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Value creation in corporate e-learning platforms

International Management and Entrepreneurship
Master's thesis

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As the corporate world goes more and more digital, all functions of companies need to follow the trend. Learning and staff training is no exception. Companies are transforming the learning of employees to a digital format by using different kinds of e-learning platforms. These platforms can bring a lot of value to organizations if they are used correctly and for a clear purpose. By using e-learning platforms properly, companies can make the learning of employees more efficient and save significant amount of time and money due to savings e.g., in travelling costs.

Interest towards e-learning itself has been growing amongst scholars. However, the existing literature mostly focuses on e-learning in a traditional student-teacher setting. Not many studies focus on e-learning in the context of staff training and people development in a corporate context. As companies around the world are already using e-learning platforms to develop the knowledge and knowhow of their employees, there is a research gap in corporate e-learning and how value is created in it. This study aims to fill the research gap of value creation in corporate e-learning platforms and the purpose of the study is to explore the various ways in which value is created in these corporate e-learning platforms. This research was done in collaboration with Turku School of Economics' Centre for Collaborative Research unit to help them understand the key factors in successful corporate e-learning platforms.

The empirical research of this study was conducted as expert interviews. The interviewees are HR professionals who have experience in the management and administration of e-learning platforms from the customer side. This gave the study a point of view of the customer organization. The interviews were conducted as theme interviews based on the theoretical framework of the study.

The findings of the study were that there are three key factors that bring value to customer organizations in corporate e-learning platforms: training data, easy usability, and efficiency. Combining these value propositions from the service provider side with three value drivers from the customer side, commitment, planning, and communication, value can be created in collaboration between the service provider and the customer organization.

Key words: E-learning, Value creation, E-learning platform, LMS

Pro gradu -tutkielma

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Yritysmaailman muuttuessa yhä enemmän digitaaliseksi, yritysten kaikkien toimintojen pitää pysyä muutoksessa mukana. Henkilöstön kehittäminen ei ole poikkeus. Yritykset käyttävät digitaalisia työkaluja, kuten e-oppimisalustoja, oppimisen tukena ja tehostuskeinona. Nämä alustat luovat arvoa yrityksille, jos niitä käytetään oikein selkeään tarkoitukseen. Käyttämällä e-oppimisalustoja asianmukaisesti, yritykset voivat tehostaa työntekijöidensä oppimista ja säästää huomattavasti aikaa ja rahaa esimerkiksi matkustuskustannuksista.

Tutkijoiden kiinnostus e-oppimista kohtaan on ollut kasvavaa. Aikaisempi kirjallisuus on kuitenkin pääasiassa keskittynyt e-oppimiseen perinteisessä opettaja-oppilas asetelmassa. Yrityskontekstissa tapahtuvaan henkilöstön kouluttamiseen ja henkilökohtaiseen kehittymiseen ei ole kiinnitetty paljoa huomiota. Kun yritykset ympäri maailmaa käyttävät e-oppimisalustoja kehittääkseen työntekijöidensä tietoja ja taitoja, on olemassa tutkimusaukko e-oppimisesta yrityskontekstissa ja siitä, mistä arvo e-oppimisalustoilla yrityskontekstissa muodostuu. Tämä tutkimus täyttää tuota tutkimusaukkoa. Tämän tutkimuksen tarkoituksena on tutkia tapoja, joilla arvoa luodaan e-oppimisalustoilla yrityskontekstissa. Tämä pro gradu -tutkielma on tehty yhteistyössä Turun kauppakorkeakoulun Centre for Collaborative Research -yksikön kanssa tuomaan lisää ymmärrystä niistä avainasioista, jotka ovat keskeisiä onnistuneen e-oppimisalustan kehittämisessä.

Tämän tutkimuksen empiirinen osio toteutettiin asiantuntijahaastatteluina. Haastateltavat ovat henkilöstöalan ammattilaisia, joilla on kokemusta e-oppimisalustan hallinnoinnista asiakasorganisaation puolella. Tämä mahdollisti asiakasorganisaation näkökulman saamisen tutkimukseen. Haastattelut toteutettiin teemahaastatteluina pohjautuen tutkimuksen teoreettiseen viitekehykseen.

Tutkimuksen tulokset osoittavat, että on kolme selkeää avaintekijää, jotka tuovat arvoa asiakkaalle e-oppimisalustalla yrityskontekstissa: koulutusdata, helppokäyttöisyys ja tehokkuus. Kun nämä palveluntarjoajan puolelta tulevat arvolupaukset yhdistetään kolmeen asiakasorganisaation puolelta tulevaan arvoa luovaan tekijään, sitoutuneisuuteen, suunnitelmallisuuteen ja kommunikaatioon, arvoa voidaan luoda yhteistyössä palvelun tarjoajan ja asiakasorganisaation välillä.

Avainsanat: e-oppiminen, arvon luonti, e-oppimisalusta, LMS

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1 Introduction

1.1 Emergence of e-learning platforms in corporate context

The transformation to digital business models has been rapid in the past decade. Companies have changed their strategies to fit the requirements of the globalized and digitalized markets (Zaki, 2019, 430). Especially, the rise of the platform business models has been significant. Platforms have become increasingly common in business-to-consumer (B2C) industry, but they are only starting to announce themselves in the business-to-business (B2B) industry (Hein et al., 2019, 504). Platforms can be used in several ways in B2B industry, but one of the applications is so called e-learning platform. In B2B context, e-learning platforms are used to train employees in their working skills. Companies invest significantly in personnel training and education. According to the Training Industry Report of 2021 (2021, 21), an average US based company with at least 100 employees spent 1071 USD per employee to personnel training in 2021. The trainings happen often through traditional courses and group work, that are expected to bring knowledge to the employees and thereby bring development to the companies' efficiency, sustainable development, or any other aspects of business. However, the knowledge itself does not necessarily create value in practice if the skills are missing. Athletes and musicians do not improve without practice, so why would business managers become better at their jobs just by gathering information? Corporate e-learning platforms may offer a solution for this knowledge-skill gap. They allow employees to practice various situations and see the effects of their actions in advance. As the corporate training platforms develop, it is vital to recognize how the value is created in this concept. As the literature shows, value is created in cooperation between the service provider and the customer, so the emphasis in value creation is in the relationship between the actors (See Lusch & Nambisan, 2015). Especially during the COVID-19 pandemic, digital ways of doing business have become more and more common and companies have adopted virtual platforms as a significant part of their practices. Platform business models have started to emerge in the B2B setting, but the research of digital platforms has focused mainly on B2C setting (Hein et al., 2019, 504). The research on the value creation of B2B platforms, let alone e-learning platforms in the B2B setting, has gotten less attention. The conditions where the value of a B2B platform is created is significantly more complex compared to the B2C setting. The ecosystems involve various actors that need to be encouraged. On

top of that, it is more challenging to satisfy the customers as they have their strict requirements as legal entities. (Hein, et al., 2019, 516) The dimensions of time and space that previously determined B2B relationships have changed due to digitalization, which has influenced the value creation in the whole B2B industry. In the shift from separate contexts to dynamic and more complex ones, digitalization changes the process of value creation (Corsaro & Anzivino, 2021, 343). Because of e.g., the fact that resources can be exchanged regardless of time and space, previous studies have agreed that value creation is dependent on the context, not only on the actors (Corsaro & Anzivino, 2021, 320). The purpose of this study is to explore various ways in which value is created in B2B e-learning platform context.

To make the thesis easier to follow, it is practical to define the main concepts of the study. The most important of the concepts are value creation and e-learning. In brief, as a company generates something to customers that holds value by exercising its efforts and resources, it can be referred to as value creation (Hoo et al., 2021). However, the literature shows that in the digital world of today, value is often created together with the customer. This view is based on the service-dominant logic that is reviewed later in this thesis (see Lusch & Nambisan, 2015). In this thesis, platform is referred to as a digital platform. It is a digital software-based network infrastructure. Corporate e-learning platform refers to a platform whose purpose is to train employees of companies in certain aspects of their work.

The thesis is made in cooperation with Turku School of Economics' Centre for Collaborative Research. The project that the thesis is related to is an innovative collaborative and decentralized learning platform by which meta-skills of working life can be measured and developed. The interviewees of this study are professionals who have experience in the administration of corporate e-learning platforms from the side of the customer organization. Therefore, the research itself is done from the perspective of the beneficiary. In a corporate e-learning context, the beneficiary can be the user of the platform who is aiming for personal development or the company that acquires the platform to develop their operations. The research gap is more significant in the case of value creation for customer companies, so this thesis aims to explore ways in which value is created for companies that use e-learning platforms. Even though this study is done from the perspective of customer companies, the practical implications of the study can

also benefit e-learning service providers as knowing the value creators of corporate e-learning platforms helps to develop a better product.

The author of this theses has worked in the B2B platform industry for two and a half years. The work experience has aroused interest in the topic and the practical experience helps to understand the matter better.

1.2 Research objectives and structure of the study

The research gap this thesis aims to fill closely relates to the value creation in B2B platforms. The previous literature does not completely capture the factors that create value in the B2B digital context (see Netsanet & Altmann, 2016;). Platforms in B2B context differ from B2C platforms in many ways. As the supply chains of B2B platforms are much more complex and have more actors in the B2B setting, the principles of value creation in B2C context do not fully apply. Another difference is that much of the value of B2C platforms come from the data acquired about the behaviour of the users and selling that data to advertisers. In B2B platforms this might not be the case. (Anderson et al., 2022, 4502.) Thus, the nature of value in this context remains vague and is mainly described at an abstract level (see Anderson et al., 2022). Studies regarding value creation in e-learning platforms exist, but the actual research gap this thesis aims to fill is value creation in corporate e-learning platforms. Previous studies focus on e-learning platforms in a traditional teacher-student setting.

> *The purpose of the study is to explore the various ways in which value is created in a corporate e-learning platform context.*

Turning the purpose of the study into research questions through the theoretical frameworks, the research questions are as follows:

1. *How are e-learning platforms used in corporate context?*
2. *How do the customer organizations define value in corporate e-learning platforms?*
3. *How is the customer organization involved in value creation in corporate e-learning platforms?*

The sub-questions emerge from both theory and practice. As this study aims to explore the ways in which value is created in corporate e-learning platforms, it is important to know how these platforms are used in the corporate context. The definition of value in corporate context relates heavily to the ways value is created. This sub-question comes emerges from the theoretical framework of the study, as the concept of *value-in-use* argues that value can be added only when a service is used (see Vargo & Lusch, 2004). Lastly, the third sub-question relates to the service-dominant logic (S-D logic) of Vargo and Lusch (2004; 2008; 2016). It emphasizes the role of the customer in the value creation process.

The study consists of a theoretical framework and an interview study. The theoretical framework focuses on the main concepts of the study. Theories about value creation are identified and previous literature about e-learning in corporate context is reviewed. There can be many beneficiaries in e-learning platforms. E.g., the users of a platform can be beneficiaries from a personal development point of view. As the study relates to the e-learning platform project of the Centre for collaborative research and the interviewees are employees of organizations that use e-learning platforms, the study is conducted from the point of view of customer organizations. There lies a significant research gap in this context, which justifies the decision as well.

This study will follow the following structure. Theoretical framework will discuss relevant theories and review existing literature of the topic. The theoretical framework consists of two main concepts: e-learning and value creation. Both concepts will be divided into two sub-concepts and at the end the theoretical framework is synthesized with a theoretical model regarding value creation in e-learning platforms. Following the theoretical framework, the methodology of the study will be discussed. The methodology section will discuss the research approach, data collection, data analysis and trustworthiness of the study, as well as some ethical considerations. Finally, the findings of the empirical research are presented before the study is concluded by discussing the academic contribution and managerial implications.

2 Theoretical framework

In this chapter the main theories of the concepts of the study are identified. The existing literature of these concepts are reviewed and tied into the topic of the study. The theoretical framework discusses the main concepts of the study by dividing them into sub-concepts. The main concepts are *e-learning* and *value creation.* E-learning is divided into *e-learning platforms and environments* and *e-learning in corporate context*. Value creation is divided into *service-dominant logic and value co-creation*. In addition to these concepts, the evolution of marketing theories and the concept of *service innovation* are discussed. Lastly, a model of *value co-creation in e-learning platforms* serves as a synthesis of the theoretical framework.

2.1 Evolution of marketing theories

In order to justify the choices of theoretical framework for this thesis, the evolution of marketing theories is reviewed briefly. This will show how the framework for value creation has been selected.

