Institute 2015, 11).