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School of Economics and Management

Usage - The Holy Grail of Digital Services

*An Exploration of Factors influencing B2B Customers' Usage of
Digital Services*

by

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Abstract

Many product-based companies have identified digital services as a promising way to differentiate themselves and to stimulate future growth. However, as digital services frequently induce a business model change to a pay-per-use or subscription model, companies see themselves increasingly challenged as their revenues are progressively dependent on customers' actual usage. This is in contrast to the past product-centered logic with one-time payments regardless of customers' subsequent usage. Hence, it becomes increasingly important for providers of digital services to build an understanding of the concept of usage. Therefore, the purpose of this thesis is to enhance this understanding by exploring possible factors that influence business-to-business customers' usage of digital services. Based on a single case study of a global software provider and three of its business customers, this study draws on semi-structured interviews with respondents from both the provider and customer side.

The findings identify a model with a network perspective on factors that influence business customers' usage of digital services. Moreover, the study reveals that many provider-related factors hint that in usage-based digital services, the role of the provider needs to shift to be more customer-centric. Furthermore, it was found that it is not possible to consider each factor in isolation as there is a strong interdependence between factors within as well as across the provider, the customer and their relationship. Ultimately, the findings reveal that the type of digital services appears to have a significant impact on the factors that influence their usage.

These findings add to prior research by providing a deeper insight into the concept of digital service usage in a business-to-business context. For managers at digital service providers, these findings might prove useful to understand how their organization needs to be aligned to enable customer usage. Similarly, based on the premise that value for a customer is only created when a digital service is used, this study might also be of assistance for customers' managers by enhancing the understanding of necessary internal preconditions for their usage.

Keywords: Digital Services, Usage, Value-in-use, Business Model, Software Industry

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1 Introduction

“Computer systems cannot improve organizational performance if they aren’t used.” (Davis et al., 1989, p.982)

Since Davis et al.’s (1985) discussion of the necessity for managers and employees to use computers in their daily working life to actually enhance organizational performance, the business world has changed significantly. Physical products in many markets have ceased being a strong value-creating and differentiating factor (Edvardsson et al., 2008). Hence, many product-centered companies in both business-to-consumer (B2C) and business-to-business (B2B) markets have shifted their attention to the incorporation of more services in their portfolio. These services are frequently believed to act as a new source of competitive advantage and to trigger continued growth (Barrett et al., 2015; Prins et al., 2009). At the same time, margins connected to the sales of services are usually higher compared to product sales (Gebauer & Fleisch, 2007). In more recent years, this attractiveness of services has been further boosted by digitalization. With the help of digital technologies, the creation of new services has been significantly facilitated (Gago & Rubalcaba, 2007; Smith, 2013). On top of the desired advantages connected to traditional services, digital services have become particularly attractive due to their low marginal costs. Once they are created, their software nature allows to easily duplicate them without generating significant additional costs (Rifkin, 2014; Williams et al., 2008).

However, despite the shift from physical products such as computer systems to services or digital services, Davis et al.’s (1989) rationale that the benefits connected to an offering only materialize when it is used still holds true. In fact, this aspect triggered a discussion on the definition of value in marketing and has ultimately led to the idea that value for the customer can only be created if this customer uses a product or service successfully for his own operations. This is the idea of *value-in-use* (Vargo & Lusch, 2004).

In response to such changes in value creation that digital services induce, many companies have started thinking about how to in turn also capture this new value in their business model

(Spieth et al., 2014). This has led to a number of firms adopting new profit formulas based on subscription (Danaher, 2002; Weinhardt et al., 2009) or pay-per-use (Gebauer et al., 2017; Weinhardt et al., 2009) concepts to reflect their new value propositions. As the digital nature of these new services allows to keep track of individual usage data, customers are given the flexibility to only pay for the amount of digital services they use whenever they do so (Porter & Heppelmann, 2015). This is best exemplified by video streaming subscription services in a B2C environment or cloud computing and software-as-a-service (SaaS) offerings in a B2B setting (Lusch & Nambisan, 2015). However, while the flexibility connected to such new payment schemes definitely appears beneficial for customers, the increasing dependence of a digital service provider's revenue on its customers' usage poses significant challenges. In fact, despite numerous success stories, almost all providers see themselves initially challenged to gain significant financial returns in this new paradigm as it is difficult to predict customers' usage level and to, hence, set appropriate usage fees (Kowalkowski et al., 2017).

Taking up Davis et al.'s (1985) initially stated proposition again, it can be seen that despite all the changes, customers' usage is still essential to actually create value which materializes in different forms such as the improvement of organizational performance. More importantly, however, as computer systems used to mostly be a one-time sale, providers' revenue streams were not directly impacted by their customers' subsequent usage (Porter & Heppelmann, 2015). However, this changes under such new usage-dependent business models where companies are challenged to continuously provide value to their customers (Porter & Heppelmann, 2015). Hence, as the revenue of numerous companies across many sectors is and will be increasingly dependent on their customers' actual usage of their offerings (Gebauer et al., 2017), it is highly relevant to create an understanding for the concept of usage and the factors that influence it to ensure that customers can gain value by using the digital services and providers can stabilize their revenues.

1.1 Problematization

The rise of services as a new source of generating competitive advantage has induced a deluge of scientific contributions on services in the past two decades (Bettencourt et al., 2013; Chumpitaz Caceres & Paparoidamis, 2007; Cusumano et al., 2015; Den Hertog et al., 2010; Gebauer & Fleisch, 2007; Kindström, 2010; Nambisan, 2001). Even more recently, the new digital services increasingly gained considerable attention of researchers across many fields

(Bustinza et al., 2018; Lusch & Nambisan, 2015; Porter & Heppelmann, 2015; Sklyar et al., 2019). However, despite the significant increase in scientific contributions on service and digital service, research in the particular context of their usage in B2B still appears to be scarce. A review of existing literature reveals a significant, threefold gap that has yet remained underexplored in academic research.

First, the aspect particularly of digital services which are massively gaining in importance due to digitalization (Barrett et al., 2015) has frequently not yet been considered in usage-related contributions. This deficiency in existing literature was also identified by Lusch and Nambisan (2015) who call for a better comprehension of the concept of digital service usage and its pricing. The scarcity of existing literature in this digital field is not surprising as digitalization is a fairly new phenomenon as the research firm 451 Research (2017) indicates that less than 40% of companies have a clear digitalization strategy. However, as their survey reveals that additionally, more than 50% of companies are already planning their digital transformation or at least consider to do so, a focus on digital service usage might be a promising research avenue to pursue. This is echoed by Sklyar et al. (2019) who in relation to digital services more specifically suggest that future research should attempt to synthesize marketing and information systems (IS) research.

Secondly, many existing contributions investigated service usage in a B2C rather than a B2B setting. This means that these studies particularly emphasized the concept of usage of different types of services that are used by individual end consumers. Among the more prominent types of services that were studied are television entertainment services (Bolton & Lemon, 1999; Son & Han, 2011), online banking services (Bhattacharjee, 2001) and telecommunication services (Prins et al., 2009; Choi et al., 2011). However, with digitalization, also more B2B companies have shifted their business model to a usage orientation with digital services (Porter & Heppelmann, 2015; Sklyar et al., 2019). As this has only recently emerged, this aspect still appears underrepresented in existing literature. Hence, the shift of companies and the consequent increasing importance of digital services would imply that research also in a B2B context might be relevant. A recent study on the adoption of usage of cloud computing services by business customers (Obal, 2017), reveals that the topic of digital service usage appears to already find its way into B2B-related research.

While Obal (2017) is one of few who indeed considers both previously raised deficiencies of the digital aspect as well as the B2B orientation, his study reveals the third part of the

identified gap: the predominant focus of past usage-related studies on the purchasing side (Hameed et al., 2012; Obal, 2017). However, offering pay-per-use or other usage-based services frequently also trigger changes on the provider side such as a change in business model (Kindström, 2010; Sklyar et al., 2019). These business model changes often require providers to adapt new processes or acquire new resources (Johnson et al., 2008) which indicates that customers' usage might be further influenced by factors within the organization of the digital service provider. By seeing factors solely from the customer point of view, the provider has been disregarded at the expense of potentially overlooking vital factors related to this side of the provider-customer exchange. This shortcoming was also noted by Sklyar et al. (2019) who argue that organizational issues of digital service providers have not yet been sufficiently investigated. Moreover, missing the provider side has further led to disregard the relationship formed between the provider and customer which is considered to be crucial under a value-in-use orientation (Vargo & Lusch, 2004).

Summarizing, this shows that to date to the best of our knowledge, a holistic view on factors that influence customers' usage of digital services in B2B from both a customer and a provider perspective is still missing.

1.2 Significance for Strategic Management

Digitalization is becoming increasingly pervasive across all industries triggering significant strategic changes. Citing Jeff Immelt, the CEO of General Electric, who argued that "every industrial company must become a software company", Porter and Heppelmann (2015, p.14) suggest that many companies will increasingly rely on digital components in their offerings as well as shift their business models to increasingly reflect customers' usage. This hints the twofold relevance of this topic from a strategic management perspective. First, for the provider of digital services and second, for the customer of digital services. In the past, as exemplified by Davis et al. (1989), the strategic significance of usage has been particularly recognized in the context of the customer. For a desired benefit of an acquired product or service to materializes, it needs to be used. This usage finally results, for example, in an increase of organizational performance (Davis et al., 1989). However, as indicated above, with digitalization and the rise of digital services, the topic of usage has also increasingly become of relevance for the strategy of providers. This is mostly attributed to the fact that as business models change from one-time product sales to pay-per-use or subscription-based

models, customers will only pay when actively using the service which ultimately makes the revenue dependent on customers' usage (Gebauer et al., 2017). Although arguably, usage has been already important in one-time product sales where usage might influence customer's repurchase decision (Bhattacharjee, 2001), such new business models drastically increase the importance of usage. In contrast to one-time product sales, a customer's discontinuance in usage is more immediately reflected in his revenues as customers only pay for what they use whereas such discontinuance in product sales does not influence the cash flow from a customer to a provider as a one-time payment has been made which is independent of the usage (Gebauer et al., 2017). Hence, understanding possible factors that influence this usage might be of highest relevance for providers and customers attempting to tap into digital services in order to derive future strategies.

1.3 Research Question and Purpose

Building on the background and the problematization of digital service usage, the aim of this thesis is twofold. Firstly, this thesis aims to contribute to academia by addressing the identified threefold research gap of holistic studies on digital service usage in a B2B setting from both the customer and the provider perspective. Secondly, this study seeks to contribute to practice by creating a better understanding of factors that might influence customers' usage. With numerous companies moving into the digital service business, this thesis aims to enhance practitioners' comprehension of this issue which might ultimately enable them to take more informed decisions related to measures supporting usage. For providers, this intends to be of help when maneuvering in a new usage-based logic, while for customers, it should provide insights on how to optimize their usage to maximize the value that they derive from digital services.

Therefore, the purpose of this study is to enhance the understanding of digital service usage by exploring possible factors influencing customers' usage of digital services in B2B settings. To do so, the following research question (RQ) was formulated:

What provider-, customer- and relationship-related factors influence customers' usage of digital services in a business-to-business context?

To address this research question, a single case study of Microsoft Austria as a digital service provider and three of its business customers will be conducted. Further elaboration on the research approach and the case company will be provided in the methodology chapter below.

1.4 Outline of the Thesis

Following the introduction, the literature review firstly aims to create a common understanding of the concept of usage as well as of digital services. Subsequently, literature from several different research areas is synthesized to identify possible categories within which possible factors that influence B2B customers' usage of digital services might be found. The identified categories are finally structured into a preliminary framework which is intended to serve as a template for the subsequent data analysis.

The third chapter then aims to elaborate on the methodology that underlies this thesis. In this chapter, our research approach and design are motivated, before outlining our data collection and analysis. Lastly, there is a reflection on aspects related to reliability, validity and ethical considerations.

The fourth chapter begins with a description of the studied case. Subsequently, the collected empirical findings are presented. At the end of this chapter the findings are blended into an empirical framework of factors.

The fifth chapter seeks to firstly analyze the differences between the preliminary and the empirical framework. Subsequently, the core findings of the thesis will be discussed and put into perspective with existing literature.

The last chapter aims to conclude by explaining the theoretical and practical implications. Moreover, the limitations of this study will be described and possible avenues for future research will be addressed.

2 Literature Review

Webster and Watson (2002) argue that a review of prior contributions to literature is an imperative task for all academic studies. Hence, the following review attempts to create an overview of the existing literature and theories of the field. This should ultimately result in the establishment of a solid theoretical foundation for the subsequent study (Levy & Ellis, 2006). In this process, Webster and Watson's (2002) suggestion to review literature across multiple research fields was adhered to as the chosen topic is highly interdisciplinary. Such a synthesizing approach might help to ensure an appropriate breadth and depth of the review which Hart (1998) considers to be key quality features of literature reviews. Furthermore, this chapter might be seen as a first step aiming to address our research purpose.

While the first synthesis allowed to identify a gap in existing literature and to subsequently derive the introductory stated research problem, the main emphasis of the following literature review will be on the identification of categories within which possible factors might be found. These categories will be clustered in a preliminary framework which will subsequently be utilized as a template (King, 2004) for our data analysis. Moreover, key concepts of this thesis such as usage and digital services will be explained to enable a common understanding. The remainder of the literature review will be structured according to three main areas which have been identified by the synthesis of existing research: the provider, the customer and the relationship. Within those areas, literature is structured again into categories which should help to gain a better and more focused understanding of where potential factors might be located. Hence, the categories aim to break down the broad areas of provider, customer and relationship into smaller, possible sections where more specific factors might subsequently be found in the empirical study.

2.1 Key Concepts

In order to create a common understanding of the key concepts used in this research, the following sections will elaborate on the terms of usage and digital services.

2.1.1 Conceptualization of Usage

The concept of usage is not new in academic literature. In fact, there are a number of studies across different areas that have investigated the phenomenon of usage from various angles. Mostly, they are centered around the fields of IS (Bhattacharjee, 2001; Karahanna et al., 1999), management (Choi et al., 2011; Cooper & Zmud, 1990; Davis et al., 1989; Zmud, 1982) and marketing research (Bolton & Lemon, 1999; Vargo & Lusch, 2004). However, the contributions in these fields have strong interdisciplinary approaches and hence also touch other fields. This is exemplified by Cooper and Zmud (1990) and Zmud (1982) whose contributions originate from general management science but are strongly connected to innovation and IS research. Despite the focus on B2B in this study, there were also B2C contributions reviewed in order to conceptualize usage in its full extent.

One important stream of usage research surfaced in the management of IS domain in conjunction with innovation research. For example, Zmud (1982) studied the diffusion of software practices. He argues that innovation is not only about initiating and adopting a new idea, but particularly about emphasizing its implementation which he describes as a process "such that it [the innovation] becomes ingrained within organizational behaviors" (p. 1422). This view on the concept of usage is closely related to Bhattacharjee's (2001) description of continued use. However, instead of emphasizing the organizational learning perspective when conceptualizing usage like Zmud (1982) proposes, Bhattacharjee (2001) rather emphasizes the temporal dimension of usage. While he also acknowledges the initial adoption of IS as a crucial step, he regards it rather as a prerequisite for continued use. Nevertheless, Bhattacharjee (2001) aligns with Zmud's (1982) view on the importance of the implementation phase as he points out that the success of IS is mainly dependent upon post-acceptance usage which he strictly distinguishes from the first-time use.

While this aspect is also echoed by Davis et al. (1989), they complement the concept of usage by underlining the performance connection that comes with it. In their example of computer systems, they highlight that these systems are initially adopted with the intent to enhance organizational performance. However, for their improvement potential to materialize, actual usage of these systems is central (Davis et al., 1989). Cooper and Zmud (1990) align with the interrelation between performance realization and usage of IS and also suggest that a lack of usage might be a possible reason that a desired performance is not achieved. This line of argumentation from IS research very much correlates with marketing literature and

particularly the concept of value-in-use. Similarly to Davis et al. (1989) and Cooper and Zmud (1990), Vargo and Lusch (2004) suggest that value for a customer can only be created if a product or service is actually used. However, in order to achieve this usage, Cooper and Zmud (1990) suggest a more fine-grained approach by differentiating between acceptance and routinization. While acceptance describes the coaxing of employees into committing to the usage of the new system, routinization represents the process of transforming the usage of this new system into a routine.