The first focus in the study of the field of marketing, which had an economics-based foundation, was on the trade and distribution of manufactured goods. The first marketing researchers focused on the trade of commodities, marketing institutions that made things available and organized for possession, and the tasks required to make the exchange of commodities through marketing institutions possible. (see Marshall, 1927; Copeland, 1923; Nystrom, 1915) The *functional school* began to evolve into the marketing management school in the early 1950s. This school was distinguished by a decision-making approach to managing the marketing functions and an overall focus on the customer (see Levitt, 1960). By focusing on a market and then choosing the best choices for the marketing mix also known as “4 Ps” (product, price, place & promotion), Kotler (1967) defined marketing as a decision-making activity aimed at profitable customer satisfaction. The 4 Ps model dominated the marketing field until the emergence of new frames of references that were independent from the 4 Ps model. The development of services marketing as a subdiscipline in response to challenges from scholars to "break free" from product marketing and acknowledge the limitations of the predominate logic for handling the subject matter of services marketing is perhaps most remarkable (see Shostack, 1977). At the turn of the 21st century, the focus on marketing research shifted towards networks. It started to become imminent that there would soon be a paradigm shift in marketing (see Achlor & Kotler, 1999). (Vargo & Lusch, 2004)

The final shift from focusing on goods to focusing on services was sped up by a framework by Vargo and Lusch (2004). They proposed that the time of good-dominant logic (G-D logic) in marketing had come to its end and the dominant logic of marketing should be service-dominant logic (S-D logic). The S-D logic presents that value is co-created by multiple actors always including the beneficiary (Vargo & Lusch, 2016, 8). The next sub-chapter focuses on S-D logic, as it is the main theoretical framework of this study regarding value creation.

2.2 Service-dominant logic

As mentioned, the shifts in marketing theories resulted in a new dominant logic in the late 1990s. The final shift came in a form of a framework of Stephen Vargo and Robert Lusch in 2004. The basis of their framework is the assumption that companies offer services instead of goods. Therefore, the new dominant logic is called service-dominant logic (S-D logic).

Major concepts of the S-D logic are operand resources and operant resources. Resources used in an operation or act to achieve an effect are known as operand resources. Operant resources on the other hand, are used to act on operand resources (Constantin & Lusch, 1994, according to Vargo & Lusch, 2004, 2). A goods-centered dominating logic regarded the operand resources as being the most important. A corporation (or nation) had factors of production, which were primarily operand resources, and a technology (operant resource), which had value to the extent that it could efficiently transform its operand resources into outputs. Operant resources are usually intangible and unseen; typically, they are organizational procedures or core competencies. As opposed to operand resources, which are often static and finite, they are likely to be dynamic and infinite. Because they have an effect, operant resources allow people to increase the value of natural resources and produce new operant resources.

The microprocessor is a well-known example of an operant resource: human ingenuity and talents took one of the most abundant natural resources on Earth (silica) and put knowledge in it. Because they are the sources of effects, operant resources are seen as primary by the prevalent logic that is service-centered. This change in the relative importance of resources has an impact on how exchange procedures, markets, and customers are thought of and managed. (Vargo & Lusch, 2004, 2-3)

The logic of the goods-centered and service-centered views can be distinguished through operand resources and operant resources. This is presented in Table 1.

Table 1 Differences of goods-dominant logic and service-dominant logic. (Adapted from Vargo & Lusch, 2004, 7)

	Goods-Centered Dominant Logic	Service-Centered Dominant Logic
Primary unit of exchange	People exchange for goods. These goods serve primarily as operand resources.	People exchange to acquire the benefits of specialized competences (knowledge and skills), or services. Knowledge and skills are operant resources.
Role of goods	Goods are operand resources and end products. Marketers take matter and change its form, place, time, and possession.	Goods are transmitters of operant resources (embedded knowledge); they are intermediate “products” that are used by other operant resources (customers) as appliances in value creation processes.
Role of customer	The customer is the recipient of goods. Marketers do things to customers; they segment them, penetrate them, distribute to them, and promote to them. The customer is an operand resource.	The customer is a coproducer of service. Marketing is a process of doing things in interaction with the customer. The customer is primarily an operant resource, only functioning occasionally as an operand resource.
Determination and meaning of value	Value is determined by the producer. It is embedded in the operand resource (goods) and is defined in terms of “exchange-value”.	Value is perceived and determined by the consumer on the basis of “value in use”. Value results from the beneficial application of operant resources sometimes transmitted through operand resources. Firms can only make value propositions.
Firm-customer interaction	The customer is an operand resource. Customers are acted on to create transactions with resources.	The customer is primarily an operant resource. Customers are active participants in relational exchanges and coproduction.
Source of economic growth	Wealth is obtained from surplus tangible resources and goods. Wealth consists of owning, controlling, and producing operand resources.	Wealth is obtained through the application and exchange of specialized knowledge and skills. It represents the right to the future use of operant resources.

Vargo and Lusch (2004) present eight foundational premises (FP) to describe the S-D logic. Later on, the scholars published another article regarding the S-D logic and updated the framework adding three FPs (see Vargo & Lusch, 2008). As marketing evolved, yet another update on the framework was needed in 2016 (see Vargo & Lusch, 2016). This thesis uses the latest version as a framework for the study. The FPs are relevant for the framework of this thesis, as a model of value co-creation in e-learning platforms by Thangaiah et al. (2021), that is a significant framework for this study, uses the FPs of S-D logic. The development of the FPs are presented in Table 2.

Table 2 Foundational premises development. (Adapted from Vargo & Lusch, 2016, 8)

Foundational Premise	**2004**	**2008**	**2016**
FP 1	The application of specialized skills and knowledge is the fundamental unit of exchange.	Service is the fundamental basis of exchange	No Change
FP 2	Indirect exchange masks the fundamental unit of exchange	Indirect exchange masks the fundamental basis of exchange.	No Change
FP 3	Goods are distribution mechanisms for service provision	No Change	No Change
FP 4	Knowledge is the fundamental source of competitive advantage.	Operant resources are the fundamental source of competitive advantage.	Operant resources are the fundamental source of strategic benefit.
FP 5	All economies are service economies.	No Change	No Change
FP 6	The customer is always the co-producer.	The customer is always a co-creator of value.	Value is co-created by multiple actors, always including the beneficiary.
FP 7	The enterprise can only make value propositions.	The enterprise cannot deliver value, but only offer value propositions	Actors cannot deliver value but can participate in the creation and offering of value propositions.
FP 8	Service-centred view is customer oriented and relational	A service-centred view is inherently customer oriented and relational.	A service-centred view is inherently beneficiary oriented and relational.
FP 9		All social and economic actors are resource integrators	No change
FP 10		Value is always uniquely and phenomenologically determined by the beneficiary.	No change
FP 11			New Value co-creation is coordinated through actor-generated institutions and institutional arrangements.

Especially FP 6 is relevant for this study, as the basis of the research is the assumption that value is created in collaboration between actors in a service ecosystem. This is also a basis for the model of service innovation introduced by Lusch and Nambisan (2015)

that will be reviewed next. The service innovation model is meaningful for this study as it relates to development of a service. This study relates to an e-learning platform development project.

2.2.1 Service innovation

As this thesis relates CCRs project of developing a collaborative e-learning platform that measures and develops meta skills of work life, the concept of innovation needs to be discussed. Lusch and Nambisan (2015) suggested a service innovation framework based on service-dominant that fits the context of this study well.

Lusch and Nambisan (2015) created a framework to explain service innovation. The service-innovation view of Lusch and Nambisan exceeds the traditional thinking of dividing between tangible and intangible, and producer and customer. It focuses on four main aspects in service innovation. Firstly, innovation happens in a collaborative manner in an actor-to-actor (A2A) setting. Furthermore, service is seen as special competences that are applied for the benefit of actors. Thirdly, resource density and resource liquefaction play a significant role in service innovation. Lastly, integrating resources is fundamental for innovation. There are also three main dimensions in the framework of Lusch and Nambisan: service ecosystems, service platforms and value co-creation. This framework suits the e-learning platform context well, as all three dimensions relate to issues in e-learning platforms.

A community of interacting actors within a network can be considered a service ecosystem in a correct context (Hein et al., 2019, 504). The actors of the network develop their roles and skills together aiming for effectiveness (Adner, 2006, 100). Vargo and Lusch (2011, 185) describe service ecosystem as a self-adjusting separate system that involves regularly loosely connected social and economic actors. It links different actors through services to enhance joint value creation. There are problems related to the service ecosystem that need to be taken into account. Lusch and Nambisan (2015) name three issues. Firstly, the service ecosystem needs to be structurally flexible, and it needs to provide structural integrity. The flexibility in the service ecosystem is needed in order for the interaction to be effortless between the actors. The relationships inside the service ecosystem need to be strong as well. Secondly, the actors of the ecosystem need to share a similar worldview for the collaboration to go smoothly. Thirdly, an architecture of

participation is needed. It builds the conditions for interaction and collaboration, and in that way for value creation as well.

A service platform enhances resource density and liquifies resources to ensure effective exchange of services in an ecosystem (Hein et al., 2019, 505). It is a modular structure that syndicates tangible and intangible resources and organizes the interactions of them and the actors. One of the main benefits of a service platform is resource density. It refers to the speed in which resources can be exchanged from an actor to another. A layered modular architecture of a service platform allows scalability for the exchange of services and resources, which in turn creates possibilities for service innovations and co-creation of value. (Lusch & Nambisan, 2015, 166) The resource liquefaction on the other hand means that information is detached from physical representation, and it can be shared on a general level (Tilson et al., 2010, 750). The modular structure of a service platform creates a need for governance. The rules define the ways in which the network is being governed. (Lusch & Nambisan, 2015, 167-168.)

Significant studies exist of customer engagement in innovation and value co-creation (see Christensen, 1997). Digitalization and the rise of the internet have changed customer value co-creation and brought depth and scope to it (Sawhney et al., 2005). The co-creation of value is based on the idea that actors create the value together in a service ecosystem on a service platform. Beneficiaries (customers) acquire services to be a part of a larger solution or to supplement their resources. This way the customer becomes involved in the process of value creation. The actors can in many ways proactively support value creation by changing internal mechanisms and processes. The beneficiaries can adopt different roles in value creation. (Lusch & Nambisan, 2015, 168) The research of strategic management has recognized five roles for customers in value creation: coproducer, user, resource, buyer and product (Kaulio, 1998). These roles are however based on the G-D logic. The S-D logic on the other hand identifies two main roles for actors. They are the service offerer and beneficiary. The beneficiary can have three roles: ideator, designer and intermediary. An ideator brings knowledge and ideas of what is needed in their specific context. This enhances service innovation. In this role, it is important that the exchange of knowledge and resources between actors in the ecosystem is flowing. A designer mixes and matches components of knowledge to develop new services. It is important that the actors present their offerings in a way that it is possible for other actors to make interpretations of the knowledge. An intermediary is able to share

knowledge across multiple ecosystems. The actors in this role can make nonobvious connections that create value and service innovations. (Lusch & Nambisan, 2015, 168.)

As the service innovation model suggests, value creation happens in cooperation between actors. In the next subchapter, the concept of value co-creation is presented. S-D logic is the theory that this discussion relies on as well.

2.2.2 Value co-creation

Scholars have found two perspectives of value in the context of marketing: value-in-exchange and value-in-use. The first one relates heavily to an older understanding of business, where the sold good was on the core of the business. Value in use, on the other hand, relates to the S-D logic. It suggests that value is created only when the service is used. Thus, the customer, i.e., the beneficiary, is involved in the value creation. (Grönroos & Voima, 2012, 137) Value co-creation is a perspective of value creation. It emphasizes the interaction between the service provider and the beneficiary. According to Grönroos & Voima (2012, 137), value creation is a process that involves the actions of the service provider, the customer and possible other actors. Thus, value is created in cooperation between the actors. Value co-creation started to gain ground in the value creation discussion as the shift to service society became evident in western countries in the late 1990s (Kandiah & Gossain, 1998). As mentioned, this resulted in a shift of thinking in marketing as the S-D logic started to replace the traditional GD-logic (Vargo & Lusch, 2004). Therefore, the value creation process and the thinking behind the concept changed significantly. Value-in-exchange concept was replaced by the concept of value-in-use (Eggert et al., 2018, 81).

