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USE INTENTION OF SAAS EMPLOYEE ADVOCACY PLATFORM: CASE SMARPSHARE

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ABSTRACT

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Employee advocacy has risen as a noticeable paradigm influencing the ways companies do marketing, communications, and branding. SaaS-vendors are providing solutions to facilitate employee advocacy. This study focused on a solution called SmarpShare. To explain which factors influence the use intention of employee advocacy platforms, this study proposed a research model based on the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2). The proposed research model posited perceived usefulness, perceived ease of use, social influence, facilitating conditions, hedonic motivation and the desire for online self-presentation as determinants of use intention. A self-administrated questionnaire was targeted to users of SmarpShare, which resulted in 446 valid responses. Taking a quantitative research approach, the proposed model was tested using a partial least square (PLS) analysis.

The proposed model explained 66.5% of variance in use intention. Significant correlations between proposed factors supported the hypothesis. Desire for online self-presentation, perceived usefulness and hedonic motivation were found as direct determinants of use intention. Other significant relationships were found between perceived ease of use and hedonic motivation, and hedonic motivation and desire for online self-presentation. Perceived ease of use was found not to influence behavioral intention directly. The study achieved an acceptable level in terms of validity and reliability. Reflecting the results, considerations for SaaS vendors and their customers were provided.

Keywords: Employee advocacy, Unified theory of acceptance and use of technology (UTAUT2), technology adoption, user acceptance, service perspective, SaaS, mobile service, digital service, mobile application, structural equation modeling (SEM), partial least square (PLS) analysis

TIIVISTELMÄ

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Työntekijälähettilyys vaikuttaa jo nykypäivänä vahvasti siihen, miten yritykset toteuttavat markkinointia, viestintää ja brändityötä. Työntekijälähettilyyden toteuttamiseen on tarjolla pilvipalveluita. Tämä tutkielma keskittyi SmarpShare-nimisen palvelun omaksumiseen. Selittääkseen mitkä tekijät vaikuttavat työntekijälähettilyyssovelluksen omaksumiseen, tässä tutkielmassa kehitettiin tutkimusmalli, joka pohjautui UTAUT2-viitekehykseen. Kehitetty tutkimusmalli asetti koetun hyödyllisyyden, koetun helppokäyttöisyyden, sosiaalisen influenssin, ympäristötekijät, hedonisen motivaation sekä halun näyttäytyä tekijöiksi, jotka edistävät sovelluksen käyttöintentiota. SmarpSharen käyttäjille kohdennetun kyselyn avulla kerättiin 446 validia vastausta. Tutkimus oli määrällinen. Ehdotetun tutkimusmallin selitysvoimaa analysoitiin PLS-rakenneyhtälömallinnusta käyttäen.

Tutkimusmalli selitti 66.5% käyttöintention varianssista. Kaikki statistisesti merkittävät korrelaatiot tukivat hypoteesejä. Halu näyttäytyä, koettu hyödyllisyys, sekä hedoninen motivaatio vaikuttivat käyttöintentioon merkittävästi. Muita merkittäviä korrelaatioita löydettiin koetun helppokäyttöisyyden ja hedonisen motivaation, sekä hedonisen motivaation ja näyttäytymishalun välillä. Koettu helppokäyttöisyys ei tutkimuksen valossa vaikuta suoraan käyttöintentioon. Tulosten reliabiliteetti ja validiteetti saavuttivat tieteellisesti hyväksyttävän tason. Palveluntarjoajille ja heidän asiakkailleen tarjottiin suosituksia tutkielman tuloksiin peilaten.

Asiasanat: työntekijälähettilyys, Unified theory of acceptance and use of technology (UTAUT2), teknologian omaksuminen, palveluajattelu, SaaS, mobiilipalvelu, digitaalinen palvelu, mobiiliapplikaatio, rakenneyhtälömallinnus (SEM), osittainen pienimmän neliösumman regressio (PLS)

PREFACE

2015 was quite a year. I had a massive urge to finalize my studies in JYU. And I kind of did, before I got a job. From early spring on, this thesis remained more as a burden in the back of my head than as an active project. In the later fall, I just had to do this. Thanks to Smarp, I was able to motivate myself to get to this point in early 2016.