Despite the vast prevalence of IS and innovation contributions to usage, the increased confluence of IS and service research has added new insights into the area of usage research. An example is offered by Parthasarathy and Bhattacharjee (1998) who augment the view on the concept of usage by suggesting that the dimension of customers' satisfaction is indicative for their usage. Choi et al. (2011) go even further and suggest that customers' usage is also an indication for repurchase decisions. This interrelationship of customer satisfaction and the prolongation of service agreements is also featured in marketing and particularly in service research. For example, Bolton and Lemon (1999) argue that as customers' future service usage will depend on their individual evaluation of their current experiences, it is imperative for companies providing services to maintain strong relationships with their customers.

Summarizing, the literature review yielded that despite several contributions in the last decades, a commonly accepted conceptualization of usage is still missing. This might be attributed to the fact that many different terms prevail that frequently refer to the same idea. However, this review showed that the concept of usage has been traditionally subject to investigation in the fields of IS, marketing and management research. However, also service and innovation scholars appear to have increasingly gained interest in the subject. Despite the seeming diversity of these areas, the review unveiled that the main attributes of the usage overlap in several respects:

- Usage is temporally located in the time after the initial purchase (post-adoption) (Bhattacharjee, 2001; Choi et al., 2011; Cooper & Zmud, 1990; Parthasarathy & Bhattacharjee, 1998)
- Usage is concerned with the process of a behavior becoming instilled into the daily routine of an organization (Cooper & Zmud, 1990; Zmud, 1982)
- Usage is decisive for the realization of the expected performance (Davis et al., 1989)

- Usage is an indicator for customer satisfaction and, hence, repurchase decisions (Bhattacharjee, 2001; Bolton & Lemon, 1999; Choi et al., 2011; Parthasarathy & Bhattacharjee, 1998)

Hence, this conceptualization of usage which incorporates the most significant cornerstones of usage will subsequently be used throughout this thesis.

2.1.2 Digital Services

Despite a significant increase in contributions, literature appears to have not yet agreed on a common terminology in the area of *digital services*. This is reflected in authors using different names for the same phenomenon. Whereas Barrett et al. (2015) refer to them as Information Communication Technology (ICT)-enabled services and Lusch and Nambisan (2015) call them digitally-enabled services, other authors such as Williams et al. (2008) and Sklyar et al. (2019) rely on the term digital services. However, a possible definition is offered by Williams et al. (2008) who define digital services as: “an activity or benefit that one party can give to another, that is, provided through a digital transaction” (p.507). While this definition addresses one important component of digital services, namely the technology aspect which is also confirmed by other authors (Akaka & Vargo, 2014; Barrett et al., 2015; Ives et al., 2016; Wulf et al., 2017), it misses another vital aspect. This was highlighted by Porter and Heppelmann (2015) who point out that digital services are frequently not only characterized by a digital component but also by a consequent shift towards a service-oriented business model. More specifically, customers rather pay for what they use or need on a subscription or usage basis (Alford & Morton, 2009; Danaher, 2002; Gebauer et al., 2017; Porter & Heppelmann, 2015; Weinhardt et al., 2009). This is particularly relevant for this thesis where the focus is on usage.

The interplay of these two main characteristics of digital services might be best visualized by the example of software offerings. While software offerings inherently fulfil the technology part of the definition, it does not mean that all software offerings are digital services. In fact, software offerings can very well be provided on a license model which rather resembles a one-time payment and, hence, is to be distinguished from a digital service (Porter & Heppelmann, 2015). Only if this software is offered based on a “as-a-service” business model, it complies with the above described second part of the definition of digital services.

Nevertheless, it needs to be highlighted that digital services are not restricted to software-as-a-service but also encompass examples such as cloud computing (Weinhardt et al., 2009).

Summarizing, despite the incoherent naming in research, the term “digital service” will be utilized within this thesis to describe services that are based on digital technologies and offered in usage-dependent or service-oriented business model. Hence, the review of literature will not be restricted to the term of digital service but rather based on whether a contribution adheres to the idea of the chosen definition.

2.2 Provider’s Factors

Although usage-related literature rather focuses on the customer and how he might influence usage (Hameed et al., 2012; Obal, 2017), it might also be of interest to explore categories of possible factors within the area of the provider. That the provider in fact might have a possible influence on customers’ usage is based on the concept of service-dominant logic (Vargo & Lusch, 2004). This idea places the exchange between the provider and the customer at the center and argues that both sides need to co-operate for value creation. While value for the customer is then only created if he uses an offering, a provider is intended to continuously work with the customer on how to best use it in his particular situation (Vargo & Lusch, 2004). Hence, this viewpoint hints that the provider might also take a more active role in influencing customer’s usage and his value creation.

Therefore, in order to arrive at possible provider-related categories of factors influencing customers’ usage of digital service, existing literature in related fields such as marketing, service and strategic management has been reviewed. However, instead of explicitly focusing on usage, the majority of these existing contributions from a provider’s perspective are centered around the development process of new services and the changes that come with it (Den Hertog et al., 2010). As the focus throughout this thesis is on usage which was initially defined as being concerned with the continued use in the post-adoption phase, literature contributions on organizational changes for the development of services might not seem relevant at first. However, a more fine-grained analysis revealed that while these contributions’ focus indeed is on service creation, they also implicitly consider post-development implications such as the expected value creation for customers (Bettencourt et al., 2013; Hinings et al., 2018; Sklyar et al., 2019). Hence, a review of this literature stream

focusing on service creation is considered a reasonable approach for the exploration of provider's categories where possible factors of usage might be found.

2.2.1 Change Management

Literature suggests that with companies moving into digital offerings, their strategy changes as they are becoming more customer-focused. Such a shift in orientation leads firms to put the creation of customer empowerment at the core of their strategy (Andersson & Rosenqvist, 2018). This also aligns with the previously raised marketing perspective of Vargo and Lusch (2004) who stipulate the focus on value-in-use referring to the idea that value is only created for a customer if he actually uses an offering. Hence, one common category of potential factors across literature contributions from the above noted fields relates to organizational change. The underlying assumption of this research is that many companies that move into digital services had a different offering and strategy in the past (Sklyar et al., 2019). Numerous studies particularly on manufacturing firms summarize this process as *digital servitization*. This refers to the transformation a company undergoes when shifting its business model and logic from a product focus to a service focus (Bustinza et al., 2018; Kowalkowski et al., 2017; Sklyar et al., 2019; Vendrell-Herrero et al., 2017). A challenge that comes with this transformation is rooted in a company's administrative heritage. This describes the idea that when companies aspire to undertake a strategic maneuver such as moving into digital services, they are frequently challenged by their traditional organizational configuration in terms of responsibility distributions, values or management styles (Bartlett & Ghoshal, 1987; Sklyar et al., 2019). The same observation was also made in general service research, where the impact of a firm's history is frequently attributed to its path dependency (Den Hertog et al., 2010). Evidence from IS research on incumbent firms embracing digital innovation suggests that when a change away from a company's traditional path is chosen, competing concerns between the existing and newly required prerequisites arise (Svahn et al., 2017). However, despite the relevance of the people-related side for a company's success in moving to a stronger service focus, evidence suggests that cultural change management is frequently neglected by companies (Kowalkowski et al., 2017). This is a problem as Bustinza et al. (2018, p.117) who discuss this change particularly in the context of digital services suggest that a commitment to a new business logic around digital services needs to be embedded in a "change of mind" and "change of practice". In essence, it is frequently concluded that it is managers' responsibility to spearhead the change of the organizational

culture as well as to reshape internal processes and procedures (Bustinza et al., 2018; Svahn et al., 2017). Such a holistic pursuit of change is considered crucial for an organization attempting to offer digital services as it helps to overcome initial tensions and internal conflicts (Bustinza et al., 2018; Hinings et al., 2018).

2.2.2 Organizational Resources and Capabilities

Another possible category of factors is centered around organizational resources, capabilities and competences. The importance of resource allocation when transforming from a product-centric to a service-centric focus has been studied in various contexts and has been recognized in contributions across strategic management (Sklyar et al., 2019; Bustinza et al., 2018; Porter & Heppelmann, 2015), marketing (Den Hertog et al., 2010; Breidbach et al., 2018; Maglio & Spohrer, 2008), and IS (Lusch & Nambisan, 2015) literature. Discussing the development of digital services in a strategic management context, Sklyar et al. (2019) illustrate that for product-centered firms to successfully provide digital services, their flexibility in resource allocation plays a crucial role. While Porter and Heppelmann (2015) and Sklyar et al. (2019) suggest business units should be more closely aligned as the organization for digital services requires stronger cross-departmental collaboration, Bustinza et al. (2018) stress more holistically the aspect of strategic agility. They argue that this agility is considered to facilitate the configuration of the right resources at the right point in time to provide new digital services. A similar proposition is prevalent in marketing and specifically in service research. It is frequently argued that for companies attempting to provide complex services, it is imperative to think and act in an interdisciplinary way. This means people and technologies should be flexibly aligned to the according opportunity that arises (Breidbach et al., 2018; Maglio & Spohrer, 2008). They even argue that a company's flexibility in orchestrating its resources is decisive for the actual value creation for each customer. However, while Maglio and Spohrer (2008) discuss this particularly in a B2B context, Breidbach et al. (2018) come to the same conclusions by a literature review of service contributions of studies on both B2B and B2C firms. Moreover, the exact same topic of the relevance of flexible resource configurations has also been discussed in IS literature. Lusch and Nambisan (2015, p.164) suggest that the ultimate goal in these configurations is to ensure that an offering creates the "best value-in-use for the user in a particular situation". Nevertheless, to achieve that only reconfiguring existing resources might not suffice and it is, hence, suggested that offering digital services also requires to create new roles (Gebauer & Fleisch, 2007; Porter &

Heppelmann, 2015). Porter and Heppelmann (2015) found that the creation of a customer success management unit is typical. They argue that the goal of people working in this team is to ensure that customers continuously get the best value from the usage of a certain product or service.

However, while it is argued that companies should firstly attempt to change internally (Sklyar et al., 2019; Svahn et al., 2017), it sometimes does not make sense to build up certain resources in-house (Porter & Heppelmann, 2014; Svahn et al., 2017). For such cases, it is generally suggested that firms need to look beyond company borders for external partners to support their digital servitization efforts and to ultimately enhance their capabilities (Bustinza et al., 2018; Sklyar et al., 2019). Even though Den Hertog et al. (2010) approach the topic more broadly by defining the concept of dynamic service innovation capabilities, they also note the engagement with external partners as a key dynamic capability in bringing a new service to market. They attribute this necessity particularly to the increased specificity of customer needs which might only be met when a collaboration is entered. Nevertheless, in their study on manufacturing firms undergoing digital servitization, Bustinza et al. (2018) conclude that irrespective of the possibility to rely on external resources for some tasks, a firm must in any case possess resources in the form of tacit knowledge as well as commitment which are seen as enablers for digital servitization. This very much also summarizes the idea of Porter and Heppelmann (2014) and Svahn et al. (2017) who suggest that companies need to assess their internal capabilities and based on that need to find the right balance between internal and external capabilities. Hence, summarizing, the aspect of organizational resources might also be a possible category of factors for customers' usage of a digital service.

However, as this shift in organizational resources and capabilities also means a change in the expected behavior of the individual within the provider organization from a mere focus on securing the sale to the integrative consideration of a customer's success enabled through the usage of a product or service (Porter & Heppelmann, 2015), it might be reasonable to take a look at performance and reward literature. In essence, Kerr (1975) argues that humans strive to do what they will be rewarded for. Hence, it is frequently highlighted that realigning rewards with a newly desired behavior is fundamental to organizational change (Schneider et al., 1996). They illustrate that with an example from production environments. They argue that when an organization is overly focused on maximizing production by rewarding its employees for a number of goods produced, employees will emphasize rather on quantity than

on quality. However, such a reward system is inappropriate if quality should be emphasized. Tuli et al. (2007) echo this same idea and put it into a solution offering context. They argue that if compensation in a firm is no longer exclusively dependent on the sale of a product or a service, but also considers customers' satisfaction with the offering and the implementation as well as the post-adoption support, salespeople are more likely to thoroughly reflect on the subsequent effective usage of a solution. Therefore, Andersson and Rosenqvist (2018) conclude that with a shift in organizational objectives, also individual sales incentives should be adjusted.

Furthermore, Kerr (1975) proposes another incongruity that might ultimately affect customers' usage. It is commonly argued that for a successful offering of services and innovation, it is key for providers to more tightly collaborate internally (Sklyar et al., 2019; Svahn et al., 2017) as well as with external partners (Den Hertog et al., 2010; Svahn et al., 2017). This would mean that teamwork is becoming more important which should hence be reflected in the incentive system to align provider's employees with the usage thinking.

2.2.3 Skills and Competences

Moreover, several contributions agree that on top of the organizational resources and capabilities, the consideration of required changes in capabilities on a more individual level is an imperative aspect when transforming to a service-oriented company. Despite coming from three different fields, Sklyar et al. (2019), Gebauer et al. (2017) and Den Hertog et al. (2010) align in their suggestions that the main objective of the change actions on an organizational level are intended to also prepare the individual employees for the new digital service offering. As empowering customers is becoming more important, it is specifically pointed out that there is a significant need to reconsider what this change implies for the skillset of the individual employees from a human resources management perspective (Andersson & Rosenqvist, 2018; Gebauer et al., 2017; Porter & Heppelmann, 2015).

However, the relevance of a renewed skillset and knowledge basis extends beyond company borders and becomes increasingly important in customer-facing roles when adopting new offerings. A review of literature revealed that particularly marketing, but also a few management scholars have investigated the influence of the increased service orientation of firms on their customer-facing roles. As Edvardsson et al. (2008) suggest that it is imperative for service providers to understand their customers' needs, individuals within the provider

should be able to use this information to translate it into value for the customer (Pöppelbuß & Durst, 2017). Other contributions go even further and point out that it is not only about understanding the potential value for customers, but particularly about the meticulous communication of the value to the customer in the context of his individual situation (Kindström, 2010; Terho et al., 2012). They further suggest that this subsequently allows providers to show the customer that he is well understood and allows to make better suggestions of how a service could be used to support his own business operations. Despite the different contexts of the studies, the strong value orientation suggested by Kindström (2010) and Terho et al. (2012) aligns very much with Vargo and Lusch (2004) and Bettencourt et al. (2013) who argue that services should be created with the intention of helping customers to get a job done instead of the idea of simply aiming to introduce an innovative service per se. In order to be capable of doing so, Porter and Heppelmann (2015) and Nambisan (2001) underline the importance for service providers to thoroughly build up knowledge about a customer's unique situation. However, Payne et al. (2008) add that it does not suffice to build up this knowledge once, but propose that such a new mindset creates a need for constant learning to accumulate an in-depth understanding of a customer's value-creating processes. However, Vargo and Lusch (2004) highlight that if a firm manages to build up this information and knowledge and subsequently applies it to an individual customer, then this can even be a fundamental source of a firm's new competitive advantage.

2.3 Customer's Factors

While the previous section has aimed to create an understanding for possible categories of factors related to the provider, this chapter strives to review existing literature to identify possible categories of factors influencing digital service usage within the customer area. As literature broadly suggests that the customer is the one who creates the actual usage by using the digital services (Hameed et al., 2012; Hernandez-Ortega et al., 2014; Obal, 2017), we consider it reasonable to assume that the customer can actively influence the usage. However, as literature reflecting simultaneously on digital service and its usage in a B2B context is scarce, research from different related fields such as IS, service and innovation research is utilized.

2.3.1 Top Management

A review of existing literature reveals top management as a possible category influencing customer's usage of digital services. Research related to top management surfaces mainly in innovation (Daellenbach et al., 1999; Damanpour & Schneider, 2008) and in IS research (Hameed et al., 2012; Hernandez-Ortega et al., 2014; Karahanna et al., 1999; Thong & Yap, 1995). In the field of innovation research, Damanpour and Schneider (2008) investigate the important role of management support within public organizations. Their study shows that demographics of managers are less significant for innovations to be successfully implemented within one's firm. However, they point out that personal characteristics of top management such as a pro-innovation attitude supports innovation in an organization. Moreover, management's commitment towards innovation is another critical aspect (Daellenbach et al., 1999). Hameed et al. (2012) add the educational level or the involvement of the CEO to the list this list of characteristics. Whereas they specifically address the CEO, other research takes a broader view and elaborates on the general top management support (Damanpour & Schneider, 2008; Hernandez-Ortega et al., 2014; Karahanna et al., 1999). However, despite their narrow naming, Hameed et al. (2012) refer to the same phenomenon similar to the other researchers. According to further research, small businesses particularly benefit when their managers are innovative, possess knowledge about information technology (IT) and endorse the new IT system (Thong & Yap, 1995). Karahanna et al. (1999) study top management in a financial setting and emphasize a further task of management, namely to be a role model for employees to increase the usage of newly adopted IT systems. This view is further extended by Hernandez-Ortega et al. (2014) who state that the top management's role is to allocate appropriate resources to the respective project.