As mentioned, Vargo & Lusch (2004) argue that value is created in cooperation between the service provider and the beneficiary. This joint attempt to create value is called value co-creation. In S-D logic, the value is not created only by the company, but it is built together with the customer as they use the service and interact with various actors. In other words, the creation of value happens in the customer sphere during consumption, and it is a response to the proposition value of the service provider. Therefore, value relates heavily to the attitudes and feelings the customer develops towards the service (Thangaiah et al., 2021, 154). During recent years, information systems scholars and business practitioners have increased their interest towards value co-creation (Pacauskas, 2016, 7).

For value to be created, it is vital that the customer is actively involved and engaged. The participation incorporates resources, goals, and experience into activities by guiding the process of value co-creation. Therefore, the customer takes more responsibility for co-creating the activities with other participants (Thangaiah et al., 2021, 154). According to Rubia et al. (2019) there are two co-creation behaviors in virtual communities: searching for information through the community and generating and sharing of content with other members of the community. Therefore, the features that allow the customer to create an emotional connection and have closeness while using the service are vital to identify. The service provider can only offer a value proposition, but the value of the offering is determined by the user through usage. (Thangaiah et al., 2021, 154.)

The principles of value co-creation can be applied to e-learning platforms as well. Before combining the concepts of e-learning and value creation, the concept of e-learning is presented in the next subchapter. Different e-learning platforms and environments are presented and e-learning in corporate context is discussed by relying to existing literature about the topic.

2.3 E-learning

Digitalization and technology have spread to almost every aspect and every activity of societies. Thus, the learning and training industries have also been taken over by them (Holmes & Gardner, 2006, 12). E-learning can be defined as a web-based technology that enables learning (Ghavifekr, 2017, 76). The learning material can be delivered through various technologies such as the internet, audio, and video (Thangaiah et al., 2021, 154). E-learning can also be done in many shapes and platforms. E.g., virtual learning environments, massive open online courses, and simulations are forms of e-learning (Ahmed et al., 2018, 148). Aparicio et al. (2016, 292) define e-learning as the unity of learning and technology. Learning is seen as the cognitive process of acquiring knowledge. Technology on the other hand enables learning like any other tool such as a notebook or a pencil. Technologically speaking, a pencil is much more transparent than an e-learning system, making it a less complex and easier to understand. Making the e-learning systems more transparent and easier to understand is something that researchers have recommended to focus on when developing e-learning. This chapter focuses on the evolution of e-learning and the usage of e-learning in corporate context.

2.3.1 E-learning in corporate context

The phrase "e-learning" is typically only used in relation to educational institutions. Very few individuals initially think of businesses when they hear the term "e-learning." However, during the past few years, corporate e-learning has become increasingly important in enterprises all over the world. The global knowledge economy, the quick development of information and communication technologies, the increase in internationalization and globalization, as well as changes in occupational structures, mean that companies must develop innovative approaches to ensure that their workforce is qualified to address these challenges (Tynjälä, 2008, 135). On top of attracting and retaining talent, companies need to be able to help their employees to perform at the highest possible level (Serrat, 2010, 85). As knowledge is the most vital resource for organizations, they need their employees to learn continually and be adaptable. Organizations need to ensure that employees have the possibility to reach their full potential. E-learning is a tool that people and organizations can use to keep up with the development in the global knowledge economy. By enhancing one's knowledge and skill set, e-learning can increase one's employability and the effectiveness of a company. It can also enhance just-in-time training and provide employees more control over their learning. (Ivala, 2014, 86.)

E-learning can be used in a variety of workplace training contexts, such as professional development training, onboarding of newly hired employees, training on new services or products, or simply updating and improving professional knowledge, skills, and competences (Hussin, 2019, 6). Ultimately everything comes down to knowledge. We live in a world that is undergoing fast change as a result of ongoing technological advancements. The life cycle of the already-available products on the market is shortened by the rapid emergence of new products and services. Thus, extreme competition emerges. As a result, it is imperative to keep the workforce educated about the economy's rapid changes. More and more businesses are realizing that they need to keep up with emerging developments and trends in order to remain competitive. Having an educated workforce is the only way to stay ahead of the competition. This requires the staff of these companies to learn new information and acquire it quicker than ever before. The success of a corporation depends heavily on training and information. (Hill & Wouters, 2008, 210.)

When utilized properly, e-learning offers several advantages over traditional classroom-based training, which is often used for seminars and workshops. E-learning courses may be taken at anytime, anywhere. Corporate e-learning courses give flexibility to employees of an organization. E-learning courses are adaptable and customizable (Weggen & Urdan, 2000, 4). A single session can be split up into many segments. An organization may avoid productivity loss that would have occurred with a "conventional" kind of corporate training by extending one training lesson across a few days or even weeks. Lessons that are shorter mean that the employees do not have to stop working for as long, saving crucial office time. Employees may also decide to take the offered e-learning course from their place of employment. Once more, this aids in preventing productivity loss. Additionally, corporate e-learning courses are accessible around-the-clock, thus enhancing the workforce's flexibility. Each employee is free to choose the most appropriate time for them to begin an online course. (Nemeth & Ivanochko, 2021, 275.) Additionally, e-learning platforms offer the qualified specialists and all the resources required for a course, solving the issue of finding qualified instructors. However, the personalized courses are one of the most important and beneficial aspects of e-learning (Grzelak et al., 2019, 496).

2.3.2 E-learning platforms and environments

Computer-based systems that are used in the field of human learning can be divided into three categories according to whether the system is meant to replicate, model or augment human behavior. Systems from each categories have a purpose in business and academic context. In corporate context, the most essential systems are those in the third category, that support the acquisition of knowledge about a certain topic and help the user to gain experience and expertise. These kinds of systems are often developed in cooperation with professionals from the education field. (Sklar & Richards, 2010, 111-112.)

E-leaning often happens through online courses or training. A popular form of an e-learning platform is training management system that delivers and organizes online courses. (Bondarouk & Ruël, 2010, 150). In the literature, the terms e-learning platform (see Dagger et al., 2007) and learning management system (see e.g., Matei & Vrabie 2013) are often used for the same purpose as training management systems.

Learning management systems are software that allow the user to manage learning material and resources (Ain et al., 2016, 1306). They offer standardized content for

learning. The learning can be done e.g., through modules, tests, and conversations (Bondaruk & Ruël, 2010, 150). In more comprehensive systems, knowledge and skill analysis, human resource planning, virtual live lectures and resource allocation are also possible (Ain et al., 2016, 1307). Awang & Darus (2012, 416) add that learning management systems are online platforms that allow users to engage in social learning events and cooperation online. Learning management systems are web-based, which makes it possible to use them wherever whenever. Some of the first-generation e-learning platforms were not web-based, but during time, almost all solutions are located on the internet (Dagger et al., 2007, 29).

E-learning platforms and e-learning itself can be categorized to synchronous and asynchronous (Bondarouk & Rüel, 2010,150). E-learning is synchronous when all the participants and instructors attend in the learning activity simultaneously, even though often in distinct locations. Therefore, the learning activity can be referred to as a learning event with a two-way interaction and all the participants are virtually present. (Zhang & Nunamaker, 2003, 210). Synchronous e-learning can be done in several ways, e.g., through an interactive virtual conference or through virtual group work or chat rooms (Githens, 2006, 22). The benefit of synchronous e-learning is that the learners get a stronger sense of engagement compared to asynchronous e-learning. It is possible to ask questions and the answers are received in real time (Zhang & Nunamaker, 2003, 210). Furthermore, the management of expectations is easier in synchronous e-learning (Moon et al., 2005, 379). On the other hand, synchronous e-learning platforms are less flexible time wise (Zhang & Nunamaker, 2003,210).

Asynchronous e-learning does not happen in real time, and it is not a joint simultaneous learning event. The possibility for learning exists all the time and the role of e-learning is to deliver learning material in a need-based manner (Zhang & Nunamaker, 2003, 210). Asynchronous learning applications are e.g., simulations, videos, graphic presentations, and audio components (Bondarouk & Rüel, 2010, 150). Although the asynchronous e-learning platforms do not traditionally enhance interaction, applications such as comment sections and chat rooms can be added in order to increase it. Furthermore, these features can nowadays be seen as a fundamental part of e-learning (Haythornthwaite & Andrews, 2011, 210).

Nowadays, e-learning platforms often combine features from synchronous and asynchronous platforms. Semi-synchroneity means that a certain group of learners get learning material consisting of e.g., video lectures, reading material, tests and discussion simultaneously. The learners are performing the learning at the same time, but do not have to attend events simultaneously. This way the learners can motivate each other and discuss about the topic they are studying. (see Meister, 2013.)

2.4 Value co-creation in e-learning platforms

E-learning platforms are service platforms; therefore, the involvement of users and their information and ideas can be very useful in the development stage of the platforms (Thangaiah et al., 2021, 155). Furthermore, the concepts of S-D logic and value co-creation fit the phenomenon. From the perspective of S-D logic, the users of the platform act as ideators. They offer knowledge and information on what are the factors that need to be taken into consideration when developing an e-learning platform. The service provider makes the value proposition and gathers users who then share their knowledge. This process enhances the chances of developing a better product (Thangaiah et al., 2021, 155).

2.4.1 S-D logic based conceptual model of e-learning

Thangaiah et al. (2021) propose a conceptual model of e-learning based on S-D logic and value co-creation. The model involves value propositions (enrichment, interaction, personalization, and environment) and value drivers (engagement, resources, experience, and goals) (see Figure 1).

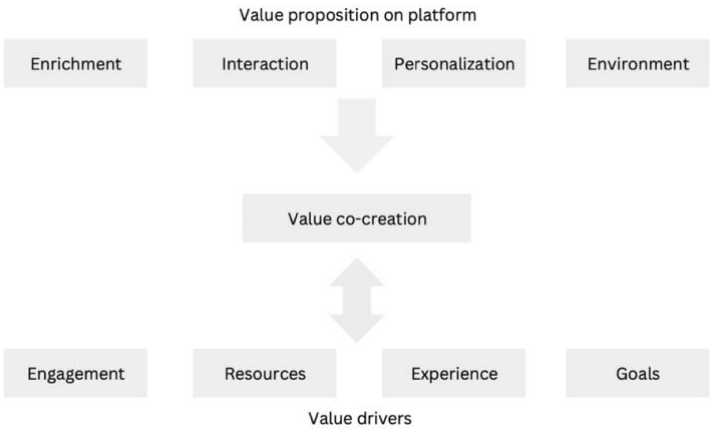

Figure 1 E-learning Conceptual Model based on service-dominant logic and value co-creation. (Adapted from Thangaiah et al., 2021)

It must be taken into account that this conceptual model applies to the context of a traditional teacher-student setting. Nevertheless, the model can be used to some extent in the corporate context as well as it describes the fundamentals of value co-creation in e-learning platforms.

A value proposition is a promise made by a company, that allows the customer to have an opportunity for value creating benefits (Buttle & Stan, 2015, 159). In the case of e-learning platforms, the service provider gathers the users who share their knowledge related to the platform. The value proposition has no value in it itself, but it facilitates the process of value co-creation. The customers create the value with their other resources. Virtual platforms can benefit from technology, as they can use accessible web-based technology in the value co-creation process. The users can simultaneously use the platform and co-create value in it. (Thangaiah et al., 2021, 155.) Thangaiah et al. (2021, 155) propose four value propositions and four value drivers for e-learning platforms (See figure 1). The value propositions are enrichment, interaction, personalization, and environment. The value drivers are engagement, resources, experience, and goals.

The features and information generated to make knowledge more suitable for learning is referred to as enrichment in e-learning platforms. Presentation of content allows the user to have easy management while using the e-learning platform. (Thangaiah et al., 2021, 155). The information delivered to users involves issues of content management, how the information is delivered, and enrichment of learning through more content for users aiming to reach goals (Tuunanen & Govindji, 2016, 140). Learning management is a vital concept in the enrichment value proposition. It helps in delivering information and in creating content that is useful for all users (Mcdaniel et al, 2017, 195). Enrichment can be put into practice through various channels. E.g., through updates, notifications spaces or file systems within the platform. From the perspective of S-D logic, enrichment in e-learning platform falls under the foundational premise 1 as it is a service involving skill and knowledge and enrichment of features. These aspects are also known as operant resources. (Thangaiah et al., 2021,156.)