I thank all the participants for devoting their time to take my little questionnaire: you made this happen. I would also like to thank all the inspiring people I had the chance to meet during my time in JYU. You all contributed massively to my final will to graduate. Especially the many characters at the faculty of Information systems science, I owe you one. Professor Tuure Tuunanen, thank you for all your encouraging support and guidance along the way, you were one of the most inspiring academics I got to meet.

One must also be grateful for all the encouragement and support I have gotten from friends and family. For friends, a special thanks belongs to all the climbers in Jyväskylä region. I truly feel humbled to have met such an array of amazing people, you taught the biggest lessons in life. For the family, I thank you all for believing in me. Lastly, but certainly not the least, I would like to devote my thanks to Suvi. You were probably the one who suffered the most from this thesis. You were the one who had to witness the bad days. I will always be grateful for your patience and encouragement. I could not have asked for more - I am a lucky to have you by my side.

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1 ACCEPTING THE ROLE OF A BRAND AMBAS-SADOR

In today's digital world, it is safe to say that information technology (IT) innovations have intruded into every walk of life (Hong & Tam, 2006). Carrying a mobile phone, a tablet, a laptop, or other digital assistant to almost everywhere people go, has become a norm (Vodanovich, Sundaram, & Myers, 2010). A device with its applications can serve its user for both, personal and professional purposes. This paradigm, which can be referred to as digitalization of services, challenges the ways companies need to view their marketing, communications, and branding operations. Most notable digital service trend of the last decade is the emergence of social medias.

Social media has had a tremendous effect on how individuals and organizations are communicating both privately and professionally (Dreher, 2014). No longer can companies solely base their marketing and communication efforts on a one-way monologue. Audiences and stakeholders are no longer in a receiving role but as active participants in an on-going dialog. This change has created a new set of rules for organizations. Immediate responsiveness and transparency are demanded by audiences (Dreher, 2014). In this media-saturated era, advertisement strategies relying on interruption, repetition, and ubiquity are growing in ineffectiveness (Rayport, 2013). Similarly, marketing is perceived more difficult in the digital economy than it has been ever before (Satell, 2015). Due to this, brands are leveraging content with which a direct communication channel can be opened towards consumers, partners, and the general public (Satell, 2015).

To stand out and to move towards an authentic voice, the role of employees' as communicators has started to gain ground in organizations. Employees role as communicators is important as they mirror the reality behind the brands. Their voice is authentic and trustworthy. Their networks are relevant and wide in scope.

The message seems clear for all stakeholders: employees can function as influential brand ambassadors, shaping their own professional image and the image of the employer they represent (Dreher, 2014). This trend is acknowledged by em-

ployees, by their employers and by the vendors providing solutions for the concept: *employee advocacy*. Employee advocacy may be defined as behavior, where employees voluntarily support or defend their employer, its brand, or products by externally promoting a preferred image (Men, 2014). Vendors also address other aspects to the concept such as the growth of employees' professional brand, growth of employees professional network, effortless content discovery, measurable and easy content sharing, enhanced brand value, increased media coverage, and increased sales potential (SmarpShare, 2015). In practice, employers encourage employees to share relevant content to their personal social media accounts. Vendors are offering Software-as-a-Service (SaaS) solutions to help the facilitation. This study aims to empirically find the determinants preceding employees' use intention of one advocacy solution, SmarpShare. The purpose is to find out which factors contribute to the use intention of SmarpShare the most.