2.3.2 Motives

Synthesizing the existing literature revealed that another category that is frequently discussed in research refers to the motives of organizations leading to an adoption of IS (Grewal et al., 2001; Obal, 2017; Son & Benbasat, 2007). In general, the term motive relates to the reason why companies decide to adopt something in the first place which is argued to either influence the later usage in a positive or negative way. Research on motives originates from the field of IS adoption in the specific context of usage in B2B marketplaces where depending on the motives to participate in such marketplaces, the later intensity of usage may be

predicted (Son & Benbasat, 2007; Grewal et al., 2001). However, research about how motives might influence the subsequent usage is contradictory. In fact, to determine the influence of usage, motives are distinguished into efficiency- and legitimacy-oriented ones (Son & Benbasat, 2007). Whereas the first relates to the motivation of increasing efficiency, the latter describes a motivation which is basing adoption on mimicking competitors. Although such legitimacy-oriented motives positively correlate to the initial adoption, they do not result in usage (Son & Benbasat, 2007). The reason for this might be found in customers who are frequently giving in to the pressure imposed by other actors. Such behavior may lead to an adopted technology which is a poor fit for the company and hence is not being further used (Obal, 2017). However, Obal (2017) contradicts previous research by adding that the pressure imposed by actors such as competitors might not impact usage negatively. While literature on legitimacy-oriented motives remains divided, research indicates that efficiency-oriented motives lead to higher usage (Son & Benbasat, 2007). The reason for this correlation is that companies seeking to increase efficiency have sought more information beforehand which increased the likelihood of satisfaction after the initial adoption and resulted in higher usage rates (Obal, 2017).

2.3.3 Individual End-User

Numerous studies focus on the individual end-user as a category where possible factors influencing usage might be found (Bhattacharjee, 2001; Parthasarathy & Bhattacharjee, 1998; Bolton & Lemon, 1999; Choi et al., 2011). In this context, Cooper and Zmud (1990) and Zmud (1982) defined usage as a behavior that incorporates IS in routines and therefore leads to usage. Conceptualizing usage from this individual behavioral point of view has led research within the realm of usage to build on various theories originating from the field of psychology (Swanson, 1982). Hence, research about the individual end-user builds on the premise that the usage of an IT system might be broken down to the use of the individual end-user. This individual point of view is naturally strongly reflected in B2C studies (Bhattacharjee, 2001; Davis et al., 1989; Kim & Malhotra, 2005; Premkumar & Bhattacharjee, 2008; McKinney et al., 2002; Son & Han, 2011). The most prominent model explaining the usage of individuals is the Technology Acceptance Model by Davis (1985). According to the model, the perceived ease of use and the perceived usefulness of an IT system influence the later usage. The perceived usefulness is described as the impact of using an IT system on one's job performance. Accordingly, if one's individual performance will increase, the person is more

likely to use the IT system. Whereas this rather focuses on the outcome of usage, the perceived ease of use emphasizes the process of using an IT system as it defines the effort required to use it (Davis et al., 1989). The significant importance of the individual end-user prevailing in B2C has influenced researchers to study the individual end-user also in a B2B context (Hameed et al., 2012; Karahanna et al., 1999). It is argued that the individual employee within the firm who is using the IT system will consequentially influence usage. However, although tested in a B2B setting, the models utilized to explain the behavior of the individual end-user remain similar to the psychological models prevailing in B2C research. Karahanna et al. (1999) tested aspects as originally proposed by Davis et al. (1989) and show that findings from B2C models generally also apply in the B2B context. A literature review of Hameed et al. (2012) further cites the individual end-user as an important aspect on the way to usage. In this study, the individual end-user is claimed to become important in the implementation phase which is considered to follow the adoption phase. It is specified that the implementation encompasses the roll-out of the IT system which should enable individual end-users within the organization to use the respective system and subsequently lead to usage (Hameed et al., 2012).

2.3.4 Organizational Readiness

Another possible category of potential factors influencing usage is the organizational readiness. Studies about organizational readiness primarily focus on the adoption and usage of IS (Grandon & Pearson, 2004; Iacovou et al., 1995; Jeyaraj et al., 2006; Mehrtens et al., 2001; Zhu & Kraemer, 2005). Organizational readiness is defined as the financial and technological resources which were found to be important in the implementation and usage of IT systems (Iacovou et al., 1995). Financial resources are described to be crucial as they are required for various different activities. For example, Davis et al. (1989) elaborate on aspects such as trainings which are necessary to enable the individual end-user the usage of the system. Hence, to offer such trainings, financial readiness is required. Hernandez-Ortega et al. (2014) echo the importance of financial resources while adding that top management is required to authorize the spending of resources on such trainings. Additionally, financial means are required to cover further implementation costs, usage fees or other ongoing expenses (Iacovou et al., 1995).

However next to financial means, organizational readiness further refers to the technological resources which are “concerned with the level of sophistication of IT usage and IT management” (Iacovou et al., 1995, p.469). The term technological resources is used in different contexts. While Grandon and Pearson (2004) relate the term to the infrastructure of a firm, Zhu and Kraemer (2005) shift the focus from physical IT equipment to the skills and competencies of the IT employees. They argue that human resources in IT are required to have knowledge on how to implement the respective IT system. Having such competencies in the IT department is also referred to as the professionalism of the IT unit (Jeyaraj et al., 2006). However, further research extends the competencies from the IT department to the individual employee who is not necessarily part of the IT department (Mehrtens et al., 2001).

2.4 Relationship’s Factors

The literature review yielded that many of the contributions across several fields highlight the importance and change of the nature of relationships when it comes to becoming more service-oriented and digital (Obal, 2017; Kindström, 2010; Porter & Heppelmann, 2015; Sklyar et al., 2019). However, in general the aspect of relationships between firms has long been acknowledged in B2B. Particularly through the rise of relationship marketing, the relational aspects in provider-customer connections have gained importance both in practice and academia (Gummesson, 1998). Hence, as the relationship represents the connecting link between providers and customers of digital services, we consider it a valuable area to review for the exploration of possible factors that influence usage.

2.4.1 Trust and Commitment

A synthesis of several contributions revealed that traditionally a good relationship in B2B is predominantly characterized by trust and commitment (Garbarino & Johnson, 1999; Han et al., 1993; Morgan & Hunt, 1994) which might be a possible category of usage-related factors. Particularly the aspect of trust seems to play an interesting role for digital service usage. Morgan and Hunt (1994, p.23) conceptualize “... trust as existing when one party has confidence in an exchange partner’s reliability and integrity”. Similarly, it is also commonly argued that trust is rooted in the belief of one party that the other party will not act self-interestedly and only engage in activities that will create a positive outcome for themselves (Anderson & Narus, 1990; Chumpitaz Caceres & Paparoidamis, 2007). Elaborating on this

topic from a transaction cost perspective, Morgan and Hunt (1994) agree with this line of argumentation and suggest that this in turn means when one of the partners believes that the other one acts opportunistically, trust will inherently decrease. This traditional understanding of trust in B2B relationships represents one aspect of trust for digital services. However, besides this trust on a more interpersonal level, literature particularly on digital services introduces another level of trust which is related to security matters. It was found that business customers were frequently concerned with data protection and security matters connected to cloud-based digital services (Sklyar et al., 2019). This was also identified by Hernandez-Ortega et al. (2014) who argue these security-related concerns are indicative for customers' usage. Hence, they suggest the implementation of a clear security policy between the two parties which is intended to enhance customer satisfaction, the mutual trust and ultimately their usage.

Moreover, commitment also plays a crucial role in B2B relationships and refers to the situation when a partner attributes a sufficiently high portion of importance to a certain relationship such that he considers it worth maintaining and is willing to make an investment into it (Chumpitaz Caceres & Paparoidamis, 2007; Gounaris, 2005; Morgan & Hunt, 1994).

2.4.2 Intensity

The literature review yielded that the intensity of the relationship between provider and customer and the contact frequency between them increases when shifting towards a service orientation. In the context of traditionally product-based companies moving into the provision of smart and connected offerings, it is for example argued that their interaction and relationship with their customers change and become more “continuous and open-ended” (Porter & Heppelmann, 2015, p.4). Sklyar et al. (2019) and Kindström (2010) align with this increased relevance of a more intensive provider-customer relationship and add that the nature of services or digital services even makes this new type of interaction necessary. It is explained that service providers need to be capable of building stronger relationships with their customers in order to get a better understanding of their individual situation (Kindström, 2010; Terho et al., 2012). They add that this enhanced picture of the customer is in turn needed to be able to visualize the individual value for the customer. The importance of doing this properly is underlined by the fact that Valtakoski (2017) found that a misunderstanding of a customer's actual need is one main reason for new services to fail. This approach and

understanding of value creation is deeply rooted in the concept of service-dominant logic and value-in-use which has been extensively discussed in marketing literature. Vargo and Lusch (2004) and Vargo and Lusch (2008) who are frequently referred to as the initial contributors to this new paradigm argue that a provider can never deliver value to a customer, but can only make value propositions. In their argumentation, they point out that this is the case due to the strong contextuality of value where value is only determined based on a customer's value-in-use. As they regard value as being highly idiosyncratic, they suggest that value creation is fundamentally based on interactions between providers and customers. They describe this process as the co-creation of value. This intensive collaboration of provider and customer to create value essentially extends beyond the sale and specifically incorporates actions so that customers can learn how to best use a service or product for their individual situation.

2.5 Preliminary framework

The literature review yielded three main areas within which possible factors influencing digital service usage in B2B might be found: the provider realm, the customer realm and the relationship realm. Moreover, it was identified that within each realm, there are several categories within which possible factors might be found (Figure 1). These areas and categories which present the basis for the preliminary framework have materialized by synthesizing previous literature predominantly from IS, strategic management, innovation, service and marketing research. With this approach of defining areas and categories, this study attempts to adhere to the often referred delicate balance between being too narrow and being too broad in defining the different elements of a template or preliminary framework (King, 2004).

However, while the integration of these fields allowed to identify categories within which more specific factors influencing digital service usage in B2B might be found, it is crucial to acknowledge in line with King (2004) the preliminary nature of these areas and categories and the exploratory character of this research. This is particularly important in light of the diverse research areas which have been synthesized. While this approach has allowed to gain an overview of potential categories of factors, the reviewed studies have frequently had a particular focus and were conducted in a different context. For example, as indicated throughout the literature review, many contributions emphasize either services or IS or either the customer or the provider. More specifically, for example, it has been noted that research

utilized for elaborating on possible factors on the provider side often originates from the manufacturing industry (Bustinza et al., 2018; Sklyar et al., 2019) where the concept of digital servitization plays a key role. This setting differs from the context of this research which will elaborate on a provider in the software industry. While the use of such literature is still considered legitimate due to the similarity of change in both industries from a product- to a service-centered strategy, the different settings need to be acknowledged and changes or revisions to the preliminary framework are likely to be required. On the customer side, as indicated, some findings are based on literature drawn from a B2C context which has later been applied to a B2B setting. While, Hameed et al. (2012) and Karahanna et al. (1999) have utilized B2C findings for B2B research, it might be argued that the difference between an individual person or a firm as a customer might still lead to changes in the final factors.

Hence, this literature review again underlines the identified research gap that previous studies have frequently not taken a holistic view on digital service usage in B2B from both the provider and customer perspective. This leads us to believe that while research being concentrated on one aspect might enhance the depth of the study, this narrow focus might have been at the expense of overlooking vital factors which might arise in the particular combination of digital service usage in B2B. Therefore, while the chosen literature and the revealed potential categories of factors might help to provide a direction for the data analysis and the exploration of possible factors, they are to be distinguished from being final.

Summarizing, the literature reviewed allowed to build an understanding of the existing body of knowledge and to subsequently develop a preliminary framework which will be confirmed, contradicted or extended by the empirical data (Figure 1).

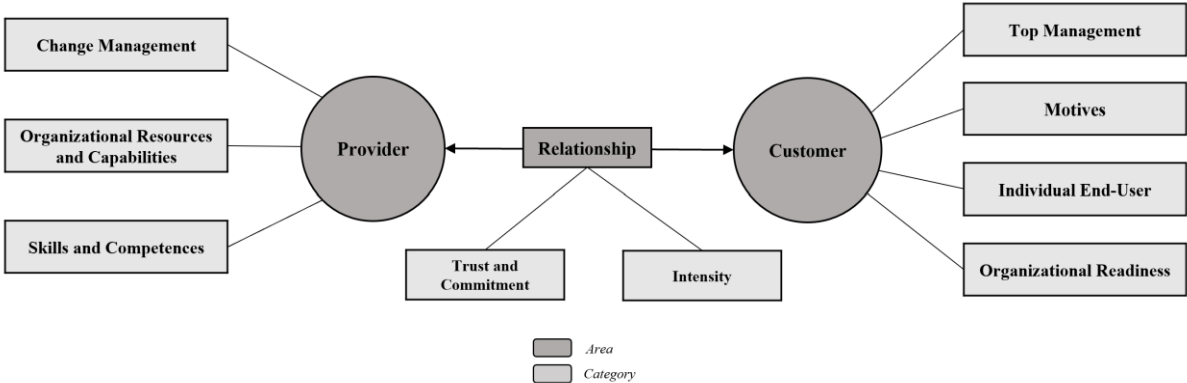


Figure 1 - Preliminary Framework of Possible Factor Categories influencing Usage of Digital Services (created by authors based on literature review)

3 Methodology

This chapter intends to elaborate on the methodology chosen to address the research question and fulfil the purpose of this thesis. At the beginning, the focus will be put on the research design while reflecting on advantages and disadvantages of the respective approach. Moving forward in the research process, the data collection method will be explained and the choice of the case company will be motivated. Another section will discuss the process of data analysis to explain the steps taken to convert the gathered data into findings which address the predefined research questions. Following those insights, it is crucial to reflect on the validity and reliability of the chosen methodology to assess the quality of the study. Moreover, ethical considerations will be pointed out.

3.1 Research Approach and Design

Saunders (2011) highlights that the research design might be thought of as the plan which explains how the research question is going to be addressed. Accordingly, the author further underlines the importance to first understand the research question and its nature to derive an adequate and appropriate research design. Relating to this approach, we aim to first reflect on the research question which has been defined in line with our purpose of enhancing the understanding of digital service usage by exploring possible influencing factors:

What provider-, customer- and relationship-related factors influence customers' usage of digital services in a business-to-business context?

This research question has been based on the identified literature gap lacking to address the phenomenon of usage in the specific context of business-to-business digital services. As Creswell (2014) indicates, a lack of previous research frequently results in the need to explore which subsequently further needs to be reflected in the research design. Hence, to address the research questions adequately, a qualitative research design has been chosen. According to Robson (2002), such an approach is particularly valuable to understand underlying aspects behind a phenomenon. In the context of our research, we see this particularity of building an

understanding for the phenomenon of usage and the related factors as crucial to adequately address the research question and purpose at hand and make valuable contributions. Whereas those arguments support the choice of a qualitative research design by correlating the nature of the research question and problem with the characteristics of a qualitative research design, it is further important to elaborate on the reasons for precluding a quantitative approach. Morse (1991) indicates that not all research problems are suitably addressed by quantitative research. Creswell (2014) defines a quantitative approach as adequate if the research intention is to further understand variables or factors influencing an outcome. Therefore, Creswell (2014) further highlights that it is prerequisite for this approach to know the variables or factors under study in advance. This precludes a quantitative research design as variables and factors are not exhaustively known a priori in this case. This is a result of previous literature which has lacked to look in a holistic manner on digital service usage in B2B from both the provider and customer perspective as described in the problematization. This might have been at the expense of overlooking factors and leads to the need to explore possible additional factors previously overseen in literature. However, while a qualitative research approach allows to explore new factors, it is important to be aware that due to this research design the factors are not quantitatively tested. Hence, this means that the relationship between factors and usage is not going to be quantitatively tested which is subject to further research.

The described qualitative research design shows that a deductive approach is not applicable as it is aiming to test theory-generated hypotheses (Bryman & Bell, 2011). However, as it has been already explained, previous literature might not suffice to generate such testable hypothesis. Additionally, such an approach does not allow for the exploration of new factors. However, an inductive approach might not be adequate either as it aims to generate theory based on empirical data (Bryman & Bell, 2011). For the purpose of this study, such an approach is believed to disregard previous literature which might, despite being in a different context, have some valuable implications and provide some direction. Hence, as both approaches are not regarded as suitable, an abductive approach might offer a valuable alternative. According to Dubois and Gadde (2002), an abductive approach consists of systematically combining both the literature and theories with empirical data. Such a research approach allows to utilize existing literature while still having a degree of flexibility to further explore possible factors.