The second value proposition of Thangaiah et al. (2021) conceptual model is interaction. Active communication between actors is essential for creating shared values for the users and the service provider. In an online platform, such as e-learning platform, the technology enables communication between the actors (Bidar et al., 2022, 908).

Communication and interaction results in interactive learning, which in turn helps to develop better learning material. This way value is co-created (Thangaiah et al., 2021, 156). The interaction between the users enables value co-creation. It makes the users feel that they are part of the community, and it encourages them to use the platform for a longer period. The service provider should search for structure that gives as many opportunities to interact as possible. (Rubio et al., 2019, 12.)

In practice, the interaction in e-learning platforms can be done through different channels. The technology gives opportunities for interactions e.g., through notifications, comment sections or frequently asked questions section (Daniels et al., 2019, 5). Reviewing interaction from S-D logic perspective, the role of the users is clearly being a co-creator of value. This falls under the foundational premise 6 of S-D logic. The users share information based on knowledge, experience, and exposure (Prahalad & Romaswamy, 2004, 8). Interaction also falls under the foundational premise 11 as the value of co-creation is created by coordination between the actors (Thangaiah et al., 2021, 156).

Personalization refers to the process of making a platform custom fit for each user. The information in the platform is based on personal characteristics as value is unique to each user and based on background and needs. (Thangaiah et al., 2021, 156.) Users of the platform can have the learning process customized to their personal specific needs (Ouf et al., 2016, 797). As interaction, personalization also enhances user engagement (Truong, 2016, 1191). It allows the user to contribute to the process of learning and experience it better. As the users of e-learning platforms have many needs that differ from each other, e-learning platforms must be able to meet various needs. Personalization can be put into practice through technology. It enables personalization, as a platform can be customized for each user. This can be done e.g., by editing the user interface or inputting different data to the platform. Personalization falls under the foundational premise 10 of S-D logic as the phenomena depend on the benefits of the users and values are unique. (Thangaiah et al., 2021, 156.)

Environment in e-learning platform can be seen as a system that allows users to integrate resources independently through value creation. E-learning environment should consist of elements of service quality, technology quality and information quality. (Thangaiah et al., 2021, 156) A well-designed e-learning environment supports users' motivations and enhances value co-creation based on resources, experience, engagement and goals (Rubio

et al., 2019, 13). Conduciveness in the e-learning platform environment enables access to resources, information, and services (Thangaiah et al., 2021, 156). The environment is essential in determining the use of e-learning (Ataburo et al., 2017, 821). The environment in e-learning platforms can be seen as a dissemination mechanism of a service. Thus, it falls under the foundational premise 3 (Thangaiah et al., 2021, 156).

Amit & Zott, (2001, 494) define value drivers in e-business as factors that increase the value of an e-business. Traditionally value drivers are things such as efficiency or complementarity. In other words, value drivers are the sources of value. In their model, Thangaiah et al. (2021) see that value drivers are generated by the users of an e-learning platform by using it. Co-creation or self-creation of value can be involved in service exchange depending on the level of contribution by actors in the exchange (Zainuddin et al., 2016, 589). This can be explained by the concept of value-in-use. It means that users of a service create the value for themselves by using the service. I.e., the value is created through participation (Bendapudi & Leone., 2003, 18). Therefore, the user is heavily involved in value creation (Grönroos, 2011, 288). On an e-learning platform, the users create the value together. The value co-creation happens through value factors. Thangaiah et al. (2021, 157) mention four value factors that derive value: engagement, experience, resources, and goals.

Engagement refers to the commitment of time, energy, and resources towards the platform by the users. In platforms, engagement happens e.g., by doing tasks, posting comments, and giving reviews. I.e., using the features of the platform. Engagement makes the relationship between the users and the service provider stronger. Therefore, it lays ground for future value co-creation with different means. (Thagaiah et al., 2021, 157) Engagement in learning context adds value by developing the learning process. By making the users participate in the process, the quality and results become better (Taylor et al., 2011, 76). The engagement of the users is heavily dependent on their perceived motivations and expectations (Bidar et al., 2017). Creating value with other actors increases the engagement. This leads to using a platform for an extended period. In general, engagement is crucial as it helps to optimize the user experience and get high quality outcomes. (Thangaiah et al., 2021, 157.)

In S-D logic, there is no value until the service is used. Therefore, the experience determines the value (Thangaiah et al., 2021, 157). Users' experiences when using the

service are the basis of cooperation (Chou et al., 2016, 66). In addition, past experiences affect the user experience as the user relates them to the usage of the service (Payne et al., 2008, 87). Positive experiences while using a platform benefit both sides and enhances co-creation of value. Furthermore, experiences encourage users to use the platform more. The experiences of the users are a resource for the service provider. The users can act as ideators and share their experiences in order for the service provider to be able to develop a better service. (Thangaiah et al., 2021, 157). E.g., business simulation platforms give the users experience of situations that they might have to face in the future. I.e., the users learn through experience. This derives value for the users. (Lainema, 2003, 122.)

S-D logic identifies two types of resources in the e-learning context: operand resources and operant resources. Operand resources are tangible such as internet connection, devices, and users. Operant resources on the other hand, are intangible. Knowledge and skills are examples of operant resources. I.e., the users use operant recourses with operand resources in order to create value for themselves. (Thangaiah et al., 2021, 157). Users also share their resources to enhance their learning and gain value. The operant resources that are shared can be e.g., ideas and opinions through comment sections of an e-learning platform (Sood, 2019).

In e-learning platforms, a goal refers to the desire of an individual to obtain knowledge about a certain thing. When a user has a clear goal that he or she attempts to reach, the will to learn and adapt to changes is high. (Thangaiah et al., 2021, 157) Furthermore, once the goal is highlighted, overcoming obstacles becomes easier for the user (Judson & Taylor, 2014, 54). Actively participating in the learning process prepares the user to overcome obstacles in the future, i.e., reaching goals (Thangaiah et al., 157). Nevertheless, users may have various different reasons (goals) for using e-learning and co-creating value in them (Zhou et al., 2019, 217).

The model of Thangaiah et al. (2021) will be modified later on based on the results of the empirical research. The modified model will present value co-creation in e-learning platforms in corporate context rather than, as the original one, in a traditional teacher-student context. The new proposed model will be the theoretical contribution of this study. It will fill the research gap of value creation in corporate e-learning platforms. It will also explain the factors that are important in creating value in corporate e-learning platforms.

2.4.2 A theoretical framework for value co-creation in corporate e-learning platforms

This subchapter concludes and synthesizes the theoretical framework of this study and explains how the empirical research is impacted by the theoretical framework. As mentioned earlier, the theoretical framework consists of two main concepts: e-learning and value creation. As presented in figure 2, the main concepts are divided into two sub-concepts each.

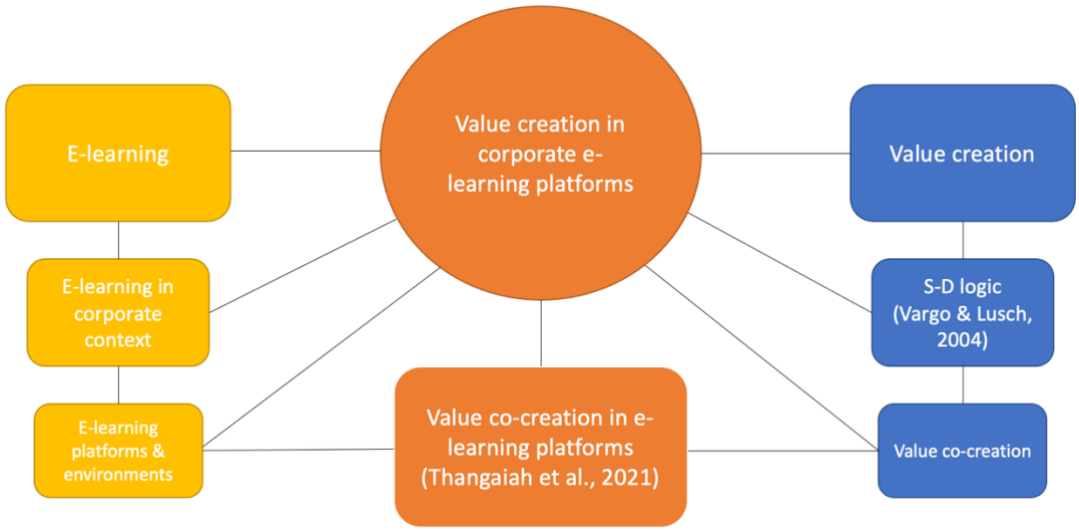

Figure 2 Theoretical framework of the study

Up in the middle in figure 2 you can see the topic of the study. The topic is divided into two main concepts, *e-learning*, and *value creation*. Both of these main concepts are then divided into two sub-concepts. *E-learning* is divided into *e-learning in corporate context* and *e-learning platforms and environments*. Value creation is divided *into service-dominant logic* and *value co-creation*. The service-dominant logic (Vargo & Lusch, 2016) serves as a basis for the theoretical framework and other concepts spring from it. All of these concepts are then combined by *value creation in e-learning platforms* model by Thangaiah et al. (2021). This model serves as a synthesis for the theoretical framework.

The concept of value creation gives the study more theoretical basis than the concept of e-learning. The purpose of e-learning and the sub-concepts of it is to understand the phenomenon in order to later combine it with the concept of value creation. The literature review regarding e-learning gives the theoretical framework a foundation where to build on. An important takeaway regarding e-learning is that e-learning platforms are often

developed by, or at least with, professionals from the field of education according to Sklar and Richards (2010, 111-112.). Therefore, it is important to emphasize the theories of value creation that are based on marketing theories, such as the S-D logic by Vargo and Lusch (2004; 2008; 2016).

Value creation on the other hand is more of a theoretic part of the theoretical framework. The theory regarding value creation that suit this study best is the S-D logic by Vargo and Lusch (2004; 2008; 2016), which is an integral part of this theoretical framework. It defines value creation and presents how value is created in services such as e-learning platforms. It also guides the empirical research of this study as the interview and analysis themes presented in the methodology section emerge from it. Furthermore, a critical element of the theoretical framework, value co-creation, emerges from it. The underlying assumption that value creation happens in cooperation between actors and that the beneficiary is always a part of creating the value, is behind the reasoning of the decisions made regarding interview questions and interview and analysis themes.

Lastly, the model of Thangaiah et al. (2021) serves as a model that ties the two main concepts, e-learning and value creation, together. It also gives direction to the empirical research and backs up the decisions that are made based on the S-D logic. In the conclusions of the study, this model is taken to a corporate context based on the findings of the empirical research.

3 Methodology

This chapter explains the methodology of this thesis including the underlying assumptions behind the study and the methods of data gathering. Firstly, the research approach of this study is explained. This includes the underlying philosophical assumptions of the study that influence the research strategy and the methods of the research. This research has an interpretive approach, and it is conducted as qualitative research. In this chapter, the data collection and data analysis of the study are also explained. This study uses expert interviews as a method of collecting data and the data analysis is done as a qualitative content analysis. Lastly, the trustworthiness of the study and the ethical considerations are analyzed and discussed.

3.1 Research approach

When a study is constructed, the topic determines the research approach, not the other way around. Once the research topic is selected, the researcher should choose a suitable approach for the topic. There are many tools available for a researcher. This is simultaneously a great opportunity and a liability. By choosing an approach that does not fit the topic, a researcher can do harm for his or her study. The approach should be chosen carefully according to the topic. (Eriksson & Kovalainen, 2008, 87) Saunders and Lewis (2012, 104) point out that the research approach reveals things about the researcher's view of the world and his or her underlying assumptions about the topic. According to Adams et al. (2014, 81), research design is the plan behind the research, and it defines the methods that are used in gathering and analyzing information. It can be seen as a strategy for answering the research questions. Furthermore, the practical success of a study depends heavily on the choice of the research method.

Regarding philosophical perspective of research, it can be distinguished into three forms: positivist, interpretive and critical (Carr & Kemmis, 1986). In this study, the underlying philosophical assumption is the interpretive approach. It highlights the social construct of reality and is often used in qualitative research. There is no single truth about reality, but the knowledge about reality is constructed and there are several interpretations about an event and reality. (Merriam, 2009, 9.) As value creation in e-learning platforms is a complex and dependent on personal experience and situation, interpretive approach fits it

well. The value creation process in e-learning in corporate context involves the beneficiary, therefore the sources of value depend on the beneficiary. In other words, there are several interpretations about what creates value.