Information systems (IS) and their applications can be viewed as services. While being ubiquitous, the role of IT in has generally moved from supportive to enabling technology (Mathiassen & Sørensen, 2008). Transformation towards a service economy has implications on the field of information systems, especially for "research and teaching opportunities for IS scholars in the domain of digitized services innovation, management, and use" (Rai & Sambamurthy, 2006, p. 327).

IS field has long paid attention to the problematics associated with inadequate user engagement and insufficient alignment between business and IT (Alter, 2010). Service concepts and metaphors may be part of the long-term solution, helping the IT groups engage and communicate with the business people they wish to serve (Alter, 2010).

Still, building a conceptual understanding of information systems as services does not provide much practical knowledge about the user acceptance of actual services. Thus, studying how existing and potential digital services and their functionalities are perceived by users, is important. Investigating and building understanding on users' behavior and usage of IS has a long research tradition in the IS field (DeLone & McLean, 1992). It has been stated, that understanding individual acceptance and use of IT is one of the most mature lines of IS research (Benbasat & Barki, 2007; Venkatesh, Davis, & Morris, 2007). Thus, theories and models explaining user acceptance are numerous, as are the factors that have been found significantly preceding individuals' use intention of technology.

This study posits perceived usefulness, perceived ease of use, social influence, facilitating conditions, hedonic motivation and the desire for online self-presentation as determinants of use intention of an employee advocacy solution. The research is guided by the question: *which factors may influence the use intention of SmarpShare?* The study takes a quantitative research approach and tests the generated research model with a partial least square (PLS) analysis. Data collection is carried out as a self-administered questionnaire, resulting in 446 valid responses

The proposed research model is supported by the collected data for the most

part. The research model explains 66.5% of the variance in use intention. In order of strength, the desire for online self-presentation, perceived usefulness, hedonic motivation, and facilitating conditions are found as direct determinants of use intention of SmarpShare. Perceived ease of use and social influences are found to have indirect effects on use intention. Perceived ease of use contributes strongly to hedonic motivation and moderately on perceived usefulness. Social influences determine perceived ease of use, perceived usefulness, and the desire for online self-presentation. Hedonic motivation is also found to strongly determine the desire for online self-presentation. The study contributes to research and practice by demonstrating how the desire for online self-presentation can have a substantial influence on user acceptance of a SaaS platform leveraging social aspects. The study reaches acceptable validity and reliability by fulfilling common criteria measures (Cronbach Alpha, Composite Reliability, AVE's, and factor loadings).

1.1 Research questions

Although many studies considering technological innovations, acceptance and use have been conducted, research is still scarce on the end-user acceptance of individual SaaS solutions, especially employee advocacy platforms. This thesis study aims to reveal the determinants preceding the use intention of such solutions by studying the user acceptance of an employee advocacy solution called SmarpShare.

RQ1: Which factors determine the use intention of an employee advocacy platform?

RQ2: To what extent do Perceived usefulness (PU), Perceived ease of use (PEOU), Social influence (SI), Facilitating conditions (FC), Hedonic motivation (HM) and Desire for online self-presentation (DOSP) explain employees' use intention of SmarpShare?

1.2 Keyword definitions

This chapter provides definitions of keywords in the study. To support the context of the study, definitions have been evaluated and chosen from research in the fields of service science and information systems. Literature in technology acceptance has provided the key theoretical foundations and terms used in the study.

1. **Service**

   Act performed for someone else, including providing resources that someone else will use (Alter, 2010, p. 201).

2. **Value**

   Seen as value-in-use, i.e. the value the user creates while using the offered resources (Grönroos & Gummerus, 2014, p. 209).

3. **Software as a Service (SaaS)**

   A service model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources that can be rapidly provisioned and released with minimal management effort or service provider interaction (Mell & Grance, 2011).

4. **Mobile application**

   Software installed in mobile or tablet device, which is able to utilize Internet connection. An application, or "app", can either be pre-installed in the device or downloaded from marketplaces such as the Apple's App Store or Google's Play (Salo, 2013).