Within the realm of qualitative research designs, an exploratory single case study approach is chosen. This research design is deemed appropriate for the research problem at hand as it fulfills the following three conditions for estimating the adequacy of a case study approach proposed by Yin (2003). First and foremost, the proposed research question seeks to explore factors rather than to define the magnitude of the impact those factors have on usage. Second, the focus of this study relates to a contemporary phenomenon which, third, cannot be manipulated by investigators.

However, besides fulfilling the respective general criteria, a single case study offers further advantages which have resulted in its choice. Bryman and Bell (2011, p.60) emphasize the holistic view that results from a case study as "the focus [is] on a bounded situation or system, an entity with a purpose and functioning parts". This characteristic is deemed particularly valuable for the research problem at hand for the following reason. An extensive literature review yielded possible areas and categories of factors which are spread across a variety of different levels such as factors related to the provider, the customer and the relationship between the two. Hence, the chosen research method is required to reveal possible factors on each level which in line with Bryman and Bell (2011) might be achieved by utilizing the strengths of a case study. Another characteristic of case studies refers to the boundary between the phenomenon itself and the context. Yin (2003) emphasizes the important role of the context which might not be clearly separated from the phenomenon. Although the separation of the context is desirable in other research methods such as experiments where researchers aim to limit the controlled variables (Yin, 2003), we see the intertwining of the phenomenon and context as beneficial. More specifically, understanding the context might further support the comprehension of various factors and the reason why they arise. Seeing those factors as stand-alone and without the context they occur in might be hindering the revealed findings. Due to the holistic nature of our study where both a provider and his customers are jointly investigated, these contextual aspects might be of particular relevance.

Despite the mentioned strengths of a single case study approach, it is crucial to further reflect on some of the limitations related to the respective approach. Although validity and reliability issues will be discussed in more detail in a later section, one prominent limitation of a single case study refers to the number of cases. Herriott and Firestone (1983) highlight the strength of a multiple case study as their findings are less prone to be particular to one company. While we are aware of this limitation, the possibility to focus on one case in more detail is

considered to be compensating this potential weakness. Specifically, in our studied case where both the provider and the customer are considered, these more detailed insights resulting from a single case study might even be beneficial. Another limitation originates from one of its major advantages. Miles (1979) points out the drawbacks of the rich data that might be collected in the course of a case study. According to the author, researchers are required to carefully consider the relevancy of data and its associated conclusions. Despite the potential pitfall of a rich set of data, this weakness is simultaneously an integral part of the exploratory nature of the conducted research as it allows to discover possible factors in diverse areas. To counteract this tendency, we have decided to solely include factors in our empirical results which have been addressed by at least two respondents.

3.2 Choice of Case Company

While the previous chapter has elaborated on the choice of a single case study and the reasons why it is appropriate to address the research question and fulfil the purpose, this section aims to discuss the choice of the case company. The chosen case is the case of the company Microsoft Austria GmbH (referred to as Microsoft) and three of its customers who are using their digital services. This case has been deemed particularly relevant to study for several reasons. First, Microsoft is a provider of digital services to business customers which aligns with the setting of this research. Second, as the company offers their customers digital services where they only pay for the amount they use (Microsoft, 2019a), the usage plays a critical role as it directly impacts the firm's revenue. This aligns with the aspects discussed in the introduction where earnings of companies are often directly linked to the usage of the digital services (Gebauer et al., 2017). Third, the case of interviewing both Microsoft as the provider of digital services and the selected customers ensures that different perspectives can be compared on the same matter. This is enabled by a direct customer-provider relationship and seen as favorable compared to interviewing customers using digital services regardless if Microsoft is the provider. Moreover, this addresses the identified research gap of studies focusing on either the customer or provider without adopting a holistic view.

3.3 Data Collection

The data of the case is collected by conducting semi-structured interviews and using publicly available documents. Semi-structured interviews have been chosen as they allow for being flexible while still following certain areas which the literature review and the derived preliminary framework have indicated as being important (Bryman & Bell, 2011).

In total, nine interviews have been conducted, five of which with employees of Microsoft. These provider respondents have been selected according to the criteria if they have insights related to the usage of digital services and have been contacted via e-mail and phone. The link between the respondents and the usage of digital services has been noted in Table 1. Whereas some have been contacted right at the beginning of the research, one interviewee has been referred to us by others as they indicated that the interviewee's position is particularly relevant for the aspect of usage.

On the customer side, four interviews have been conducted with one or two employees of each customer organization. The interviewees have been chosen based on four criteria which have been pre-defined by us in order to ensure the suitability of the respective interviews for addressing the research question. First, the interviewed customers have to be business customers to guarantee a B2B setting. Second, the respective customers have to use digital services rather than other products such as personal computers which are also in the portfolio of the studied provider. Third, the interviewees have to have specific knowledge about the digital service, its role in their company, the usage and how the roll-out of the digital service has been conducted in order to provide information that is valuable for addressing our research question. Fourth, the initial digital service adoption has to be between six to twelve months. This should ensure that the time period between adoption and the date of the interview is sufficient for building up usage. Hence, a customer having adopted digital services shortly before the interview might not have the right insights. However, time between adoption and interview should further not exceed 12 months in order to guarantee that knowledge about the implementation of the digital service and the subsequent usage is still available in the company. Those criteria have led to five possible customers fulfilling the requirements which have been contacted via e-mail and phone. Out of those, three customers and in total four interviews have resulted. At one company two interviews have been conducted as the first interview revealed that this customer is using two different digital

services. Hence, another interviewee has been able to provide us with further insights into the other type of digital service the company uses. After four interviews with customers and five with Microsoft, the information received has reached a certain level of saturation possible within the constraints of this research and made us feel confident to address our research question adequately. However, it has to be remarked that further interviews might have led to additional insights.

The semi-structured interviews have been conducted both face-to-face but also via Skype video calls due to the geographical distance to the companies. On average, the interviews lasted between 30 to 45 minutes. Both of us have been present in the interviews which have been recorded after the consent of the interviewees has been given. This has enabled us to focus fully on the interviews rather than concentrating on taking notes simultaneously. During the interview, an interview guide has provided areas that should be covered by stating various questions which are provided in Appendix A, B and C. The interview guides have been adapted to both the provider and customer side to suit the questions towards the individual. Moreover, different interview guides have been created for managers and customer-facing roles at Microsoft to further adapt to the insights the respective respondents might give. Those guides are seen to adhere to the call of Yin (2003) proposing to document important aspects of the research process to enhance reliability.

Table 1 - List of Respondents of Semi-Structured Interviews (created by authors)

	Position (Company)	Link to Digital Service Usage	Via
Provider	Leadership Team Member (Microsoft - managerial position)	Knowledge about the change initiative creating a usage focus within Microsoft from a managerial perspective	Face-to-face
	Head of Transformation (Microsoft - managerial position)	Knowledge about the change initiative creating a usage focus within Microsoft and direct customer contact in a consulting role	Face-to-face

	Account Manager (Microsoft)	Direct customer contact and knowledge about how Microsoft can support the usage	Face-to-face
	Sales Professional (Microsoft)	Direct customer contact and knowledge about how Microsoft can support the usage	Skype
	Customer Success Manager (Microsoft)	This post-sales role is solely dedicated to enabling and creating post-adoption usage at the customer	Skype
Customer A	Senior Project Manager Digital Technologies (Mining and metals company)	Involved in the process of adopting and implementing Microsoft's digital services	Skype
Customer B	Head of Business Intelligence (BI) and Artificial Intelligence (AI) (Manufacturing company*)	Involved in the process of adopting and implementing Microsoft's digital services	Skype
	Head of Digital Services (Manufacturing company*)	Involved in the process of adopting and implementing Microsoft's digital services	Skype
Customer C	Head of Business Development Apps and Digital Entertainment (Media and telecommunication company)	As an individual end-user using Microsoft's digital services within the company	Skype

*) same company

3.4 Data Analysis

Upon data collection, the data is going to be analyzed. Creswell (2014) attributes an important role to the data analysis as it helps in making sense of the collected data and therefore, serves as an input for the following results and discussion. However, to act as valuable input, useful data needs to be identified to avoid the pitfall of including irrelevant data into one's later discussion and results (Bryman & Bell, 2011). Despite the importance of this step, Bryman and Bell (2011) further point out that compared to quantitative research, qualitative research has not agreed on one commonly accepted approach to analyze the respective data. Therefore, different approaches towards the data analysis are possible (Saunders, 2011).

In this research, the data is analyzed using a template approach as proposed by King (2004). According to the author, such an approach does not explicitly refer to a single technique, but rather to a group of them. As the name indicates, at the core of a template analysis lies a so-called template which consists of different codes. A particularity of such a template analysis is the process which does not start with the data analysis but rather commences already in earlier stages of the research process. The reason for that is the template which is developed a priori to the collection and analysis of the data (King, 2004). More specifically, in this research, the literature review served as a valuable input to identify possible codes which are presented in the preliminary framework (Figure 1). In this context, King (2004, p.257) defines a code as "a label attached to a section of text to index it as relating to a theme" which will be first developed in the initial template.

The developed framework acts as the template utilized for the subsequent data analysis. King (2004) further describes that the collected textual data will be organized according to the predefined codes. However, this pre-defined template is not to be seen as final as the process of analyzing the data will likely lead to modifications of the template. Following King (2004), the data analysis might reveal inefficiencies of the template in assigning the data to adequate codes. In line with this suggestion, we might be required to insert and delete certain codes, as well as change the scope or the higher-order classification of codes. Going back and forth between the template and the collected data will lead to a final template as soon as the researchers are able to allocate all collected data to a specific code (King, 2004).

The reasons for choosing a template analysis are manifold. Saunders (2011) highlights that the initial template which is developed based on existing literature helps to place the findings more adequately in the existing research body. Moreover, the initial template provides an initial starting point for the data analysis which will support researchers in the process (Saunders, 2011). Additionally, we also King's (2004) description of the ability to compare various views of different interviewees with each other as a main strength of this approach to data analysis for our case as data will be collected from several different interviewees holding different positions within the companies. Despite the strengths of template analysis, some weaknesses need to be addressed. Critics highlight the difficulty to strike the delicate balance between having an initial template which is too loosely defined or too complex. Both scenarios hinder the researcher to derive valuable and manageable findings (King, 2004). Although finding this balance may be a challenge, we anticipate that our definition of categories rather just stating the areas in the preliminary framework helps to manage this issue. Further critics describe the process from developing an initial framework until arriving at the finalized codes as blurry and inscrutable (Huberman & Miles, 2002). In order to compensate for the respective weaknesses, we aim to document the different predefined and final codes and correlated reasons for defining them. This will enable the readers to comprehend the process and hence compensate for the mentioned weakness.

While those arguments elaborate on the reasons for choosing a template analysis, we have not yet discussed arguments why other possible data analysis techniques have not been selected. Another frequently used approach to data analysis that might have been applicable for our case is grounded theory. This technique does not define a template a priori based on existing research but rather aims to solely base different codes on the data (Bryman & Bell, 2011). However, Bulmer (1979) questions the ability and usefulness of building theory without considering the existing body of knowledge in an initial template. Additionally, in line with Saunders (2011) we believe that precisely this pre-defined template supports us in better analyzing the rich and complex data.

3.5 Validity and Reliability

The validity and reliability of a study are essential aspects of any research design (Creswell, 2014). According to Bryman and Bell (2011), although authors agree on the importance of

those concepts, different scholars are emphasizing different nuances of validity and reliability. Those nuances and definitions are particularly diverging for various research designs and therefore authors are placing different importance and meaning to validity and reliability depending on the respective research method (Bryman & Bell, 2011). Building on those insights, the concept of validity and reliability in this study will be based on research particularly focusing on case study research. As a renowned advocate of the case study approach, Yin (2003) adapts four criteria to estimate validity and reliability of such case studies: construct validity, internal validity, external validity and reliability. Whereas internal validity is only applicable to explanatory case studies, the remaining criteria are of relevancy for this study.

Construct validity refers to the definition of key concepts and terms of the study. Yin (2003) specifies that such a definition is essential as it enables the reader to understand the most important terms in order to judge whether the utilized measures are measuring what they intend to. To be more specific, construct validity in this thesis might be related to the key concepts of usage and digital services. The elaboration of both aspects in the literature review should enable readers to grasp both concepts and judge whether the adopted research design supports the endeavor of addressing the research question.

External validity is arguably the most commonly discussed criteria for judging the quality of a case study and basis for many critics questioning a case study's ability to provide generalizable findings (Yin, 2003). Arguably, external validity is not the main concern in a single case study as it rather focuses on understanding a case in-depth than prioritizing its generalizability (Bryman & Bell, 2011). Nevertheless, despite external validity being less important in case studies than in other research methods, we do follow Creswell's (2014) recommendation to incorporate multiple strategies to ensure a certain degree of external validity. More specifically, strategies such as data triangulation or descriptions will be utilized. According to Creswell (2014), triangulating data from several sources and perspectives will aim to add to the validity of the case study's findings. We attempt to adhere to this suggestion by asking both provider and customer respondents also on influencing factors of each other. Moreover, we interview at the provider people from different hierarchical levels which further aims to improve this aspect of validity. Another strategy to ensure external validity will rely on providing a rich description of the case which will enable the reader to understand the specific context of the findings.

The third quality criterion of case studies relates to the reliability of the findings and to ensure similar results if the same case study is done again. Specifically for case studies, Yin (2003) suggests to document various steps of the research process. This procedure will help other researchers to reconstruct the case study at a later point and to ensure similar results. We have adhered to this principle by elaborating on the various steps taken within this chapter, but also by providing the respective interview guides in Appendix A, B and C.

3.6 Ethical considerations

Bryman and Bell (2011) have mentioned four important ethical considerations which need to be taken into account. Accordingly, in this section such ethical considerations will be addressed and the measures taken to overcome them will be explained. One of the ethical principles concerns the harm to participants. More specifically, such harm might be caused on different levels such as exposure to stress or damage to a participant's career. To avoid such harms, several measures have been taken. The participants' identities have been anonymized by in accordance with interviewees solely stating their slightly amended job title. Additionally, to being anonymized, statements of the interviewees have been offered to be sent to the respective respondent to check for any harmful quotation. To also adhere to the confidentiality of the interviewed customer companies, we anonymized them by solely referring to their industry. Moreover, to avoid stress for the participants, the interview has been conducted according to the interviewee's preference either face-to-face in their workplace or via video or phone call. Another critical ethical issue relates to a lack of informed consent. To counteract this aspect, already in an initial contact, interviewees have been informed about the setting and the purpose of the research. At the beginning of each interview, information about the research has been repeated to give participants another chance to opt-out. Hence, the level of information given to the participants is deemed as adequate to avoid ethical issues related to the lack of informed consent. When stating information related to research setting, it has been paid attention to the ethical consideration of deception which refers to presenting research differently than what it is in reality. Additionally, to avoid invasion of privacy, interviewees had the possibility to refuse to answer certain questions. However, no interviewee has denied to respond to specific questions.

4 Empirical Results

This chapter firstly seeks to introduce the studied case and provides an overview of the empirical findings collected from nine semi-structured interviews and publicly available company-related documents. The gathered data has been analyzed using the preliminary framework as a template which has been revised during the process of the data analysis. Hence, the preliminary framework has been modified and further developed to best represent the respondents' statements. The finalized empirical framework encompassing factors influencing the usage of digital services in a B2B is shown in Figure 2 at the end of this chapter. Whereas the areas of provider, customer and relationship factors have been found to also represent the views of interviewees, some categories have been added to, modified in or subtracted from the preliminary framework. As intended, the empirical results allow to go one step further than the category level meaning that the categories have been extended by offering more specific final factors influencing digital service usage. To avoid an excessively high number of final factors, solely factors which have been mentioned by at least two interviewees have been included. Summarizing, this chapter plays a crucial role in addressing the research question of which factors related to the provider, customer and their relationship influence the usage of digital services in B2B. However, it needs to be noted that while this chapter focuses on the empirical data, the following chapter will put the findings in perspective to literature and discuss the reasons for the decided modifications of the framework.