The paradigm of the study supports the process of deciding the actual research approach. Research methodologies can be divided into two approaches: quantitative and qualitative. There can also be approaches that combine elements of these two (Adams et al. 2014, 26). Quantitative approaches create statistical analyzes and test hypotheses. They provide outcomes that are quantifiable. Quantitative approaches follow a positivist perspective and emphasize the objectivity if the researcher. Qualitative approaches on the other hand approach the research topic from an interpretivist perspective, seeing reality as a socially constructed entity. The aim is to gain an understanding about reality by getting a holistic view of the research problem. (Eriksson & Kovalainen 2008, 193–195.) When a research topic is so complex that quantitative approaches are not enough for studying it, qualitative methods are more suitable.

As the purpose of this study is to gain understanding about a complex phenomenon – value creation in e-learning platforms in corporate context – qualitative approach is a suitable choice. When reality in the research topic is dependent on personal experiences and social constructs and the nature of reality is subjective, qualitative methods work better than quantitative methods (Gray et al., 2007, 43). As this study reviews a complex phenomenon in which the nature of reality is subjective, it is natural to carry it out as qualitative research. Furthermore, the descriptive nature of this study and the emphasis on perspectives of many actors promote the decision of choosing qualitative methods (Ghauri 2004, 109). The research questions of this study are “how” and “why” questions, which also suits qualitative research (Doz 2011, 583).

Although the theoretical framework serves as the foundation for this study, the research questions cannot be fully answered by analyzing the previous literature. In order to add to the existing framework, this study uses interviews as a source of qualitative research data. According to Eriksson & Kovalainen (2008, 79), interviews comprise of discourse structured into a series of questions and responses. Qualitative interviews serve as research tools by supplying relevant empirical data for the research at hand. The main goal is to offer information that will help to answer the research questions through analysis. This thesis is made in cooperation with Turku School of Economics’ Center for

Collaborative Research. Center for Collaborative Research is a unit of Turku School of Economics that is dedicated to joint research projects with other organizations. This thesis relates to an e-learning platform project that helps companies to develop diverse business by enhancing interaction. The interviewees of this study are from pilot companies of the project. Therefore, the emphasis of the study is in the role and experiences of beneficiaries.

3.2 Data collection

The process of gathering information for the purpose of answering research questions by consulting all available, relevant sources is known as data collection. The two categories of methods of data collection are secondary methods and primary methods. Fisher (2010, 58) The generated data for this study is mostly in the form of words rather than statistics because a qualitative research approach was employed. Individual interviews are some of the most frequently utilized data collection techniques (Patton & Cochran 2002, 11). One or more of the following methods can be used to base a qualitative study: interviews, case studies, observation, surveys, or content analysis. (Ghauri & Grønhaug, 2002). Since the aim of this study is to explore ways in which value is created in e-learning platforms and the study is done from the perspective of customer organizations, individual interviews were chosen as the data collection method.

Depending on the degree of structuring used, there are various forms of qualitative interviewing. Standard interviews follow a strict pattern, and the interview questions are predetermined. Unstructured interviews lack the strict pattern, the interviews are similar to conversations, and they often lead to unexpected topics. In unstructured interviews, the role of the interviewer is significant. In semi-structured interviews, themes are determined in advance, which ensures the generation of data in a way that the interviews can be compared. Semi-structured interviews still leave room for new ideas and improvisation and enable discovery of undetermined issues in a topic that is predefined. (Eriksson & Kovalainen, 2008; Hirsijärvi et al., 1996) All of the factors mentioned are significant in the context of this study because of the exploratory nature of the research and the fact that the respondents are employees of customer organizations with a variety of different business models. Therefore, the interviews will be conducted as semi-structured theme interviews.

In comparison to, for instance, surveys sent to the emails of the respondents in the form of text, the researcher can examine the interviewee's tone of voice better and understand his or her views and behavior in depth when conducting interviews. Additionally, because the interviewer and interviewee are working together to collect data in real-time, the interviewer has the ability to guide the conversation and respond to the most pressing situations based on their intuition and the information they have access to. However, using interviews as the approach for data collection is not without its drawbacks. First of all, speaking with a variety of respondents takes time and may necessitate traveling. In the case of this research, all of the interviews were conducted remotely via Zoom application. Doing the interviews remotely may cause disturbances such as the interviewer or interview losing internet connection during an interview. Additionally, conducting effective interviews calls for detailed planning, strong social skills, and thorough familiarity with the topics under discussion. Last but not least, the researcher must evaluate how the environment and other factors may influence how respondents respond to certain questions. For instance, the respondent might say something to present a favorable impression of themselves or the business they work for. (Ghauri & Grønhaug 2002; Hirsjärvi et al. 1996) The interviewees were given the chance to participate anonymously. This way there is less of an incentive for the interviewees to make themselves look good.

The operationalization of the research problem received the appropriate attention in order to guarantee that the interviews are done with a coherent framework and that all significant themes are covered (Table 3).

Table 3 Operationalization table

Research topic	Purpose of the study	Sub questions	Theoretical framework	Themes
Value creation in corporate e-learning platforms	To explore various ways in which value is created in corporate e-learning platforms	How are e-learning platforms used in corporate context?	E-learning	Use cases Value
		How do the customer organizations define value in corporate e-learning platforms?	S-D logic Value co-creation E-learning	Use cases Value
		How is the customer organization involved in value creation in corporate e-learning platforms?	S-D logic Value co-creation E-learning	Cooperation Value

The operationalization table additionally displays the connections between the theoretical framework and the empirical research (Eskola & Suoranta, 1998). As we can see, the study's interview themes are drawn from previously published literature, which is arranged in the table in relation to the sub-questions while continuously keeping in mind the study's purpose. Even if the respondent's background is obviously taken into consideration, each of the interview themes includes a variety of questions that are aimed to guide the conversation.

This study is related to an e-learning platform development project of Turku School of Economics' Centre for Collaborative Research. Some of the interviewees are employees of pilot organizations of the project. All interviewees are or have been HR professionals and responsible for their organization's e-learning which has resulted in experience on e-learning platforms in corporate context. This ensures that the interviewees possess information that is applicable about the themes. Most interviewees work for large Finnish companies. The identity of the interviewees is not revealed in this thesis. However, a brief introduction to each interviewees' organization is in place in the beginning of chapter 4 (see table 4) to give a better understanding of the context these interviewees operate in.

3.3 Data analysis

Data analysis' goal is to make the gathered information understandable so that conclusions can be made from it. The obtained data is processed and converted into a clear and understandable structure during the data analysis, while making sure that no significant information is lost. As there is often a large amount of data when conducting qualitative interviews, the researcher's familiarity with the subject is highlighted during the process of identifying relevant data. Additionally, it is critical to recognize that the researcher is an integrated part of qualitative research in the role of a subjective observer, and that his or her perceptions may be influenced by preconceptions and prior experiences. However, in order to conduct quality research, these beliefs should not be let to restrict the data analysis process. On the other hand, the researcher should be open-minded and on the lookout for unexpected results. Therefore, it is important that the interpreter recognizes his or her preconceptions and try to limit their effect to general curiosity and preliminary hypotheses. (Eskola & Suoranta, 1998.)

There are three different approaches to qualitative data analysis: data-driven, theory driven, and theory-bound data analysis. Theory-driven approach is used in this study. This means that the analysis is based on an existing framework. E.g., the data-driven approach does not pay attention to existing literature. In theory-driven analysis, there is room for unexpected findings that do not necessarily go hand in hand with previous literature. Theory-bound analysis emphasizes the role of the theory in the analysis even more than theory-driven analysis. In this study, the theory does not completely direct the analysis and the data can impact the direction of it. Thus, theory-driven analysis was chosen over theory-bound analysis. (Tuomi & Sarajärvi, 2002.)

The method of data analysis selected for this study is qualitative content analysis. Since content analysis's purpose is to compile the gathered empirical data into a more abstract and comprehensive form and further assist in finding patterns and developing an analytical and objective understanding of the topic, it is thought to be suitable for analyzing qualitative interview data (Tuomi & Sarajärvi, 2002). There are three main processes of data analysis: data reduction, displaying of data and drawing conclusions, and data verification. Data reduction's purpose is to take the important information from the data and simplify it without sacrificing any of its valuable information. In order to make the information understandable and accessible, data must be organized and pieced

together sequentially on a more abstract level. The researcher can then begin drawing conclusions from the data once it has been organized and cleaned up, correlating the findings to the theoretical foundations. (Miles & Hubermann, 1994)

The data analysis of this study proceeded in stages. Firstly, the recordings of the interviews were transcribed into text and the researcher familiarized himself with the content carefully. After this, the text was categorized using highlighting with colors. The text was highlighted based on each theme of the research (see Table 3). The themes of the research derive from the theoretical framework and the research questions of the study. The theme use cases refer to the purposes for which companies use e-learning platforms. Value as a theme comes from the existing literature and relies heavily to the service-dominant logic as does the theme cooperation. Each theme had its own color, so that the data could be categorized in a structured manner. The main points of each interviewee were underlined. The original expressions of the interviewees were shortened in a way that made them easier to deal with, but without changing any meaning of them. The main points of each category were collected in a separate file, making the data organized. The content of the file that included the organized data was used for drawing conclusions on what are the main findings of the research.

3.4 Trustworthiness of the study

In this subchapter, the meaning of trustworthiness in qualitative research is explained and the trustworthiness of this study is examined. The evaluation of trustworthiness is done to make sure that the results of a study are unbiased and truthful (Lincoln & Cuba, 1985). Lincoln and Cuba (1985) suggested criteria for assessing the trustworthiness of a study. They comprise four measures for assessing the trustworthiness: credibility, transferability, dependability, and confirmability. The trustworthiness of the research process of this study is evaluated through these criteria.

Internal validity, which is usually employed as a metric to evaluate quantitative research, is frequently linked to credibility. It describes how closely the study's findings correspond to reality and the accuracy of the data that was gathered (Lincoln & Cuba, 1985). A common technique to enhance the credibility of a study is triangulation, which was taken into consideration throughout the entire research. For instance, the operationalization table was created to show how the theory and the empirical focus are consistent. The theoretical framework of the study is composed of many concepts and viewpoints.

In turn, transferability assesses how applicable the research's findings are in different situations. The researcher must provide detailed and accurate information regarding the study's methodology, research environment, and selection criteria if they want the audience to be able to assess the transferability of the findings. (Lincoln & Cuba, 1985) Due to transferability, the study provides a detailed overview of the respondents, data collecting, and data analysis.

The third criterion, dependability, relates to the consistency between the data that was gathered and the analysis. It assesses if the same results could be obtained under identical conditions and how much the subjective nature of the research methodology and approach affected the findings. (Lincoln & Cuba, 1985) Data collection and data analysis of this study are described precisely on the previous chapters. Furthermore, the interviews were recorded and transcribed before the data was analyzed. However, as the researcher works at the same company as one the interviewees, previous perceptions may have affected the researcher. Furthermore, most of the organization's that the interviewees work for are well known companies, which brings the effect of previous perceptions into play.

Confirmability is the final criterion for trustworthiness. This term refers to the degree to which other researchers would be able to confirm the study's findings and whether the study's results and conclusions are grounded in the data that was gathered in a comprehensive manner. By explaining the research methodologies that were employed in detail and outlining how the data analysis process was carried out in practice, the confirmability of this study was strengthened.

3.5 Ethical considerations

When conducting research, it is important to consider the ethical aspects of the research throughout the process. In qualitative research where personal interpretations and perceptions of people are involved and the researcher is able to access subjective experiences of the interviewees, this is significantly important (Brinkmann & Kvale, 2005, 157). It is vital that ethical principles are applied into the research process in order not to cause any harm to the participants of the research (Orb et al., 2001,93).

In qualitative research, it crucial that the participation to the study is voluntary. It must be crystal clear that the participants are willing to participate in the research (Orb et al., 2001,

95). The participants need to express their consent before the data collection. Before the consent is given, the researcher must give a comprehensive background to the research and inform the participants about the characteristics and purpose of the study. The participants also need to be informed about their confidentiality and possibility to withdraw from the study. (Brinkman & Kvale, 2005, 167)

All interviewees of this study were contacted via email. The email included a comprehensive explanation of the research and the purpose of the study to make sure that participants understand the nature of the study. Encouragement to contact the researcher for any questions was also included in the email. It was also stated that the participation is voluntary, and the identity of the interviewee will not come up in the research if that is the wish of the interviewee. All participants clearly stated that they are willing to participate in the study. As most of the interviewees wanted to attend anonymously, the research was done in a manner that none of the identities of the participants can be seen.

The personal data of the interviewees has been used only to contact the interviewees and set up the interviews. The interviewees have been informed about where the researcher has gotten their contact information. When the research is published, all personal data is deleted. Once the research is finished, the research paper will be sent to each participant.

QuillBot AI tool has been used in this study to some extent to modify the structure of sentences to be of better structure and easier for the reader to read. The tool does not generate any text itself. The researcher has written the text to the tool, and the tool has rephrased sentences so that the grammar of the text has as few flaws as possible. The text generated by QuillBot has been read and modified if needed by the researcher.

4 Findings

In this chapter, the findings from the empirical data are introduced. The aim is to contribute to the topic of value creation in e-learning platforms in corporate context and answer to the following research questions:

1. *How are e-learning platforms used in corporate context?* (4.1)
2. *How do the customer organizations define value in corporate e-learning platforms? (4.3)*
3. *How is the customer organization involved in value creation in corporate e-learning platforms?* (4.2)

The researcher has interviewed the interviewees and obviously knows their identities. However, to secure the anonymity of the interviewees, they will be referred to as numbers in this study. In the following table (table 4), information about the interviewees is presented to bring clarity about who is referred to in the discussion.

Table 4. Interviewees

Company	Industry	Interviewee (numb.)	Role
Alpha	Real estate technology and industrial services	1	HR development
Beta	Construction	2	HR development
Gamma	Forestry	3	Learning development
Delta	Management and technology consulting	4	HR
Epsilon	SaaS	5	HR development
Zeta	Education	6	HR

The companies the interviewees work for are referred to as Greek alphabet. All interviewees work at large or mid-large Finnish companies that do business internationally, excluding interviewee 6, who has significant experience of e-learning platforms during their working career.

4.1 Use cases of corporate e-learning platforms

One of the objectives of this research is to find out for what purposes do companies use e-learning platforms. These purposes are referred to as *use cases* in this study. This subchapter discusses the data of the interviews that considers how companies use e-learning platforms. Focus is on the most common use cases and whether companies in different industries use e-learning platforms differently. When "their e-learning platform" is talked about, it refers to the e-learning platform that a customer organization uses. The interviewees do not work for companies developing or providing e-learning platforms.

4.1.1 Use cases for learning

When asked about the purposes to which their companies use e-learning platforms, all but one interviewee responded by stating that mandatory trainings for employees are done on an e-learning platform. Interviewee 4 stated that the e-learning platform Delta uses includes mandatory trainings for all employees. Interviewee 1 mentioned that Alpha as a publicly listed company has a responsibility to organize some mandatory trainings for their employees and those trainings are held on an e-learning platform. Interviewees 2, 3, 4 and 6 stated that mandatory trainings regarding safety are done on e-learning platforms. Interviewees 2 and 3 also mentioned that not only employees of the company, but also contractors that work on the sites of their companies need to complete safety trainings on their e-learning platforms. The benefit of these trainings being on an e-learning platform is that the information about which employees have or haven't completed mandatory trainings is easily manageable and available according to interviewees 1, 2, 3 and 6. Interviewee 3 also mentions that mandatory cyber security trainings and code of conduct trainings are held on the e-learning platform.

Four out of six interviewees mention that their e-learning includes trainings about their companies generally. These means that there is learning material about their companies on e-learning platforms. All interviewees stated that e-learning role or task specific

trainings are on e-platforms. Interviewee 5 added that the basics of certain roles can be beneficial to be taught on an e-learning platform.

"It is rather easy for us to say that in order for you to be a good SaaS salesman, you need to master these topics." (Interviewee 5.)

Reflecting to the model of Thangaiah et al. (2021) the goal of teaching the basics to employees with the e-learning platform derives value.

Examples about role specific material on an e-learning platforms were trainings for electricians to gain a certificate and training for salespeople to boost sales development. Interviewee 5 also mentioned that the service provider of the platform Epsilon has used, offers different kinds of profiles within the platform for different roles. E.g., there might be material ready for SaaS salespeople, customer success people and so forth.

Four out of six interviewees mention that e-learning is used heavily in the process of onboarding new employees. This relates to what interviewee 5 said about teaching the basics to all employees. The real benefit of having onboarding material on an e-learning platform seems to be that it is highly scalable. When the skills and knowledge are basic and general enough, an e-learning course is enough. According to interviewee 2, Beta uses their e-learning platform to educate their employees even before their first work shift. A new employee can sign into the platform even before their first work shift and learn about the company and the most relevant tasks. This gives a good basis for the new employees before they start the actual work and helps to get started when the first work shift starts.

Self-leadership training is mentioned by interviewee 3 as one of the use cases of e-learning in their company. Learning that aims for certificates is mentioned by interviewee 1 and 4. Interviewee 4 additionally mentions general practical training such as Microsoft Excel and Microsoft Teams trainings as well as virtual trainings that happen at a certain time as use cases of e-learning for Delta. Interviewee 6 introduces an idea that an e-learning platform could also serve as a platform for communication, and it can also be used in information sharing.

Regarding staff trainings that occur at a certain time, interviewees 1, 2, and 5 stated that a combination of e-learning and traditional classroom training can be a beneficial way to get the most out of a training. Interviewee 5 mentions that some preliminary material can

be studied on an e-learning platform, and a face-to-face training can be used as a conversational way to intensify learning. Interviewee 1 says that in Alpha's organization, all employees must sign into a training on an e-learning platform and the material and tests are on the platform, but managers can choose whether they want the training to take place virtually or in a classroom. Therefore, the company can have all data regarding staff training in the same place.

4.1.2 Use cases for management

Five out of six interviewees mention reporting and managing of learning the use cases of e-learning platforms. This means that companies are able to see through their organizations' learning processes and have all learning material and learning data in the same place. Managers can get reports on who have done what and see which employees possess a certain certificate. Interviewee 1 pointed out that the availability of the information about certificates of employees can also be used in sales and marketing.

Compared to traditional face-to-face training, e-learning seems to offer a notable option. The straightforward use cases regarding what is taught on an e-learning platform can vary and many relevant skills and knowledge can be taught on an e-learning platform. All interviewees agree that traditional interaction is a crucial part of learning, and it intensifies it. This is why according to interviewee 5 the purposes of using an e-learning platform often limit to learning basic skills and knowledge. When skills and knowledge that are to be learned are more complicated and situation dependent, a classroom training is often more effective. When taking the use cases a bit further, not just learning purposes, the real benefit of e-learning platforms in corporate context start to show. When talked about the use cases of e-learning platforms in corporate context, one aspect seems to come up almost every time. According to all five out of six companies, e-learning platforms are used as a source of data. What this means is that the courses and e-learnings that employees have done can be seen on the platform and this data can be used for different purposes. The data can be used for reporting about the learning of the employees of companies, in sales and marketing operations, and integrated to other systems, such as HR systems, and be used in connection with other personal data of employees as Interviewee 1 mentions:

> *"The thing that is increasingly important is the scope of reporting and how the training data can be used in connection with other personal data."* (Interviewee 1.)

This relates heavily to another theme of the interviews and this study: value. The next subchapter will be discussing the data gathered form the interviews regarding the value companies gain and how that value is created.

4.2 Value in corporate e-learning platforms

Another research question of this study is *how do customer organizations define value in e-learning platforms?* This subchapter aims to discuss the data regarding this research question. The focus is on the things that bring value and the ways in which value is created for the customer organization.

4.2.1 Training data

Transparency in some form brings value to a customer organization according to all interviewees. The respondents all stated that e-learning platforms make it easier to manage learning within the organization in one way or another. Interviewees 1, 2, and 5 emphasized the fact that the learning of employees within an organization is visible with the data available about who have finished which trainings. Leadership needs to have visibility to all departments and countries within a company, which could help in taking advantage of synergies according to interviewee 1. The data about trainings and learning of employees is referred to as training data in this study. The availability of training data is one of the factors that create value that comes up frequently in the interviews. It can be used e.g., for overall management of learning or reporting as interviewee 1 mentions:

"*The thing that is increasingly important is the scope of reporting and how reporting can be used and how the training data can be used in connection with other personal data for certain purposes."* (Interviewee 1.)

The data can also be used to actually determine the value that e-learning bring to the organization by measuring learning according to four respondents. With training data, one can see how much the training content is consumed and whether the platform is actually used according to interviewees 1, 2, 4, and 5. Interviewee 4 states that the correlation between the number of accidents on the sites of a construction companies and the number of employees that have completed a safety training is something that a

company can use to determine whether the safety training actually works. Interviewee 5 states that one can also see whether sales trainings return the wanted result by observing how sales results develop after a training on an e-learning platform is done.

According to interviewee 1, training data could be used even more in the operations of a company. This is something that is actually a main focus of Alpha in the future regarding their e-learning platform. At the moment they use training data that is gathered from their e-learning platform e.g., in sales and marketing by mentioning how many of their electricians have certain certificates.

Integrations to other digital systems of a company is a topic that gets mentioned often when asked about the value that e-learning platforms bring. As mentioned, training data can be used in connection with other personal data of employees. To make this happen, it must be possible to integrate the e-learning platform with e.g., the HR system of a company. Five out of six respondents mention integrations as a factor that creates value for a customer organization. In addition to integrations to HR systems, interviewee 4 mentions that an integration to the enterprise resource planning (ERP) system is beneficial. The ERP system can e.g., notify employees about relevant learning material on the e-learning platform. This way the materials on the e-learning platform get studied more and the employees develop and perform better. This leads to the next topic of how value is created in corporate e-learning platforms: easy usability and accessibility.

4.2.2 Easy usability

Each respondent mention easy usability as a value creator in corporate e-learning platforms. According to respondents, compared to traditional face-to-face trainings, e-learning offer an easy and accessible way to learn. According to the data gathered regarding value in corporate e-learning platforms, the main challenge is to make sure that e-learning platforms are made a part of employees' routines in order to capture all of the potential of e-learning platforms. Five respondents mention that the fact that content is easily available brings value to customer organizations. Interviewees 3 and 6 emphasize that e-learning should be brought close to employees so that there is minimal work for employees to access learning material. Interviewee 3 introduces the concept of learning in the flow of work:

> *"The interface of learning should be easy. It should really be learning in the flow of work. One should not think that one must go somewhere on a digital platform in order to learn."* (Interviewee 3.)

Easy accessibility also relates to the matter of integrations already discussed in chapter 4.2.1. By integrating the e-learning platform with e.g., the ERP system of a company, employees can get notified about new trainings that must be done on the e-learning platform according to interviewee 4. Interviewee 6 suggests that the e-learning platform should be a part of another system that employees use on a daily basis. This would support the value driver of the learning content actually being used mentioned by interviewees 1 and 4.

Not being tied to location is mentioned by three of the respondents as factor that creates value in e-learning platforms. Employees do not have to be present at the workplace to learn relevant things regarding their work. Furthermore, employees do not have to travel to attend trainings. This saves the customer organization money and time according to interviewee 3. Respondents 1, 2, and 3 state that the possibility to access the e-learning platform with any device gives value to the organization, as many employees tend to use time e.g., during traveling or commuting to learn about relevant topics and a mobile device is the handiest way of doing that. E-learning not being dependent on time is mentioned as a value creator by interviewees 3 and 4. The value about it not being time-dependent comes down to the same factors as e-learning not being dependent on location or device. It makes it easier for employees to learn, as they can do the trainings when it fits their schedule. Especially in companies that operate in different time zones, it is beneficial that companywide trainings can be done in a flexible manner timewise.

Interviewees 1 and 5 state that it is not enough that the platform is easy for the end users (employees). It is also vital that managing the platform is easy for the customer organization. The administrative work regarding the platform should not tie a lot of resources of the customer organization.