4.1 Case Description

The origin of Microsoft dates back to 1975 when the company was founded with the intent to bring a PC to every desk and into every home (Hill, 2017). However, while the US-based company started as a computer manufacturer, its growth had been based on software particularly its operating system Windows and its productivity suite Microsoft Office (Lohr, 2018). For this study it is particularly important to note that more recently, Microsoft has shifted its strategy and mission by emphasizing the cloud business and thereby enabled digital

services (Hill, 2017). Several interviewees attributed this shift to the inauguration of Satya Nadella as the new chief executive officer of Microsoft. In line with Microsoft's renewed mission to "empower every person and every organization on the planet to achieve more", the interviews indicate that Microsoft attempts to position itself as an enabler of "digital transformation for the era of an intelligent cloud and an intelligent edge" (Microsoft, 2019c).

In this study, however, a particular focus is placed on Microsoft Austria which is one of approximately 120 countries with a Microsoft subsidiary (Microsoft, 2019c) and will be subsequently referred to as Microsoft. It has about 340 employees and more than 5,500 domestic partners (Microsoft, 2019d). For better understanding the context of the case, it is important to note that the organization of Microsoft Austria has a strong focus on sales and marketing (Microsoft, 2019b). This means that while products, services and solutions might indeed be locally adapted to a given customer, no new digital services are developed in this subsidiary.

As this research focuses on digital services, it is important to explain the digital services offered by the case company. Microsoft offers a variety of digital services, however, the main focus in this study is on its digital services related to the so-called modern workplace and its digital services centered around its cloud platform Azure. While modern workplace services include applications such as Office 365, the business intelligence and reporting tool PowerBI and the collaboration and communication tool Teams, Microsoft's cloud platform Azure provides numerous digital services ranging from data storage to artificial intelligence (AI) and internet of things (IoT). The pricing of such digital services is often based on usage where customers only pay for what they use (Microsoft, 2019a). This accentuates the importance of usage for the case company which has been further emphasized by the interviewees.

To adhere to the purpose of the study to enhance the understanding of digital service usage by exploring possible influencing factors, three of Microsoft's business customers are studied in addition to Microsoft itself to explore such possible factors. As described in Table 1, the three companies are operating in different industries which visualizes the cross-industry relevance of these digital services. The manufacturing company has been interviewed about digital services they have in place which are both – digital services related to the modern workplace and digital services related to the cloud platform. The mining and metals company utilizes digital services related to the cloud platform, while the media and telecommunication company uses digital services related to the modern workplace.

4.2 Provider's Factors

The following sub-sections present the findings collected from the conducted semi-structured interviews that relate to the area of the provider. To get a more complete picture on factors that influence B2B customers' usage of digital service and to reveal possible blind spots, both the interviewees from Microsoft as well as from its customers were leveraged in regards to the provider's influence. This means that not only the interviewees of the digital service provider were asked about their influence on usage but also its customers were asked of what factors of a digital service provider they think influence their usage. The findings have been synthesized to reveal similarities and differences and are structured by overarching categories and are broken down into factors written in italic letters.

4.2.1 Heritage and Change

The interviews revealed that Microsoft had been undergoing a significant change process over the past years to accommodate to the strong usage focus connected to its digital services. This chapter hence intends to summarize the findings and present the specific factors that outline general organizational prerequisites that a provider needs to get right to in the end get a customer to use his digital services to create value for both the provider and customer.

Change of Mindset – Several provider respondents pointed to a cultural change that was initiated on the top management level of Microsoft. In fact, this change was triggered by the inauguration of Satya Nadella as new chief executive officer at the top of the organization. One of the most visible changes that he undertook was the amendment of Microsoft's mission. Both, the Leadership Team Member (Microsoft) and the Head of Transformation (Microsoft) highlighted that with “Empowering every person and every organization on the planet to achieve more”, the changed focus on customer's actual usage became part of Microsoft's new DNA.

Change of Habits – As the change of the company's mission already indicates, several respondents argued that having the historic structures of a product-centric organization that cannot be changed from one day to the next is seen as a challenge that needs to be overcome to positively affect usage. It has been revealed that such a change of habits concerns both providers and customers. Both the Leadership Team Member (Microsoft) and the Head of Transformation (Microsoft) argued that in the past when IT companies used to only sell

products, they usually did not emphasize the post-sales usage aspect. However, that is totally different in a usage world. Moreover, several interviewees added that particularly traditional customers also were used to this transactional interaction style. Hence, there was also an effort required to get the own employees as well as the customers to understand the new business logic where it is not about what the customer buys but about what he actually uses. Overcoming this legacy is, hence, considered a key influencing factor of usage.

Change of Pricing – Both the Leadership Team Member (Microsoft) and the Head of Transformation (Microsoft) also stressed the importance of changing the billing model in a usage-dominant era. However, they point out that the nature of digital services even makes it necessary to rethink one's revenue model. The interviewed Leadership Team Member (Microsoft) explained that:

In the new world of digital services, for example when it comes to Internet of Things services, it would not make sense to pay for every registered user or every piece of software. But it is rather about what is used based on the amount of data or the performance that I use.

It was further explained that from a provider's financial perspective this induces significant changes. While selling a product meant a one-time immediate cash flow into the pocket of the provider, in a usage world the meter only starts counting when the customer actually uses a digital service. It was argued that such a new pricing logic is seen as a prerequisite factor for succeeding in a usage-dominant world.

4.2.2 Structure and Roles

Structure and roles has been defined as another category within which several influencing factors of usage are found.

New Roles and Change of existing ones - Several provider respondents described the creation of the customer success unit as a new, exemplary initiative to focus more extensively on customer's usage. The interview with a Customer Success Manager (Microsoft) revealed that the focus of his role is exclusively on the post-sales phase. He highlighted that it is my ambition "to support customers in bringing digital services into use in such a way that they contribute to their business success". The positive impact of this role was also echoed by the interviewed Account Manager (Microsoft) who even noted that he was convinced that if there

would be more of these internal resources that particularly emphasize a customer's usage, then this would have a positive impact on usage. Nevertheless, the interviewed Leadership Team Member (Microsoft) argued that despite the relevance of such new dedicated usage-related roles, "every role within the organization needs to have a usage focus". Hence, new roles were created as well as existing ones were adapted as these actions were described to be influencing factors of usage.

Internal Structure and Resource Allocation - Several provider respondents expressed that it is increasingly important to bring the right resources at the right time to the right person at the customer as this affects his usage. The interviewed Leadership Team Member (Microsoft) highlighted that in order to achieve that, this also has to be reflected in the internal structure. This is why there typically exists now an account manager who holistically manages a customer and orchestrates all associated activities in order to ensure that the right resources such as technology experts and sales professionals are present at the customer at the right time. The interviewed Account Manager (Microsoft) summarized the benefit of this internal structure by stating:

If we manage to bring the right resources at the right time to the right person at the customer with the right topics, then this definitely has a positive impact on a customer's usage.

The relevance of this matrix structure out of generalists and specialists was also highlighted by the customer side as the interviewed Head of BI and AI (Customer B) described that depending on his current projects he is connected with the according experts from Microsoft.

Internal and External Collaboration – One imperative prerequisite for allocating the right resources at the right time in order to thereby positively influence customers' usage is a proper internal alignment and collaboration. Several provider respondents stressed the need to more strongly and tightly collaborate with internal colleagues to ensure the best possible support for customers. This was particularly highlighted by the Leadership Team Member (Microsoft) who is certain that

...the idea of supporting customers in developing their business further, also requires a totally different approach to the market. This does not necessarily mean to have a totally different workforce, but the existing workforce might need to be aligned differently.

Hence, the internal collaboration and alignment are seen as key influencing factors to fully enable customers to achieve their goals. However, as despite proper alignment, a provider's resources for a customer are inherently limited, several respondents emphasized that it is imperative to not only properly collaborate internally but also with partners. Both the interviewed Account Manager (Microsoft) as well as the Sales Professional (Microsoft) regard this collaboration with external resources as another way to bring the right resources to the customer and hence a factor that influences usage.

Performance Measurement and Compensation – Several respondents highlighted that it is imperative for a digital service provider's success to realign the individual objectives and the connected compensation of the employees to the usage focus. The interviewed Leadership Team Member (Microsoft) pointed out that when Microsoft's goals are based on the customer success and this success is defined as his usage, it is indispensable to adapt the compensation accordingly. The interviews with the two customer-facing roles, the Account Manager (Microsoft) and the Sales Professional (Microsoft), confirmed this change in their compensation plan to a stronger usage-based focus.

4.2.3 Customer Focus

The identified focus in the section above on bringing the right resources to the customer already indicates another key influencing aspect of usage: a provider's customer focus. The interviewed Leadership Team Member (Microsoft) explained that “In a usage world, there is a much clearer focus on the customer and there is much closer interaction.”. In the interviews this strong customer focus was frequently addressed by referring to the new role that Microsoft takes. However, interestingly the synthesis of the conducted interviews revealed that the word *role* frequently was used in two different contexts. Firstly, *role* as described in 4.2.2 refers to the formal positions that were introduced and changed in the organizational structure. However, secondly, *role* also describes the actual behavior Microsoft and its employees take in the interaction with customers. This second meaning of *role* is the one that underlies this sub-chapter.

Stakeholder Management – The interviews have shown that a provider of digital services should be aware of what drives individuals in different functions within a customer's organization. This is particularly important as the interviewed Leadership Team Member (Microsoft) points out that “The world has become increasingly complex and there is now

more than one contact person at a customer.” The interviewed Account Manager (Microsoft) highlights that working with several people within the customer also becomes necessary because of the great diversity in approaches companies choose when undergoing digital transformation. Moreover, the interviewed Sales Professional (Microsoft) argued that involving and building relationships with several people at the customer also ensures that digital services continue to be used even if one person involved in the topic leaves the company.

Role of Consultative Partner - All provider respondents argued that the provider’s role in a usage-dominant era is to not only present a digital service to a customer but to particularly emphasize on how it can be used and what value it yields for the individual business of the customer. The interviewed Sales Professional (Microsoft) for example is certain that this changed role is a critical usage-influencing factor by saying that “if they [the customers] do not know what to use it for, it will not be used”. This is also reflected in the management’s perspective as the interviewed Head of Transformation (Microsoft) underlined that people in customer-facing roles are required to think beyond products and discuss customers’ future strategies. Further provider respondents agree that this more strategic approach of jointly defining a business case with the customer will subsequently trigger stronger usage. This statement also holds true in our case from the customer’s point of view. When being asked about the expectations towards the provider, two of the interviewed customers pointed out that they expect the provider of digital services to show them use cases and scenarios of a particular digital service. This is exemplified by the Head of BI and AI (Customer B) who expects from a provider “that offers are made of how the digital service can be easily and most efficiently used”. The coherence between customer and provider side in this matter becomes even more visible in the following statements. While the interviewed Leadership Team Member (Microsoft) stated that “we [at Microsoft] benefit from our internationality where we can present our customers with global references and experiences to in some way also educate them.”, the interviewed Head of Digital Services (Customer B) highlighted that “we [at the manufacturing company] are looking around where possible solutions or existing developments already prevail that could help us with the current challenges that we have”. Moreover, the Customer Success Manager (Microsoft) highlighted that sharing past experiences made in the adoption and change process connected to these digital services with other customers, is also extremely valuable for customers’ usage. The Head of

Transformation (Microsoft) is confident that if a provider manages to get this role right, then “all of this is also reflected back in a customer’s usage”.

4.2.4 Skills and Knowledge

However, in order to succeed in this changed role, both the Leadership Team Member (Microsoft) and the Head of Transformation (Microsoft) argued that working with the customer to focus on his usage requires new skills and knowledge. As this skillset and knowledge is considered to have a strong impact on customer’s usage, there was a strong emphasis on internal trainings in the past months at Microsoft. We hence clustered the findings of the skills and knowledge that influence usage into five more specific influencing factors.

Ability to envision digital future with customer - Starting to work with a customer, the Head of Transformation (Microsoft) argued that Microsoft’s customer-facing employees need to be capable of evaluating a customer’s digital maturity. We found a consistency among all Microsoft respondents in this respect as they highlighted that depending on a customer’s prior considerations, the ability to use methods such as design thinking might be crucial. They further explained that this process is called envisioning referring to showing the customer what his future could look like. However, as every customer is in a different situation, several respondents highlighted the necessity of a customer-facing person to flexibly adapt to a customer’s individual digital maturity.

Ability to consider implementation and change management - The findings revealed that despite the definition of the business case through the above described envisioning process, it is also about the ability to consult customers on implementation matters. The Account Manager (Microsoft) and the Customer Success Manager (Microsoft) highlighted that in this respect it is about having the ability to initiate and support change management together with the customer at his company because with the introduction of digital services, processes might change and a customer’s employees need to get on board to in the end successfully use a digital service.

Several respondents underlined that despite these skills, it is particularly the role of a provider’s knowledge that can affect customer’s usage of a digital service. However, the interviews revealed that the requirements for knowledge had changed over the years. The

Head of Transformation (Microsoft) described that the need of deep technical expertise had declined while knowledge in two other areas had become more important:

Industry Knowledge – The Leadership Team Member (Microsoft), the Head of Transformation (Microsoft) and the Account Manager (Microsoft) argued that in line with the role of a strategic advisor, industry knowledge became imperative. While it is not the intention to know the customers' industry better than the customers themselves, the response was that with an understanding of an industry, a business case can be shaped better which subsequently results in enhanced usage. Moreover, it was emphasized that despite being empathetic when talking to senior leaders at the customer, having the knowledge of the respective industry is critical to make a competent impression.

Reference Case Knowledge - The empirical results showed that provider interviewees attributed a high relevance of knowledge about similar cases to an increase in customer's usage. The Leadership Team Member (Microsoft) stated that "I need to know something in order to bring added value to my counterpart.". It was further explained that it is through this deep knowledge of similar cases and reference stories that customers can be shown possible use cases and, hence, added value can be created for a customer. The interviewed Customer Success Manager (Microsoft) augmented this view by arguing that the reference case knowledge is also critical when it comes to the underlying change and adoption processes.

4.3 Customer's Factors

Whereas the previous sub-chapter focused on possible factors within the realm of the provider, further categories influencing usage have been found within the area of the customer. Similarly to the provider's factors, interviewees from both sides have been asked about possible factors on the customer side to identify similarities and differences between respondents.

4.3.1 Top management

A majority of interviewees from both the provider and the customer circled around the topic of top management. Accordingly, it has been highlighted that a customer's top management plays an important role in influencing the usage of digital services. A synthesis of the mentioned aspects resulted in three factors related to the top management influencing usage.

Enthusiasm – The interviewed Head of BI and AI (Customer B) stated that top management needed to be filled with enthusiasm about the project. According to the same interviewee, its role is to support the project of using digital services and to establish the trust in such a project. This aspect has been confirmed by a Customer Success Manager (Microsoft) stating that a CEO who talks openly about a digital service within the firm and encourages employees to use it is beneficial. Following the same logic, the Account Manager (Microsoft) pointed out that the other extreme of top management disapproving services provided over the cloud as in the case of Microsoft’s digital services, no digital services will be adopted and subsequently no usage can happen.

Responsibility Delegation – However, in addition to enthusiasm, several interviewees emphasized that top management needs to delegate responsibility. As the Account Manager (Microsoft) exemplarily specified:

If one individual person within the customer’s organization had to commit to his leadership team that digital services will be created, it is the ideal case. Because this person has the pressure to realize something [and] to use the digital services.

However, the Account Manager (Microsoft) further adds that delegating responsibility does not solely help to realize a project, but further helps to ease the process. Accordingly, if someone has the responsibility, he “does not have to fight the frequent political challenges that surface if there is no dedicated early support from top management.” Hence, without top management delegating responsibilities, internal conflicts between departments will hinder the usage of digital services because no one has the power to actually drive the usage of digital services forward.

Financial Resources Provision – One frequently mentioned factor influencing the usage of digital services is the availability of financial resources. Interviewees from both the provider and customer side have emphasized the importance of this factor. The Senior Project Manager Digital Technologies (Customer A) elaborated on the topic of financial resources on the customer side. Additionally, the Sales Professional (Microsoft) pointed out that although the willingness of customers to use a digital service plays a crucial role, willingness alone does not suffice. In this context, the interviewee stated: “If someone in the IT [department] wants to do such a project, but the Chief Information Officer does not give any budget, then the project won’t happen.”. While this statement reflected upon the role of financial resources

itself, it further mentions the source of such financial resources, namely, the top management. The Account Manager (Microsoft) adds that such a budget is crucial to enable important aspects such as the implementation of the digital service which will in the end lead to the usage of it.