4.2.3 Efficiency

Another value that customer organizations get from e-learning platforms is efficiency according to the data gathered from the interviews. Four out of six respondents mention efficiency as one of the most valuable things that e-learning brings to an organization. Efficiency relates heavily to scalability of learning according to interviewee 5. As

mentioned earlier, especially basic skills and knowledge that need to be taught to a large group of employees can be taught via e-learning platform. Therefore, it only ties resources to the process of creating the learning content to the platform, thus allowing managers to focus on other important things rather than teaching the basics to new employees. Interviewee 6 mentions the value in decreasing the man hours used in onboarding of new employees as well. According to interviewee 5, scaling learning via e-learning platforms is only beneficial regarding the basics, as more detailed and complicated trainings require traditional interaction and conversations to intensify the learning. Interviewee 6 gives an example of how e-learning decreases internal bureaucracy and increases efficiency in a customer organization:

> *"It must be verified that a person has read an induction text and a paper needs to be signed when the text has been red. A manager uses their working time sitting next to the person who reads and marks that the material has been red. Versus the case that the material would be on a platform and the manager does not need to tie his or her time to the task."* (Interviewee 6)

The matter of e-learning not being dependent on time or location also brings value from an efficiency point of view. When a training can be done from anywhere, e-learning platform saves the customer organization actual money, as it decreases the travelling costs of employees. Employees do not have to travel to other locations to attend trainings as they can be attended from anywhere if the training is done online or as self-learning on an e-learning platform. I.e., e-learning platforms save customer organizations' time and money. As the purpose of staff training is to improve the competences of the staff, e-learning brings value in making the employees more efficient in their work. Interviewee 5 states that by teaching the basics to all salespeople in the organization, results were seen and the company's sales grew.

4.2.4 Other value creators

On top of training data, easy usability and efficiency, other value factors were mentioned in the interviews as well. One factor that came up frequently in some form or another in the interviews was the quality of e-learning. Interviewee 6 stated that with an e-learning platform organizations can share more accurate information to a broader audience. This relates to a matter mentioned by interviewee 3 regarding the coherence of learning material. When the learning material is same for everyone, the possibility of misunderstanding is far smaller. Interviewee 3 explained it as follows:

> *"Earlier there were Chinese whispers. A message that needed to be "trained" through the whole team could go from the big boss through middle management to managers and the message had already changed when it reached the managers.* (Interviewee 3.)

Versatility is also mentioned as a factor that adds value to e-learning platforms. Interviewee 3 states that when there are various kinds of trainings and material available, employees stay interested and use the e-learning platform more. They also mention that learning as whole makes working interesting and keeps employees satisfied and productive.

The technical execution and integrations also affect the quality of the service. Interviewees 2 and 3 highlight that trustworthiness technically is important to customer organizations. The data should be correct. If the data shows that a person has completed a training, that should be the case in real life and vice versa. The possibility to trust the system and its technicalities brings added value to the platform.

The data gathered from the interviews shows that the lack of interaction in learning on e-learning platforms can decrease the efficiency of learning. Interviewees 1, 3, 5, and 6 mention that traditional interaction in a learning situation intensifies learning and the lack of it might lead to worse results. Interviewees 3 and 6 suggest that a possibility of interaction within the platform would create additional value. Interviewee 6 states that an e-learning platform can be used to commit employees to the organization. E.g., remotely working employees could interact on the platform.

Interviewees 4 and 5 points out that ant e-learning platform can be a good tool for managers working in a supervisor role. The performance of employees regarding learning can be graded on an e-learning platform. This gives an opportunity to supervisors to take advantage of functions of the e-learning platform when giving feedback to employees. Five out of six respondents also mention that gamification of learning can bring value to the organization and enhance employees' commitment to learning. Interviewee 1 mentions a culture game that their organization has on an e-learning platform. Interviewee 5 states that learning can be turned into a competition. However, turning learning into a competition can be a double-edged sword, as employees might start to use too much time on learning about topics that are not relevant for their positions.

4.3 Cooperation between service provider and customer in corporate e-learning platforms

The third research question of this study is *how is the customer organization involved in value creation in e-learning platform?* This subchapter discusses the role of cooperation between the service provider and the customer organization in value creation in corporate e-learning platforms. The roles of the counterparts are discussed separately and at the end, the cooperation is discussed as a whole.

4.3.1 Role of service provider

The data gathered from the interviews indicate that taking care of the customer relationship is a significant factor of a successful e-learning platform in corporate context. All respondents state that communication between the service provider and the customer is essential in the process of making an e-learning platform a part of the customer organization's processes. Interviewees 1 and 5 mention that the service provider should be proactive in the relationship and show genuine interest towards the customer. This means that the service provider should be in contact with the customer frequently and find out the changing needs of the customer. Active communication from the service provider enables the possibility of developing a better product for customers. Interviewees 1, 2, and 6 state that conversations between the service provider and the customer help both sides. When the customer tells their needs, they can expect a better product from the service provider. On the other hand, the service provider gathers information about how their product can be developed and is able to provide a better service to its customers. Interviewee 1 states that customers would have a lot of input about how to develop the platforms that they use:

> *"World changes and needs change, and I would have a long list of what I wish that our e-learning platform could do."* (Interviewee 1.)

This finding is in line with the theoretical framework of the study. As mentioned in chapters 2.2.1 and 2.2.2, interaction between actors within a service ecosystem enhances value co-creation. The customer acts as an ideator by generating knowledge about their needs in a specific context. Exchange of knowledge and resources between the service provider and the customer should be flowing to gain value from the relationship.

Interviewees 1, 2, and 3 state that the relationship between the service provider and the customer should not be limited to how the customer uses the e-learning platform. In today's digital business world, it is increasingly important that all digital systems that a company uses fit into the IT infrastructure of the company. Therefore, it is important that there is a link between the service provider and the IT department of the customer according to interviewees 1 and 3. A connection to the IT department allows the e-learning platform to be integrated into other systems of the customer and thus to be a part of daily operations. This means that the service provider needs to be able to customize the technical structuring of the platform according to interviewee 2. The technical customization and integration also relate heavily to the usage of training data as it enables the customer to use the data in connection with data from other systems.

4.3.2 Role of customer

Good communication is not only the responsibility of the service provider. According to the data, the customer organization also needs to focus on communication with the service provider. As mentioned earlier, an open relationship with good communication benefits both the customer and the service provider. By focusing on the communication with the service provider, the customer enhances the chances to get the most out of the e-learning platform they use. When taken into theory, the customer acts as an ideator and co-creates value in cooperation with the service provider.

Internally, the role of the customer in making the platform successful comes down to a couple of factors according to the data gathered from the interviews. Interviewees 1, 2, and 3 emphasize the importance of technical integration. The customer organization needs to focus on making the e-learning platform a part of the IT infrastructure of the organization. If this does not happen, the platform will be a separate part of the company's infrastructure and it will not be used properly and eventually the value of the e-learning platform will not be distrained. Interviewee 6 even suggests that an e-learning platform should be a part of another system that is used a lot in an organization. Another important factor in getting full value from an e-learning platform is internal ownership. According to interviewee 1 it is important that it is clear who is responsible for the management of the platform in the customer organization. Interviewee 5 points out that it is vital to buy and start using an e-learning platform at a correct time. Even a parental leave of an employee responsible for the execution of the e-learning platform from the customer side

can result into it not being used. Interviewees 1, 2, and 5 also state that careful planning from the customer side is essential for the e-learning platform to be successful. Interviewee 5 also states that the e-learning platform does not teach anyone by itself. The customer organization needs to make sure that the content of the platform is of high quality and does not get outdated. All of these factors aim for the goal that is mentioned by interviewees 4 and 6: making sure that the e-learning platform is actually used.

4.4 Challenges of e-learning platforms

The interviews unexpectedly brought up a topic that the interviewees tended to bring up: challenges of e-learning platform in corporate context. This sub-chapter discusses the findings from the interviews regarding those challenges. All in all, it is seen from the data gathered from the interviews that there is a significant number of challenges related to e-learning platforms in corporate context, which makes it a relevant area to study.

Interviewees 2, 3, and 4 state that traditional interaction in learning is important to get the most out of it. Once interaction in the form of conversations is added to a learning event, learning intensifies, and people learn better. Interviewees 1 and 5 mentioned that a combination of e-learning and traditional classroom training can be beneficial. Interviewee 5 emphasized that there is no problem learning basics via e-learning platform, but as topics get more detailed and complicated, conversations are needed to get the best possible result out of the training. I.e., scaling advanced personal development is challenging.

Another challenge that came up in the interviews closely relates to the role of the customer organization in value creation in corporate e-learning platforms. Interviewees 3, 5, and 6 state that committing employees to the e-learning platform is a challenge that defines how much value an organization can get from an e-learning platform. As mentioned in chapter 4.2.2, easy usability is a factor that creates value. Most of the interviewees mention that an important challenge to handle is the challenge of taking the e-learning platform close to the employees and make it part of their everyday life. Interviewee 4 mentions internal communication about the e-learning platform as a challenge as employees need to be aware of the possibilities on the platform. Interviewee 5 sums up the challenge of integrating e-learning platforms into company's processes:

> *"It is so obvious that e-learning should work, but it is still so difficult to make it work in everyday operations."* (Interviewee 5.)

Interviewee 3 states that e-learning platforms can be rather expensive for customer organizations. This is why the challenge of planning the use of the platform in advance is brought up by interviewees 1 and 5.

Lastly, interviewee 5 states that in today's world, there is a lot of information available, and people are generally good at finding information. This sets the value of e-learning platforms into a questionable position. If employees are able to learn by themselves by searching the internet, what is the point of having an e-learning platform? Interviewee 5 concludes the challenge of e-learning:

> *"In this day and age, it is not difficult to get to the source of correct information if you are active yourself. But how companies should manage learning is such a difficult challenge that I have not been able to figure it out yet."* (Interviewee 5.)

This chapter presented the findings of this study. These findings will be concluded, and the theoretical contributions and managerial implications will be presented in the next chapter of the study.

5 Conclusions

This chapter concludes this study by discussing the theoretical contributions and managerial implications of the study. The purpose of this research was to explore the various ways in which value is created in e-learning platforms in corporate context. This chapter also aims to answer the following research questions:

1. *How are e-learning platforms used in corporate context?*
2. *How do the customer organizations define value in corporate e-learning platforms?*
3. *How is the customer organization involved in value creation in corporate e-learning platforms?*

The results of the empirical research are compared to the theoretical framework and conclusions are provided based on them.

5.1 Theoretical contribution

This study aimed to fill the research gap of how value is created in corporate e-learning platforms. Previous studies had focused more on value creation in e-learning platforms in a more traditional teacher-student setting (see Thangaiah et al., 2021). The basis of the theoretical framework was Vargo and Lusch's service-dominant logic (2016), that emphasizes that companies sell services rather than products and value is created in collaboration between actors in a service ecosystem. Lusch and Nambisan (2015) also suggested a framework for service innovation that was based on service dominant logic. This study viewed value creation in corporate e-learning platforms by leaning on these theories.

5.1.1 S-D logic based conceptual model for e-learning in corporate context

The theoretical framework of this study was synthesized with the model of value co-creation in e-learning platforms by Thangaiah et al. (2021). This model explains value co-creation in e-learning platforms in a teacher-student setting. In the following figure (figure 3), the model has been modified to the context of corporate e-learning.

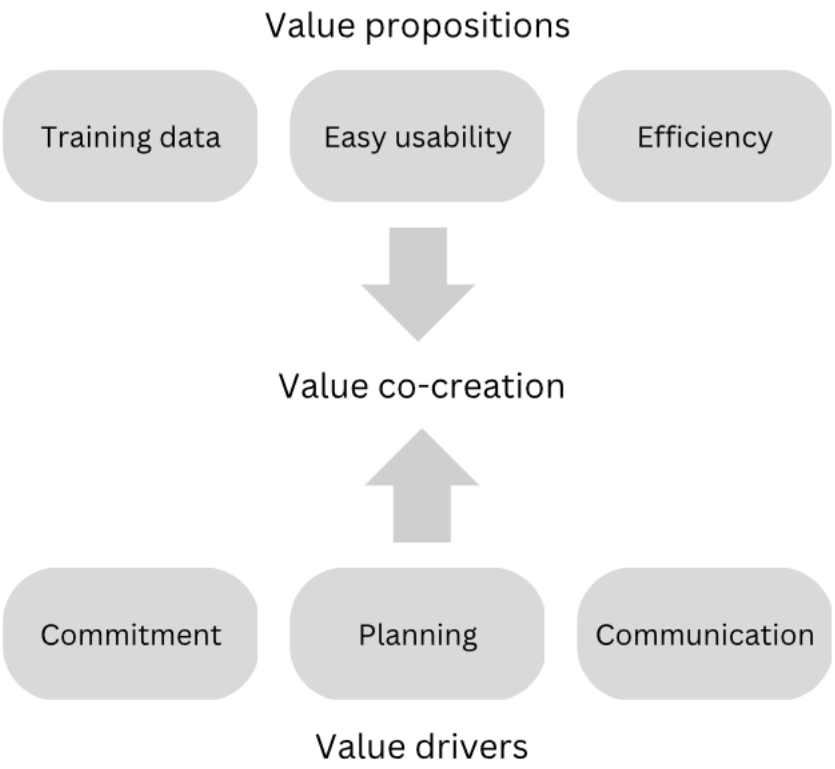

Figure 3 Corporate E-learning Conceptual Model based on service-dominant logic and value co-creation. (Modified from Thangaiah et al., 2021)

The original model of e-learning based in S-D logic and VCC by Tangaiah et al. (2021) proposes enrichment, interaction, personalization, and environment as value propositions of an e-learning platform. As figure 3 shows, based on the empirical research of this study, the value propositions in corporate e-learning are training data, easy usability, and efficiency.