4.3.2 Implementation

The empirical data revealed that the implementation of the digital service is another category of factors related to customers' subsequent usage. Implementation as described and mentioned by the respondents might be summarized as referring to the process of initially adopting a digital service until it is rolled-out within the organization and is subsequently used.

Business Case – One important factor that has surfaced in connection to the implementation is the definition of a business case. This refers to the fact that the customer needs to understand the value that the digital services create for him. This was particularly highlighted by the Head of BI and AI (Customer B) who described the necessity to understand the value the digital service provides for his company's situation. This was further confirmed by all of Microsoft's respondents who frequently addressed the aspect of enabling the customer to see the value of the digital services.

Dedicated Department – A previous factor already indicated the importance of top management delegating responsibility to an individual and particularly to a team. The interviewed Sales Professional (Microsoft) pointed out that such an assignment ensures that the project proceeds and subsequently the usage increases. More importantly, the Sales Professional (Microsoft) described that in a company with such a department "the project and hence the usage of the digital service would not be endangered if one person leaves because the company has ensured that there is a strategy which is not connected to one key person." The Head of Digital Services (Customer B) further pointed out that "it is extremely important that in such project teams there are people who are exclusively and continuously working on these projects". Despite the agreement on the issue of a department or team of people driving the aspect of digital services, the interviewees from the customers have described different departments as being responsible. In the interviewed Customer A, the dedicated department has been called 4.0 derived from the term Industry 4.0. The interviewees of Customer B described two different departments each assigned the responsibility for different digital

services. First, digital services related to AI or other cloud platform-related services have been within the responsibility of the same-named Digital Service department. The reason for the naming is that based on the digital services provided by Microsoft, further digital services are built that are in turn offered to their respective customers, the customers' customers. Second, digital services related to the modern workplace such as reporting which are ultimately used internally within the customer's company, are within the responsibility of the IT department which further aligns with Customer C where the IT department drives the project. Hence, although the assignment of the responsibility for the implementation to one department is highlighted as a key influencing factor for usage, the empirical results do not provide a clear indication which department should be driving the digital service usage within the customer's firm.

Individual End-User – The individual end-user as a factor influencing the usage of digital services remains contradictory. A Customer Success Manager (Microsoft) has explicitly mentioned an individual end-user as being important. However, respondents from the customer have not mentioned the individual to a great extent. When talking about the implementation of the digital service and the respective barriers to usage of the digital service, the interviewed Head of BI and AI (Customer B) stated that “the employees who are using the system are required to trust what they are seeing.”. While trust will be discussed as another factor in the relationship area, the statement primarily indicates that usage of digital services might be broken down to the individual user. However, other statements of the same respondent frequently do not talk about the individual as such, however, he collectively refers to individuals as departments or teams. The Head of Business Development Apps and Digital Entertainment (Customer C) who is such an individual end-user of Microsoft's digital services stated that his individual impact on usage is limited as the company has internal guidelines which require employees to use the service. Additionally, he points out that even if he as an individual wants to use a digital service such as the collaboration tool Teams, he is dependent on the whole team to use it and hence is not able to influence the usage as an individual. Other respondents such as the Head of Digital Service (Customer B) or the Senior Project Manager Digital Technologies (Customer A) have not referred to the individual within their own organization.

Project Management – The implementation is frequently described by respondents as a project which according to a Customer Success Manager (Microsoft) leads to sustainable

usage. An Account Manager (Microsoft) mentioned that “for example the roll-out of Office 365 also requires a project plan of when and how something is implemented.”. According to the Customer Success Manager (Microsoft) some support in this endeavor is usually provided by the provider. The Head of Transformation (Microsoft) identified the project of the roll-out and implementation as a key success factor while acknowledging their challenging nature. In this context, the Head of BI and AI (Customer B) stated that such a project “is rather exponential, it has started with the team and then others have started to learn from that team and so on” and hence the usage had increased exponentially. Moreover, the respondent described during the interview that a structured project plan is required to complete the project successfully. However, interviews with the customer did not reveal a one-sized approach, but rather displayed a degree of flexibility and variability towards their particular company or digital service which is used.

4.3.3 Skills and Knowledge

Respondents from the provider and customer frequently referred to skills and knowledge as being an important category encompassing factors influencing usage. Accordingly, the Sales Professional (Microsoft) and the Head of Transformation (Microsoft) stated that a lack of the right skills and knowledge will hinder the later usage of the digital service. More specifically, the required skills and knowledge can be synthesized into the following three factors.

Project Management Skills – In a previous section, the empirical data revealed project management as a factor important for the implementation of the digital service. Accordingly, the Head of BI and AI (Customer B) described having project management skills as essential. The respondent specified that they organized the projects into sprints which allowed them to change the direction of the project and the implementation of the digital service according to what works best for them. According to the interviewee, this allowed them to react faster and sooner rather than completing the implementation of the digital service in one big project and realizing too late possible shortcomings. Moreover, the Senior Project Manager Digital Technologies (Customer A) described different milestones during the implementation. Those examples show that the customer has to possess the adequate project management skills in order to successfully implement the digital services and subsequently uses them.

Customer Knowledge – Interviewees from the customer side frequently mentioned knowledge about their own customers as ultimately being important for their usage. The Head of Digital

Services (Customer B) described that based on digital services of Microsoft, they built further digital services offered to their customers. Hence, it was further described that the usage of Microsoft's digital services strongly depends upon the usage of the digital service by their customers. The Head of Digital Services (Customer B) stated that they needed to know their own customer in order to guarantee usage for their services. A Senior Project Manager Digital Technologies (Customer A) additionally described that they use Microsoft Azure as a digital service to offer further digital services based on Microsoft's AI services to their customers. The respondent further specified that "there are people needed that are close at the customer who know him". This statement shows that in order to offer digital services to their customer, Microsoft's customers need to know what their customer wants in the first place.

Mix of Different Skills – Next to the specific skill of project management and the specific knowledge about the customer, respondents have frequently argued for a mix of skills. The Head of Digital Services (Customer B) described that neither solely IT skills nor other skills will suffice. He even argued that people are required who are having a mix of different skills.

4.3.4 External Influence

Further factors have been found in the category of external aspects. Particularly, two factors have been emphasized as influencing the usage of digital services.

Customer's Customer – Based on the interviews, the customer of Microsoft's customers has been stated by a majority of interviewees as being another influencing factor. Several respondents explained that particularly the digital services related to Microsoft's cloud platform allow customers to build their own digital services for their customers based on the digital services of Microsoft. More specifically, the Account Manager (Microsoft) summarized the role of the customer's customer on usage by stating that the usage would be high, if a customer's customer forces Microsoft's customers to go into the cloud and use the digital services of Microsoft. This was echoed by several interviewed customers as exemplified by the Head of Digital Services (Customer B) who explained that they build their own digital services based on Microsoft technologies which will be offered to their customers. Hence, only if the customer's customers use this digital service, Microsoft's customer will display usage of the digital service of Microsoft. This also applies in the case of the Senior Project Manager Digital Technologies (Customer A) whose company offers predictive maintenance to their customers based on digital services related to AI by Microsoft. However,

the role of the customer's customer has not been declared important by all interviewees. In contrast to the Head of Digital Services (Customer B) and the Senior Project Manager Digital Technologies (Customer A), the Head of BI and AI (Customer B) did not refer to an external customer who influences his digital service usage.

Competitors and Other Companies – Interviewees from both the provider and customer mentioned competitors or other companies in their or related industries as influencing factors on customers' usage. The Account Manager (Microsoft) described the "customers' envy and subsequent mobilization of each other" as an interesting factor. He explained that "customers within similar industries push each other to go more digital". According to the Head of BI and AI (Customer B), the exchange between the different companies might happen at events related to digital services where companies talk about the success in using certain digital services and thus motivate each other to use those more intensively. The Head of Digital Services (Customer B) aligned with the previous statements by adding that they learn from other companies within their industry but also from related sectors.

4.4 Relationship's Factors

A majority of interviewees underlined the importance of the relationship between provider and customer when it comes to digital services and their usage. The Head of Transformation (Microsoft) argued that it is extremely difficult for a customer on his own to move to cloud-based digital services and, hence, a good relationship is key. This significance of the relationship between provider and customer for customer's digital service usage is best exemplified by a statement of the Sales Professional (Microsoft): "With the customers that I do not have a relationship with, there is not a lot of usage". Hence, the following sub-chapters will outline several core factors within different categories on the relationship level that influence usage.

4.4.1 Partnership-like Collaboration

Several respondents argued that in a usage-oriented era, it is much more about projects than mere selling. We saw a strong alignment of the respondents in the view that collaborating with customers on projects changes the nature of the relationship.

Intensive Exchange – The Sales Professional (Microsoft) argued that working on usage-oriented projects brings them closer together with the customer. Moreover, it was described as a situation where there is a strong continuous exchange of information which also the Leadership Team Member (Microsoft) echoed: “If I now want the customer to see Microsoft as a trusted advisor on his digitalization journey, then it doesn’t work anymore to only have infrequent customer touchpoints.”. This is in strong coherence with the findings from the conducted interviews with customers where the Head of BI and AI (Customer B) described that they are in close and continuous contact with Microsoft when it comes to their used digital services.

Project Support – It was highlighted that defining a business case on estimated future usage of a digital service is a difficult thing to do. Hence, the interviews revealed that one key component of the relationship are regular check-ups on the project progress. This is done in order to act as sparring partner for the internal project team at the customer. Moreover, this allows to evaluate the adherence of the project to the pre-defined plan as well as the realization of the actual desired outcome. The Head of Transformation (Microsoft) argued that this is key for digital service usage “because the more successful a project is, the better this is also reflected in the usage”.

Long-term Orientation – The aspect of continuity has been described by several respondents as another key theme in the relationship between provider and customer. The interviewed Account Manager (Microsoft) for example explained:

Because of the pay as you go model in our cloud services right now where the customer can also annually easily reduce the amount due to the subscription model ..., the relevance for usage has significantly increased and hence the relationship management has become more important.

Moreover, it was pointed out that this long-term orientation has also become increasingly important in the account team. It was argued that it is attempted to keep the people who are working with a specific customer the same for several years in a row compared to the past where it frequently changed annually. This is intended to be positively reflected in usage.

4.4.2 Knowledge Complementation

As it was initially described, several interviewees agreed on the fact that it is nearly impossible for a customer to make the transition to cloud services on his own. On top of that, the clustered structure of the interviews revealed that new skills and knowledge are key factors that influence usage on both the provider and customer side. Hence, on top of the individual necessity to build up new knowledge, it was highlighted that the exchange of knowledge between provider and customer is imperative for usage. The Leadership Team Member (Microsoft) specifically pointed out the knowledge complementarity: “We bring the knowledge about the technology, the customers bring the knowledge about their industry.... It is about bringing the best knowledge together.”. The Account Manager (Microsoft) highlighted that there is an active ambition to create room for such knowledge exchange.

Events - The example that was given by several respondents were events that are hosted by Microsoft where customers that are already actively using a certain digital service for a particular scenario present their approach to other customers. This exact same initiative was positively noted by the Head of BI and AI (Customer B). When being asked about what a provider could do to positively influence the usage of a digital service within his company, he answered that one initiative “for instance [is] the Microsoft Industry Day where customers could talk to each other and could see sample scenarios”.

Trainings and Workshops – Another initiative where knowledge is proactively exchanged between customers and providers that was described by respondents from both sides are dedicated workshops. The Sales Professional (Microsoft) described that such workshops were visited by people who actively work with the digital service at the customer and, hence, directly influence the usage. From the customer’s point of view, such trainings allow to better understand a technology and build up know how. Moreover, they are then more efficient to implement and use it for existing or new scenarios. Trainings have further been mentioned by the Head of Business Development Apps and Digital Entertainment (Customer C) who has described that such trainings have aimed to enable employees in using those digital services.

4.4.3 Trust

Another thing that was highlighted as being key to the relationship between provider and customer when it comes to usage is related to the mutual trust. Our synthesis of the interviews revealed two specific factors influence customer’s usage.

Trust in Services – The Account Manager (Microsoft) argued that “[a] reason why customers might not have usage of our digital services is because of trust related to data security”. The Senior Project Manager Digital Technologies (Customer A) noted the security aspect had also been a key factor for their decision. The customer argued that they have a better feeling about using Microsoft’s digital services because “Microsoft is not known as a data broker and, hence, we as customers don’t have the feeling that our data is sold further.”. In regard to the most important factors that make people use a new digital service within the organization, the Head of BI and AI (Customer B) highlighted that the departments have to have trust in the digital service as well.

Trust in People – The interviewed Leadership Team Member (Microsoft) highlighted that in any B2B relationship trust is of utmost importance: “The topic of trust is essential as long as there are humans at the table.”. This was also echoed by the interviewees in customer-facing roles who argue that as the project collaboration, that is necessary for digital services, brings customers and providers closer together, trust is of essence. Moreover, it was highlighted that one ingredient to maintain this trust is by acting transparently. The interviews revealed that in some situation it makes sense to also openly discuss current projects that are realized with other departments to counteract customer-internal conflicts. The Head of Transformation (Microsoft) argued that “The less clarity one has here [in the relationship], the more opportunistic it gets.”. Lastly, it was described that past purchasing and usage experience have a significant influence on trust and, hence, also on usage. If a customer was sold a prepaid package of digital services which he did not sufficiently use, then this lowers the trust and significantly negatively affects usage.

4.5 Empirical Framework

Based on the empirical data, Figure 2 summarizes the identified factors clustered in categories and areas. The presented overview builds on the preliminary framework based on the literature review and has been modified according to the gathered primary data. Reasons which have led to the respective revisions will be discussed in the following chapter.

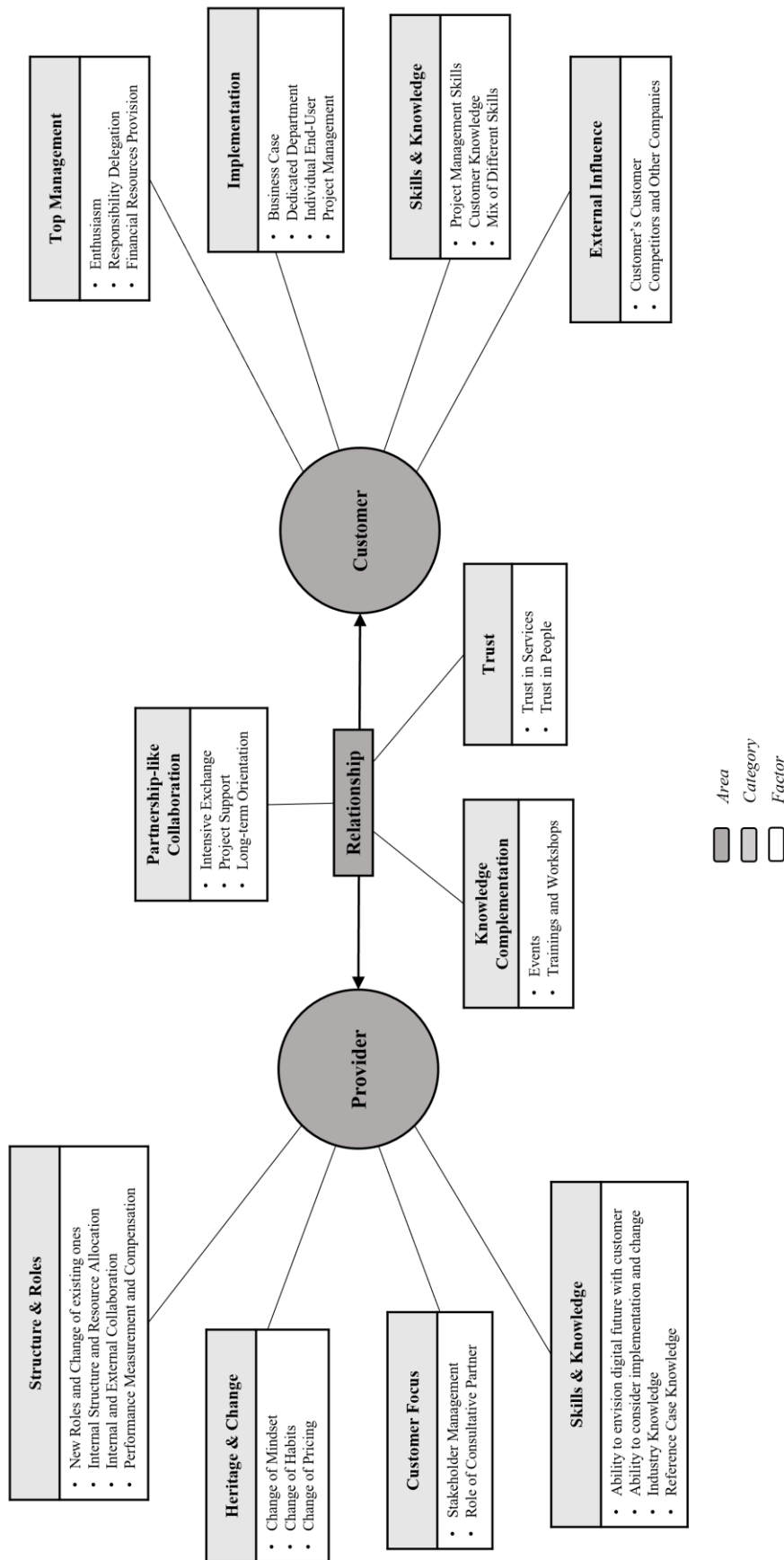


Figure 2 – Empirical Framework on Factors influencing B2B Customers' Usage of Digital Services (created by authors)

5 Discussion

Building on the empirical results, the goal of the discussion is twofold. First, it is intended to discuss the results which have been presented in the previous chapter and second, it is aimed to position the identified findings in comparison to previous research. In order to discuss the results, it has been decided to focus this chapter around four main points which are deemed relevant to address as they align with our purpose to enhance the understanding of digital service usage. This structure is intended to liberate the discussion from the very narrow focus of viewing each individual factor in isolation and to ultimately allow to elevate the discussion to the higher level of cross-factor findings. Such an approach will help to avoid missing the bigger picture that the insights of the empirical findings suggest. Furthermore, this will support the endeavor of positioning this overall research in the context of previous literature rather than to position each individual factor within the existing body of knowledge. However, we are well aware of the possible drawback of this approach such as missing to discuss individual factors in great detail. Nevertheless, we are confident that this structure will help to fulfill the broader purpose of this thesis to support the creation of a better understanding of digital service usage and its influencing factors.