The first value proposition, training data, means that companies can use the data generated by the platform to manage the learning and training of their organization. In addition, training data can be used for other purposes, such as sales purposes and measuring the success of corporate training.

Second value proposition, easy usability, refers to the finding that corporate e-learning platforms make learning in corporate context more effortless. The empirical research shows that when the learning material is close to the employees and it can be accessed with ease, the material is used more, and employees develop. This brings value to the customer organization. The original model by Tangaiah et al. (2021) proposed a value proposition of personalization. Easy usability relates to personalization, as the platform

needs to be personalized for the customer in order for it to be easy to use for the employees of the customer organization. Another original value proposition, environment, is involved in easy usability, as the e-learning platform creates an environment for learning that is easily accessible.

Third value proposition that the empirical research of this study supports is efficiency. With e-learning platforms companies can train their staff more efficiently. Employees do not have to travel to different locations, they do not need to be in the same place at the same time. For basic knowledge and skills, there does not have to be anyone doing the teaching for them. I.e., corporate e-learning platforms save customer organizations' time and money.

In their model, Thangaiah et al. (2021) propose four value drivers: engagement, resources, experience, and goals. The value drivers have been modified to corporate context based on the empirical research. The value drivers in corporate e-learning are commitment, planning, and communication.

Commitment refers to both the commitment of the customer organization to make the e-learning platform part of the company's operations and the ability to commit the employees to use the platform. The platform needs to be close to the employees for them to actually use it. The platform needs to also be made part of the IT infrastructure of the customer organization according to the empirical research. Thangaiah et al. (2021) proposed engagement as a value driver, which is very close to the commitment value driver.

The second value driver, planning, means that customer organizations need to plan the use of the e-learning platform carefully. Before the organization starts using a platform, they need to have a clear understanding on what is the correct time to start using it, what it is used for, who is responsible for managing the platform from the customer side, and how is the platform integrated to the IT infrastructure of the company. The original "goals" value driver by Tangaiah et al. (2021) relates to planning, as companies need to have clear goals for the e-learning platform.

The third value driver is communication. It is clear according to the empirical research that companies must communicate well, both internally and with the service provider, to have success with an e-learning platform. Employees need to be aware of the possibilities

on the platform, and the service provider needs to know the needs of the customer organization.

To conclude the modified model of value co-creation in corporate e-learning, the value propositions from the service provider and the value drivers from the customer side contribute to value co-creation. When the value propositions and value drivers meet, value is created in collaboration between the service provider and the customer organization.

5.1.2 Value creation in corporate e-learning

The data from the empirical research clearly shows that value creation in corporate e-learning platforms happen within the boundaries of the S-D logic. All respondents in the research stated that good communication and cooperation between the service provider and the customer is vital to get value from e-learning platforms. Especially foundational premise (FP) 6 of the S-D logic can be seen in the data gathered from the interviews. FP 6 states that value is co-created by multiple actors, always including the beneficiary (Vargo & Lusch, 2016, 8). The empirical data shows that the interviewees mention the service provider, the customer, employees, leadership of the customer, and the IT department of the customer as actors that are needed in value creation in corporate e-learning platforms.

As Sklar and & Richards (2010, 11-112) mention, e-learning systems that aim to support acquisition of knowledge about a certain topic and help users to improve expertise and experience are often developed in cooperation with experts from the education field. According to the data of this research, it would be beneficial to involve experienced HR professionals in the development phase of corporate e-learning platforms. Of course, it is important to have experts from the field of education also involved, but the experience and knowledge of corporate people development and corporate learning contexts would add value to the development process of corporate e-learning platforms. This relates to the service innovation framework by Lusch and Nambisan (2015). As explained in the theoretical framework of this study, in the service innovation framework, the beneficiary can have three roles: ideator, designer, and intermediary. The experienced HR professionals act as ideators in the service innovation process of corporate e-learning. They can bring knowledge and ideas of what is needed specifically in the corporate e-learning context. Professionals from the field of education on the other hand need to be

able to make connections between education and learning in a corporate context to bring value to the process of innovating an e-learning platform. In the framework of Lusch and Nambisan (2015), this would fall under the role of an intermediary.

This research also strengthens the consensus that operant resources are primary compared to operand resources as Vargo and Lusch (2004) argue. Corporate e-learning as a phenomenon can be seen as intangible and it can increase the value of natural resources as well as produce new operant resources. In line with the S-D logic, according to this research, in corporate e-learning value comes from the application of an operant resource and the service provider only offers value propositions.

5.2 Managerial implications

This research was made in collaboration with Turku School of Economics' Centre for Collaborative Research. CCR is developing a collaborative e-learning platform and this study helps them to understand what the most important things are to focus on from the perspective of customer organizations in corporate e-learning. The findings of this study helps both service providers and customer organizations.

Firstly, the use cases of e-learning in corporate context were identified in this study. According to the data gathered with expert interviews, companies mostly use e-learning platforms to manage learning and training in their organizations. This includes using training data gathered from the platform. I.e., it is easy to see which employees have completed which trainings. This data can be used for various purposes, e.g., in sales. Furthermore, companies use e-learning platforms to conduct mandatory trainings for employees. These mandatory trainings can be safety trainings, code of conduct trainings, cyber security trainings and trainings that are mandatory by law for publicly listed companies. Companies also use e-learning platforms for general knowledge sharing about their own company. E-learning is often also used for onboarding of new employees. Teaching the basics of a job is scalable and easy to conduct on an e-learning platform.

Secondly, the findings of the empirical research answered the question *how do customer organizations define value in corporate e-learning platforms?* The data gathered from the interviews of this study suggested that there are three main factors that bring value to customer organizations in e-learning platforms: training data, easy usability, and efficiency. Training data refers to the information about learning within the organization

that is available through the e-learning platform. Easy usability brings value to customer organizations by making learning more accessible. With an e-learning platform, learning is closer to employees, and learning material is used more. Lastly, e-learning makes staff training more efficient. Companies do not need to send their employees to different locations for trainings. This saves time and money.

According to S-D logic by Vargo & Lusch (2016), value is created in collaboration between different actors. The expert interviews of this study gave information about the role of the customer organization in value creation in corporate e-learning platforms. As seen in figure 3, the most significant value drivers of the customer organization side are commitment, planning, and communication. The customer organization needs to be committed to the usage of the e-learning platform in order to get value out of it. The customer organization also needs to commit its employees to the platform and make sure they actually use it. According to the data gathered in this research, the most efficient way to commit a customer organization and the employees to use an e-learning platform is to make it a part of their everyday life by integrating it to other systems that employees use. The boundary to do e-learning should be as small as possible. I.e., the e-learning platform should be as few clicks away for employees as possible. The usage of an e-learning platform also needs to be carefully planned in order to get the most out of it. As vargo and Lusch (2004) argue, the beneficiary, in this case the customer organization, is a coproducer of value. According to the data gathered from the interviews, in order to get the maximum value out of the e-learning platform, the purposes and methods of use need to be planned carefully by the customer organization before implementing an e-learning platform. Lastly, as mentioned in the previous subchapter, the customer organization needs to communicate well with the service provider to act as an ideator in the service innovation process. It is also important that the customer organization has good internal communication regarding the e-learning platform and the possibilities that lie in it for the employees.

5.3 Limitations and suggestions for future research

The interviewees of this study were chosen with the criterion of experience in managing and administrating e-learning platforms on the customer side. All, except one interviewee work for Finnish companies that have operations internationally. Some of the companies operate in the same industry, which makes the pool of the interviewees rather

homogenous. This can cause some distortion to the data gathered from the interviews. This is why the future research should either focus on a certain industry, to a group of certain type of companies, or scale up the sampling to include all kinds of companies.

The paucity of previous studies of the topic sets the theoretical framework of the study into a questionable light, as one cannot be sure that the chosen theories actually are the basis for value creation in corporate e-learning platforms. One needs to also consider that there are other theories that fit the phenomenon and at least affect it simultaneously with the chosen theories.

As one of the more surprising findings of this study is that training data is one of the most valuable factors in corporate e-learning platforms, it is a topic that would need more research. Companies use e-learning platforms to gather data and the data is used for various purposes. This is heavily linked to the S-D logic and the assumption that operant resources are valuable as they create other operant resources. The phenomenon of operant resources enabling other operant resources is something that future resource regarding corporate e-learning platforms should focus on. The topic of training data includes technical aspects that exceed the knowledge of the researcher of this study. For companies to be able to get training data, e-learning platforms need to be integrated into the IT infrastructure of the company. The integrations and the purposes for which training data is used for are topics that should be studied further in the future.

Lastly, this study offers a good starting point to the research in the area of value creation in corporate e-learning platforms. However, as the topic is complex and there are several sub-topics deriving from the study, such as the value propositions and value drivers, the topic needs more research for a thorough understanding of the topic to be reached.

6 Summary

This study explored the various ways in which value is created in corporate e-learning platforms. Companies already use e-learning platforms a lot, but the existing literature on the topic is limited. Especially value creation in corporate e-learning platforms is a topic that has been studied rather little considering the magnitude of the concept in the corporate world. Hence, this study fills the research gap of value creation in corporate e-learning platforms.

The empirical research was based on the theoretical framework of the study. It consisted of two main concepts, e-learning and value creation. These concepts were divided into two sub-concepts. E-learning was divided into e-learning in corporate context and e-learning platforms and environments. Value creation was divided into service-dominant logic and value co-creation. The most important theory behind the study was the service-dominant logic. At the end of the theoretical framework of this study, the concepts were synthesized by using a model by Thangaiah et al. (2021) for value creation in e-learning platforms.

Relying on the assumption that companies sell services rather than goods and that value is created in collaboration between actors in an ecosystem, this study provided findings regarding key factors in value creation in corporate e-learning platforms. The empirical research was conducted as expert interviews. The interviews were theme interviews with the themes derived from the theoretical framework. The interviewees were chosen with the most important criterion being experienced in managing and administrating the usage of e-learning platforms on the customer side in a corporate setting. Six experts from six different companies were interviewed. The interviews were recorded, which allowed a transcription to be made from each interview.

The findings of the study suggest that there are three key factors that customer organizations see valuable in corporate e-learning platforms: training data, easy usability, and efficiency. These factors were clearly the ones that came up the most in the interviews when asked about the value that e-learning platforms give customer organizations. Furthermore, this study suggested a model for value creation in corporate e-learning platforms by modifying the model of Thangaiah et al. (2021) and taking it into corporate context. Training data, easy usability, and efficiency are seen as value propositions from

the customer side in the model. Commitment, planning, and communication are value drivers from the customer side. When these factors meet, value is co-created between the service provider and the customer organization.

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Appendix

Interview questions

Themes:

Use cases
Value
Cooperation

1) Please introduce yourself, your background, and current role(s)
2) What kind of e-learning platforms have you worked with?

Use cases
3) Why has your organization decided to use an e-learning platform?
4) How does an e-learning platform help your organization?
5) Can you describe the issues that an e-learning system solves?

Value
6) What value does an e-learning platform bring to an organization?
7) How is your organization involved in creating value within the platform?
8) What makes an e-learning platform beneficial for an organization?
9) What are the most important things in an e-learning platform for your organization?

Cooperation
10) Have your organization been involved in the development stage of an e-learning platform?
11) What is the role of the service provider in creating value?
12) What is the role of the customer organization in creating value?
13) How is the platform personalized to your organization's needs?