Before diving into the discussion points, it is important to briefly elaborate on the differences between the preliminary and the finalized framework. As it has been expected, the empirical framework (Figure 2) has extended the preliminary one (Figure 1) by complementing it with factors which have been found in the studied case. Moreover, some categories of the provider (Heritage and Change; Structure and Roles; Skills and Knowledge) have been renamed compared to the preliminary framework to better reflect the statements of the interviewees while still remaining similar in their content. As it will be subsequently discussed, this might hint that some aspects drawn from existing literature might extend their relevance to digital service usage despite their frequently different contexts. Additionally, at the provider, a new category of Customer Focus has been added due to the empirical findings which frequently circled around this aspect.

Similarly, there were also some modifications necessary on the customer side. One of the most significant changes is the creation of the category Implementation while regarding the

individual end-user solely as a factor rather than a category. This is based on the results of the conducted interviews which have not confirmed the originally attributed importance to this aspect as indicated in the literature review as it will be explained in a subsequent section. Moreover, Skills and Knowledge as well as External Influence have been introduced as new customer factor categories which partially build on the Motives and Organizational Readiness of the preliminary framework. Within the area of relationship, Knowledge Complementation has been introduced newly as this was found to be a core element of the relationship between a digital service provider and its customers. All other remaining categories remain unchanged and build on the previous categories of the preliminary framework.

5.1 Customer Centricity

The synthesis of the provider factors reveals that from a holistic perspective, there is one common aspect that is widely present across these factors: the customer centricity. This finding indicates that several of the provider factors listed in Figure 2 across the given categories – although being part of the provider – are strongly oriented towards the customer. This suggests that for a provider to affect customers' usage of digital services, it appears to become increasingly relevant to holistically orient oneself as a provider towards a customer's individual situation. Hence, this key finding will be more extensively discussed in this chapter by elaborating on exemplary factors that relate to this aspect.

An exemplary factor visualizing the observed customer centricity is the *role of consultative partner* within the category of Customer Focus. This factor has been found to be imperative for a provider to consult customers to jointly elaborate on a business case. Hence, it becomes apparent that this factor displays a high degree of customer centricity. This orientation is further exemplified by the factor *new roles and change of existing ones*. It was found that a customer success team was established as a new organizational unit. As the name already suggests, this team explicitly aims at working with the customer in post-sales to optimize his individual usage of digital services. The *ability to envision digital future with customer* and the *ability to consider implementation and change* are further examples of factors visualizing the customer centric approach. Several respondents on both the provider and customer side agreed that it is imperative for usage to jointly elaborate on the individual digital future of the customer and to subsequently also think about his implementation process. Hence, the

findings indicate that a digital service provider in a usage logic needs to possess the skills to more strongly collaborate with the customer longer before as well as longer after the actual sale. This exact approach visualizes the stronger customer-centric approach in digital service usage.

This finding on customer centricity is mostly consistent with literature. First, the factor of *new roles and change of existing ones* aligns with Porter and Heppelmann (2015) arguing that customer success management is a development that has materialized particularly in software companies in order to work with customers to consult them on their usage and to thereby maximize their value. While our findings connected to this creation of new roles are consistent with existing literature, the impact of the existing roles on usage has not been previously described in literature. Hence, our results suggest to augment this view as it yielded that not only people in the newly created customer success roles have an impact on customers' usage, but also every existing role should adapt a usage-oriented mindset. We argue that this difference might occur because many of the reviewed contributions deal with the topic of organizational change that is required to initiate and build up a digital service business from scratch (Sklyar et al., 2019) in contrast to our studied case where it is more about the changes that are necessary to bring the digital services to the customer and enable usage. The factors of *ability to envision digital future with customer* and the *ability to consider implementation and change* are further in accordance with existing literature from similar fields where it is argued that service providers need to build up and progressively extend their knowledge about a customer's individual situation (Edvardsson et al., 2008; Nambisan, 2001; Payne et al., 2008; Porter & Heppelmann, 2015). Furthermore, marketing and sales scholars suggest that these insights should subsequently be leveraged to translate features of a product into value for the customer (Kindström, 2010; Terho et al., 2012).

Despite the wide accordance with previous research in this respect, it also needs to be discussed how these findings specifically relate to the different contexts of existing literature. First, several prior studies observed a development towards closer interactions and more frequent contact between provider and customers when it comes to digital services (Kindström, 2010; Porter & Heppelmann, 2015; Sklyar et al., 2019). However, as highlighted in the literature review, this stream of research connected to digital services has frequently been centered around the creation process of services and thereby often neglected to discuss the impact on usage. A comparison of our findings on these customer-centric factors with

digital service research highlights that the intensified contact and focus on customers is indeed also of relevance for usage. This means that it appears that several aspects that are of essence in the creation of digital service are transferable to the subsequent usage. This might be attributed to the diversity of scenarios that the studied digital services can be used for. It hence might be argued that selecting the right digital service for a customer's scenario out of the existing portfolio might be comparable to the consideration of a customer's need in the initial development of classic or digital services. Literature also suggests from a customer perspective, it is reasonable for a provider to more extensively focus on this pre-sales phase as Obal (2017) indicates that companies that have sought more information beforehand display an increased likelihood of satisfaction after the initial adoption, which generally results higher usage rates.

Similarly, many existing contributions originating from marketing and sales research have more explicitly highlighted the importance of providers to focus on the individual situation of and subsequent value for a specific customer (Edvardsson et al., 2008; Kindström, 2010; Payne et al., 2008; Terho et al., 2012). However, this stream again frequently has missed to build the connection to usage. Relating our findings to these fields of research reveals that while the emphasis on a customer's value creation was found to be also of highest relevance in the context of digital service usage, our findings on the factors suggest an even stronger focus on customers than previously assumed in existing literature. This is best exemplified by the focus on customers ranging from the early envisioning process of the digital future to the post-sales consulting on how to best use it. A reason for that discrepancy between the findings of this study and existing literature might again be found in the increased complexity of the services. As it was suggested that the same digital services such as AI can be used in numerous and totally diverse scenarios, it might be argued that it is more important to have a stronger customer focus to elaborate the business case with the customer compared to past literature where the studied digital services had a rather clear use case.

5.2 Type of Digital Service

Based on the factors described in the empirical result section, another central finding has materialized which relates to the type of digital service. The type of digital service was found to have a significant effect on influencing factors and, hence, might help to explain several of

the conflicting statements of the interviewees. Moreover, it might allow to explain the emergence of several new factors which have not been found in previous literature.

To provide a common understanding of the two types of digital services prevailing in this research, both types will be briefly explained. One type of digital service is characterized by the fact that the digital service is used within the customer organization. An example of this type of digital service in this case is centered around Microsoft's productivity suite Office or its collaboration service Teams. This type of digital service will be referred to as type 1 for the purpose of this discussion. The second type of digital service is related to its cloud platform. In the case of the latter type of digital service, customers may develop their own digital services based on the digital service offered by Microsoft and hence use these to offer their own digital services to their customers which will be referred to as type 2. As the types of digital services were found to have a significant effect on several factors, the specific impacts will be discussed.

To start with, the type of digital service has led to an extension of the framework beyond the initial three areas of provider, relationship and customer by adding the *customer's customer* as an additional factor. Whereas one interviewee (Head of BI and AI at Customer B) has not referred to a customer's customer, two other customer respondents (the Head of Digital Service at Customer B and the Senior Project Manager Digital Technologies at Customer A) frequently have noted their own customers as influencing factors of usage. Those discrepancies might be better understood by looking at the type of digital service utilized by these respondents. The interviewees who noted a *customer's customer*, use the type 2 digital service. This means that they use Microsoft's digital service as a basis to subsequently offer new digital services to their customers. From a provider's perspective, this adds a new layer of complexity to the factors influencing the usage as the usage is subsequently not only influenced by the direct customer, but also by the *customer's customer*. From a customer's perspective, this leads to the interesting proposition that in this type of digital service the customer acts in a dual role. He still is the customer of the digital service but he also takes a provider's role when offering further digital services to his customers. This is confirmed by the reflection of some factors which appear almost identically at both, the provider and the customer. An example for that are certain factors in the category of Skills and Knowledge within which factors can be found that require a provider to understand his customer and a customer to further understand his customer. However, it needs to be noted that this is in

contrast to the type 1 digital services, where the digital service is being used within the customer. This already implies that for this type of digital service the factor of *customer's customer* does not play a role.

Furthermore, the type of digital service was found to also have a significant impact on the factor *individual end-user*. Only one respondent (Head of BI and AI from a Customer B) explained that their digital service usage is dependent on the individual end-user within their company. Even while elaborating on this aspect, the interviewee rather referred to a team than to an individual who might drive the usage. The Head of Business Development Apps and Digital Entertainment (Customer C) who is simultaneously such an end-user has further explained that his role of creating usage is not significant as he is expected to adhere to the company guideline of using the digital service. Hence, a comparison of this finding with the preliminary framework reveals that the importance of this factor has significantly decreased as the interviewees attributed only a minor role to the *individual end-user*. However, this is difficult to explain by the considered literature (Bhattacharjee, 2001; Hameed et al., 2012; Karahanna et al., 1999) as it contrarily to the findings of this study has extensively discussed and highlighted the role of the individual end-user. The reason for that might be twofold. First, an explanation for putting the individual rather in the context of a team or department might be found in the setting of the literature. As indicated, research that stressed the importance of the individual end-user has been primarily located in B2C (Bhattacharjee, 2001; Kim & Malhotra, 2005; McKinney et al., 2002). For example, Bhattacharjee (2001) focuses on online banking of private consumers and hence, it might be argued that an individual in a private setting behaves differently than in a corporate one where the individual might be influenced by a bigger pattern of the team or the organization (Katz & Kahn, 1978). However, while the contradiction to B2C might be explained, still the contradiction of the empirical data with research in B2B remains. As Hameed et al. (2012) is solely focusing on a literature review, it may be argued that his findings might have been based on B2C research primarily and may not have been extensively tested in B2B. However, second, the lower importance of the individual-end user might have been further exacerbated by the different types of digital services. As type 2 digital services are used to offer further digital services, it might be argued that the individual end-user is moving beyond a digital service customer's company borders to the *customer's customer*. This argumentation might explain why the only interviewee describing the individual end-user (Head of BI and AI) utilizes type 1 digital services which are used internally. Therefore, the discussion highlights that the *individual*

end-user plays an interesting role in relation to the type of service. It was found that even though in type 1 digital services, the *individual end-user* is still present as indicated in literature, however, only plays a minor role as he acts as part of the organization. More importantly, however, the discussion shows that this factor is not applicable to type 2 services as the *individual end-user* moves further away from the customer and hence is not within the customer's realm.

Furthermore, also changes within the customer related to the category of Skills and Knowledge might be explained by the type of digital service. Factors such as the *mix of different skills* or *customer knowledge* seem to be particularly related to the type of digital service. To be more specific, as customers also take a provider role in type 2 digital services, it is required for a customer to also have knowledge about their customer to offer appropriate services which *customer's customer* subsequently use. This is also reflected in the *mix of different skills* which require skills such as sales rather than solely having IT skills. This might further explain the discrepancy between the approaches as to which department should be the *dedicated department*. The interviewed Head of BI and AI (Customer B) and Head of Business Development Apps and Digital Entertainment (Customer C) highlighted the IT department as being in charge, whereas the interviewed Senior Project Manager Digital Technologies (Customer A) described their Industry 4.0 department as responsible which is separated from the IT as responsible. Similarly, the interviewed Head of Digital Services (Customer B) at a customer pointed towards a department called Digital Services. Again, a distinction between the types of digital services might be beneficial to explain these differences. Respondents using type 2 digital services describe other departments than the IT unit to be responsible. This might align with the different skills that are required for such a type of digital service which might not be found in the traditional IT department such as a *mix of different skills* or *customer knowledge*. Accordingly, the respondents describing the IT department are simultaneously the ones using type 1 digital services.

Summarizing, the type of digital service has been a key point to discuss as it enables to understand some of the discrepancies between the statements of interviewees but also between previous literature and our findings. It has been shown that literature seems to align with some of the aspects mentioned by interviewees which describe type 1 digital services which are used internally. One such example is the IT department which has been mentioned to be the dedicated department by one respondent and is consistent with Jeyaraj et al. (2006)

and Zhu and Kraemer (2005). However, previous literature lacks to explain aspects related to type 2 of digital service used to offer further digital services to the customer. The reason for that might be rooted in the context of previous literature, namely, IS research (Iacovou et al., 1995; Jeyaraj et al., 2006; Mehrtens et al., 2001). In this research area, the studied systems appear to be more closely related to the definition of type 1 digital service. The reason for this is that both the respective type 1 of digital services and also the information system described in literature are used internally within one's organization. Hence, those similarity might explain the alignment of the literature with the findings on type 1 digital services. However, this stream of literature does not consider type 2 digital service and therefore has not mentioned factors such as the *customer's customer*. One potential reason why previous research does not consider this type of digital service might be found in the phenomenon of cloud-based digital services which allow and ease the use of digital service for offering further service. This phenomenon has only recently emerged as an opportunity (Sklyar et al., 2019) for companies which might explain the current absence of academic studies on this type of digital service. This finding further underlines and justifies the exploratory nature of this study. While utilizing literature from different areas has helped to guide the analysis, such findings related to the type of digital service would have been disregarded in a more rigid quantitative approach.

5.3 Vertical Interdependence

Another aspect worth discussing relates to the vertical interdependence of factors within the respective areas. In line with our research question and our purpose to explore possible influencing factors, the results reveal a number of factors. However, a more holistic analysis indicates that despite the influencing effect that one single factor might have on customers' usage, it is not possible to regard these factors in isolation from each other. It might even be suggested that to build a better understanding of the actual influence of these factors, it is imperative to vertically look across the factors related to all three areas: provider, customer and relationship. In this case, vertically refers to factors within the provider or customer or relationship. Hence, this sub-chapter aims to discuss this vertically interdependent nature of the identified factors. However, it is important to note that the subsequent examples of interdependent factors are not intended to be exhaustive but should rather have an illustrative purpose.

On the provider side, it was found that the digital service provider aims to enhance his customer focus as exemplified by taking the *role of a consultative partner*. However, this ambition might not affect usage unless the organization actually transforms. This is best represented by the change-related factors. In accordance with Kowalkowski et al. (2018) who stress the importance of managing the people side in this change process towards a service business logic, the findings on the *change of mindset* yielded that the change management connected to the employees collectively plays a crucial role for realizing the focus on customers' usage of digital services. One of these change-related factors is then connected to the requirement of new ways of interacting both internally and with customers to be capable of actually providing the right resources to the customer at the right time and hence influence his usage. This marks the interdependence between the *change of mindset* and the *external and internal collaboration* which illustrates that the factor of *change of mindset* might only influence usage if the employees of the organization actually collaborate more strongly internally as well as externally to provide the right resources to the customer. To in turn get the employees to collaborate more strongly and to emphasize on usage, a new *performance measurement and compensation system* might be required to incentivize this newly desired behavior.

On the customer side, the same idea of interdependence materializes. The results of the study indicate that factors such as *enthusiasm*, *financial resources provision* and *responsibility delegation* by the top management are influencing factors of usage. Although the factor of *responsibility delegation* has been noted as important, solely delegating responsibility while not providing the adequate financial resources might not be enough and vice versa. This interdependence is reflected by a provider's Leadership Team Member (Microsoft) discussing that just because responsibility is delegated, top management still needs to be involved by being enthusiastic. However, interdependencies can also be found between other factors within the customer such as the interdependence of a *dedicated department* with the factor of *financial resources provision* by the top management. This point is reflected by the interviewed provider's Sales Professional (Microsoft) stating: "If someone in the IT wants to do such a project but the CIO does not give any budget, then the project won't happen."

This line of argumentation can be further applied to the area of relationship where an *intensive exchange* is inherently connected to the *trust in people* as a provider's Sales Professional

(Microsoft) states that digital services bring both firms very close which requires to trust each other.

The finding of vertical interdependence within the areas of provider, customer and relationship aligns partially with existing literature. On the customer side, single factors are indeed consistent with previous research. To give an example, top management *enthusiasm* has been previously mentioned by Daellenbach et al. (1999), Damanpour and Schneider (2008) or Thong and Yap (1995). As another example, *financial resource provision* have been further mentioned by Iacovou et al. (1995) and Hernandez-Ortega et al. (2014). However, while single customer factors align with literature, the interdependence aspect appears to be less present in previous research. This might relate to the highly interdisciplinary nature of the research area. As it has been indicated in the literature review, factors that might help to build an understanding for digital service usage surface across a variety of research fields such as IS, marketing, innovation, strategic management or service research. Exactly this variety is reflected in the given examples of *enthusiasm* which is derived from innovation literature and *financial resource provision* which is derived from IS research. This also helps to understand the reason for the discrepancy between existing research and the findings of this study. While many of the identified factors have been previously discussed in literature such as in the case of *enthusiasm* and *financial resource provision*, they might have only scarcely been jointly recognized due to the fact that they have inherently been treated within different research fields.

This is in contrast to the provider side where many contributions have indeed already jointly discussed a variety of factors that were found to be of relevance in this study. An example is offered in relation to the two factors of *change of mindset* and *internal and external collaboration*. Bustinza et al. (2018), Porter and Heppelmann (2015) and Sklyar et al. (2019) all describe both of these aspects as important for the creation of a digital service offering. However, interestingly, while all three contributions note the individual relevance of the two factors and also implicitly hint a possible connection, none of the three actually discusses the aspect of an interdependence between them. Moreover, as indicated in the literature review, the majority of the existing studies was predominantly on the creation process of digital services (Bettencourt et al., 2013; Hinings et al., 2018; Sklyar et al., 2019), in contrast to this study that focuses on the subsequent usage process. This finding might hence indicate that several components that are considered crucial for the development phase of new services

might extend their relevance to also be cautiously regarded as influencing factors for subsequent usage.

5.4 Horizontal Interdependence

Another important aspect relates to the horizontal interdependence between the different areas. This means that on top of taking a joint view on the factors within an area, our findings indicate that it might be reasonable to zoom out further and also consider the interconnection of the factors across the three areas. This more holistic view on the three areas allows to first elaborate on the roles that the provider, the customer and the relationship play in the context of usage. As it has been already mentioned, factors related to the provider are frequently customer centric. This implies that a provider's role is the enablement of a customer to use digital services. The factors related to the relationship indicate that this area might be described as the linking part between the provider and the customer. This becomes apparent in the factors such as *intensive exchange* or *trust in people* which underline the dual orientation towards both the provider and the customer. Lastly, the role of the customer is rather to finally realize and create the usage which is exemplified by factors such as *project management* to implement digital services. However, as previously described, in the case of type 2 digital services which are used to further base digital services on them, the role of the customer might also resemble the enablement function of the provider to support their customers in using digital services.

Understanding the various roles shows that the factors of these three areas are strongly interlinked and interdependent. Examples of factors which visualize this interdependence across provider, relationship and customer are the *role of consultative partner (provider)*, the *intensive exchange (relationship)* and the *project management (customer)* factor. With the goal to enable the customer to use the digital service, the provider takes on the *role of a consultative partner*. This role, however, is strongly intertwined with an *intensive exchange* found in the relationship area which might be seen as the bridge between the provider and the customer. At the customer's side, the consultative role of the provider transferred over an *intensive exchange* materializes within the factor of *project management* when the customer is attempting to implement the digital services. This example shows the interdependence of factors spanning across the different actors to ultimately lead to usage.

To the best of our knowledge, this horizontal interdependence has not been discussed in previous research. The main reason for this has been the initially identified gap that no holistic view on both the provider and the customer has been taken in relation to the usage of digital services. Accordingly, the literature review yielded that research frequently focuses on either the provider (Sklyar et al., 2019; Bustinza et al., 2018; Porter & Heppelmann, 2015) or the customer (Hernandez-Ortega et al., 2014; Davis et al., 1989; Obal, 2017; Hameed et al., 2012; Iacovou et al., 1995; Karahanna et al., 1999). However, to see the interdependence as previously discussed spanning across the provider and the customer, a holistic view as applied in this research might be required. Summarizing, the simultaneous focus of this research on both the customer and the provider has enabled to discuss the horizontal interdependence which otherwise could not have been addressed.

6 Conclusion

The purpose of this research has been to enhance the understanding of digital service usage by exploring possible factors influencing a customer's usage in a B2B setting. In order to do so, the following research question has been formulated:

What provider-, customer- and relationship-related factors influence customers' usage of digital services in a business-to-business context?

Based on a single case study, this research question was addressed by identifying several factors that have been found within the three areas of provider, customer and relationship. The empirical results have led to a model with a network perspective (Figure 2) on the respective factors. Amongst others, this model incorporates factors ranging from *financial resource provision* at the customer over *trust in people* in the relationship to a provider's *role of consultative partner*. However, exploring possible factors has further led to four additional, cross-factor findings which allowed to elevate the findings and more thoroughly adhere to our research purpose of enhancing the overall understanding of digital service usage.

The first of these findings relates to the factors within the provider. Across these, the customer centricity has been identified as a common characteristic as several provider factors show a strong orientation towards the customer. Secondly, on the customer side, the type of digital service has been found to influence the importance of various factors. More specifically, our findings suggest that while some customer factors seem to play a role in one type of digital service, the very same factors might not be relevant for the usage of another type of digital service and vice versa. Moreover, two further findings relate to the interdependence of factors both within the respective area of provider, customer and relationship and across them. The strong interdependence of factors within each area that has emerged indicates that factors should not be seen as individual and separate but rather as interdependent. However, lastly, such an interdependence has not only been found between factors within the areas, but also across them. More specifically, it has been shown that some factors from the provider are indirectly linked through relationship factors to corresponding customer-related factors.

6.1 Theoretical Implications

The findings of this thesis suggest several implications to academic literature by having attempted to address the initially defined threefold research gap. First, our theoretical contributions adhere to Lusch and Nambisan's (2015) call to advance the understanding of the concept of usage particularly in the setting of digital services. After an initial synthesis of existing literature across several research areas, we first built a preliminary model of factor categories that might be of possible relevance for digital service usage. We have thereby also followed Sklyar et al.'s (2018) call that it might be useful to integrate IS and marketing literature. Studying the phenomenon subsequently in the particular setting of digital service usage allowed us to identify that several findings of existing contributions with a different focus might also be transferable to the concept of digital service usage. An example is offered by literature on the creation of digital services which was found to frequently extend its relevance also to explaining some aspects of the subsequent usage.

Secondly, as indicated in the problematization, existing literature is scarce on studies related to digital service usage in B2B. However, it was highlighted that the topic of digital service usage also becomes increasingly relevant in a B2B setting as companies' business model change (Porter & Heppelmann, 2015; Sklyar et al., 2019) and new digital services are adopted also in B2B (Obal, 2017). The findings of our case imply that in contrast to B2C, the role of the individual is significantly less relevant for usage as he acts as part of an organization. Moreover, studying a case in a B2B setting further permitted to identify that digital service usage might also require to broaden one's definition of customers, by incorporating the new actor of the customer's customer. This new actor is a finding that owes its exploration to the particular B2B focus of this study and hence extends the understanding of digital service usage as a customer's customer might inherently not play a role in a B2C setting.

Thirdly, the study attempted to also address the identified gap that the majority of existing contributions on service usage and digital service usage are predominantly centered around the customer side (Hameed et al., 2012; Obal, 2017). By also considering the provider, several interesting factors were identified of how a digital service provider might affect his customers' usage. However, even more importantly, the simultaneous consideration of the provider and the customer side that underlies this study allowed to derive further interesting implications. It is suggested that while considering both the provider and the customer

individually might allow to elaborate on what each party can do in isolation to affect usage, their interaction (*referred to as horizontal interdependence in the text above*) plays a crucial role. Due to the stronger collaboration and more intense exchange that digital services appear to require, our findings imply for theory that the holistic consideration of both the provider and the customer and in some cases even the customer's customer is imperative to create a more complete understanding for digital service usage.

6.2 Practical Implications

Besides the theoretical implications, this study also aimed to contribute to practice. From a managerial point of view, the present study provides insights into the topic of digital service usage for both providers and customers. First, the findings of this case suggest that managers of digital service providers need to put their customer at the very center of all their activities and organize their company accordingly. Particularly for companies that originally operated under a product-centered logic, the management of the shift towards a digital service business requires significant attention from the provider as this was found to have a strong impact on customers' subsequent usage. On an internal level, this means that a provider of digital services must rethink his structure and roles. The required actions exemplarily might range from a reallocation of existing resources to the creation of entirely new roles and departments that particularly reflect the usage orientation. As the usage focus requires providers to also approach and interact with their customers differently, this study suggests that managers of digital service providers need to build up a new set of skills and knowledge. Hence, it indicates that providers' managers are challenged to tap into several different areas throughout their entire organization to incorporate the renewed focus and, hence, influence usage.

Second, to realize the actual value that is desired from a digital service within their company, managers at digital service customers need to follow certain general conditions. This study proposes that middle managers need to ensure that top management is on board from the very beginning. It appears imperative for their usage that top management continuously backs the digital services initiative with both financial and human resources as well as with their own enthusiasm for the topic. This is particularly important for the implementation, where our findings recommend managers of digital service customers to first define a business case and

to subsequently have an internal project team or even a dedicated department that progressively drives the implementation. This team or department might also be in charge of developing new digital services for their customers based on these digital services. Hence, the findings underline that some of the factors of the provider might also become relevant for managers at customer companies in the case of type 2 digital services.

Third, this study suggests that in a usage world, managers from providers and customers alike need to rethink their collaboration and relationship with each other. The findings indicate that for usage to materialize, providers and customers must build a partnership-like relationship with mutual trust as the basis where knowledge can actively be exchanged to ensure the best possible usage experience.

6.3 Limitations and Future Research

It is important to point out several limitations of this thesis and possible areas for future research. One limitation refers to the methodological approach of this research. As this thesis is characterized by a qualitative research approach, it has not been intended to quantitatively test any correlation between various factors and usage but rather to explore possible factors to address the identified research gap. Therefore, future research should test the relationship between the identified factors and the usage. This might further lead to an important distinction between more and less important factors based on the influence they have on usage. Such a distinction might be interesting for managers' of both the provider and customer to know in their decision-making process as to which factors to focus on at the beginning.

Moreover, the generalizability of these results is subject to certain limitations. The single case study approach has been based on the case company Microsoft and three of its B2B customers. Hence, the findings might be idiosyncratic to this firm or the software industry it operates in. However, our findings related to type 2 digital services where customers as non-software firms start to use a provider's digital service to further offer digital services to their own customers might indicate that customers are increasingly becoming digital service providers themselves. This train of thought may be particularly worthwhile to pursue as it would allow to test the possible applicability of the learnings of this study to other firms outside this industry.

Another promising area for future research might further relate to the type 2 digital service. Future research into this type 2 digital service is needed in order to assess more specifically the differences in factors. Moreover, as in this case study a distinction between two types of digital services has been made, it might be of interest to see whether other types of digital services can be differentiated. This would enable research to more specifically address the different types of digital services and its respective influencing factors.

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Appendix A

Interview Guide Provider – Managers *(for Head of Transformation and Leadership Team Member)*

- 1. What is your role at the company? Could you tell us about your responsibilities and tasks?**

- 2. Our research yielded that two thirds of Microsoft’s revenue was on a recurring basis in July 2018, due to the increasing amount of digital services. How has your business model changed?**
 - a. Are there now several parallel business models?
 - b. Why was the business model changed?
 - c. How has the importance of “usage” changed in this transformation?

- 3. How has the increasing importance of customers’ usage had an impact on your organization?**
 - a. What changes have been made?
 - b. How are your teams structured?
 - c. How have the processes changed?

- 4. In general, what factors do you think influence the usage of digital services after a customer has decided to adopt them?**

- 5. How do you usually interact with your customers? And how could this then have an impact on customers’ usage?**
 - a. Which particular aspects of customer-facing roles might impact usage?
 - b. Has the compensation model of customer-facing roles changed in recent years and if yes, how?

- 6. If you imagine the best possible “using customer” – what needs to be ensured that this customer can be considered best?**
 - a. What does the best customer look like?
 - b. What measures are you taking to support customers in using the digital services?

- 7. If you imagine a customer not using your digital service at all and being dissatisfied – what could be potential reasons?**

- 8. What do you think is the role of the customer in relation to the usage of digital services?**
 - a. What does a customer need to do to enable usage within his own organization?

- 9. Are there any external factors that might influence usage?**

Appendix B

Interview Guide Provider – Employees (*Account Manager, Sales Professional, Customer Success Manager*)

- 1. What is your role at the company? Could you tell us about your responsibilities and tasks?**

- 2. Could you tell us about what usage means for your role?**
 - a. What does usage mean in general for you?
 - b. Why is it important?
 - c. Has the importance of usage changed for you?
 - d. What impact did that change have on your role?

- 3. In general, what factors do you think influence the usage of digital services after a customer has decided to adopt them?**

- 4. How do you usually interact with your customers? And how could your individual engagement then have an impact on customers' usage?**
 - a. Which particular aspects of your role might impact usage?
 - b. Has the compensation model of customer-facing roles changed in recent years and if yes, how?

- 5. If you imagine the best possible “using customer” – what needs to be ensured that this customer can be considered best?**
 - a. What does the best customer look like?
 - b. What measures are you taking to support customers in using the digital services?
 - c. What do you think expects the customer from your side as a provider?

- 6. If you imagine a customer not using your digital service at all and being dissatisfied – what could be potential reasons?**

- 7. What do you think is the role of the customer in relation to the usage of digital services?**
 - a. What does a customer need to do to enable usage within his own organization?

- 8. Are there any external factors that might influence usage?**

Appendix C

Interview Guide Customers *(All customer respondents)*

- 1. What is your role at your company? Could you tell us about your responsibilities and tasks?**

- 2. Our research concerns the topic of digital services. What digital services from Microsoft are you currently using at your company?**

- 3. Why are you using those digital services and why are they important for your company?**

- 4. We would like to now go back to the point where you initially started using those digital services. How did the implementation process after you decided to adopt the technology look like?**
 - a. What have been the challenges related to this implementation process?
 - b. How did you define a successful implementation? Has it been successful in your case?
 - c. What do you feel have been the most important aspects to successfully use these digital services so they create value for you?

- 5. Who is in the end the individual user? What do you think is the role of the individual user?**
 - a. How do you feel can individual users influence the usage of the digital service?
 - b. What are the challenges related to convincing employees to use those services?
 - c. Have employees had the chance to avoid using the digital service?
 - d. If employees had the chance to avoid using it, how did you convince employees to use the digital services?
 - e. If employees avoided using them, what are the reasons for that?

- 6. Your company is currently the buyer of the digital service. How would you characterize the relationship with your provider?**
 - a. Have you worked with the provider before?
 - b. Why have you chosen your current provider?

7. How can a provider support you in using the digital services even after you have adopted them?

- a. How do you think can a provider support your usage of the digital service?
- b. What are your expectations towards the provider?

8. In general, what factors do you think have influenced your usage of digital services after you have adopted them?