5. **Employee advocacy**

   Behavior, where employees voluntarily support or defend their employer, its brand, or products by externally promoting a preferred image (Men, 2014).

6. **Employee advocacy platform**

   A SaaS offering with which employee advocacy may be facilitated.

7. **Behavioral intention (BI)**

   The degree to which an individual intends to use the technology in the future (Venkatesh, Thong, & Xu, 2012).

8. **Perceived usefulness (PU)**

   The degree to which individual believes using a technology would enhance his or her performance (Davis, 1989).

9. **Perceived ease of use (PEOU)**

   The degree to which an individual considers using the respective technology is easy to access, learn and utilize (López-Nicolás, Molina-Castillo, & Bouwman, 2008).

10. **Social influence (SI)**

    The extent to which an individual perceives that important others (such as family, friends, colleagues, managers) believe they should use the particular technology (Venkatesh, Morris, Davis, & Davis, 2003).

11. **Facilitating conditions (FC)**

    The perceptions individuals hold of the resources and support that are available to perform use behavior (S. A. Brown & Venkatesh, 2005; Venkatesh et al., 2003).

12. **Hedonic motivation (HM)**

    The fun or pleasure individual derives from using a technology (Venkatesh et al., 2012).

13. Desire for online self-presentation (DOSP)

The degree to which an individual wants to present his or her preferred image in a social network (H.-W. Kim, Chan, & Kankanhalli, 2012).

1.3 Thesis outline

This study consists of six chapters. Introduction arguments on the significance of the study, motivates the reader and states the motivators behind the study. The chapter provides an overview on the subject and defines the keywords used in the study. The objectives are set and the research questions are stated.

The second chapter starts with a literature review on the service perspective towards business. The chapter is included in order to explain how information systems should be considered as an integral part of society, and especially as ubiquitous services. Chapter elaborates on how information systems should be valued and how the value is created. The concepts of Software-as-a-Service and smartphones as service platforms are introduced. Finally, employee advocacy is discussed in detail.

The third chapter reviews literature considering acceptance and use of technology, especially in SaaS context. The factors that are expected to influence use intention of SmarpShare are adopted from the reviewed literature. Prior findings in SaaS acceptance research are presented. Self-presentation theory is also reviewed to justify the inclusion of the desire for online self-presentation as a construct. This chapter provides the theoretical framework behind the proposed research model.

The chosen research method is explained in the fourth chapter. Quantitative research approach and the methods for data collection and analysis are presented. The key measures, scales and their sources are provided. The hypothesis to be tested are generated and finally the proposed research model is presented.

In the following chapter, the results of the analysis are presented. Firstly, the demographics are reviewed. Secondly, the item loadings were analyzed. Thirdly, the reliability and validity of the constructs are examined. Finally, the predictive accuracies of the factors are analyzed.

The final chapter discusses the results of the analysis. The study is concluded by examining the limitations, providing suggestions for further research, and by summarizing the efforts.

2 INFORMATION SYSTEM AS A SERVICE

Perspectives on business have shifted from product and goods-dominant (G-D-logic) view towards a view highlighting services. This chapter explains how information systems should not be viewed only as a set of ICT-enabled processes, but as service processes that are under constant change and development. The view is justified with service-dominant logic (S-D-logic) and Service logic. Service centered logic is compared to goods-dominant logic. This chapter provides the theoretical background for service-dominant logic concerning information systems and explains how value is created via such systems.

2.1 Service science and service systems

Service science is a multi-disciplined field "combining organization and human understanding with business and technological understanding to categorize and explain the many types of service systems that exist as well as how service systems interact and evolve to co-create value". Service systems instead, are "value co-creation configurations of people, technology, and value propositions connecting internal and external service systems and shared information". (Maglio & Spohrer, 2008, p. 18.) Service science sees service systems as the unit of analysis (Vargo, Lusch, & Akaka, 2010).

Service systems come in all sizes ranging from an individual person to a worldwide exchange system and are interconnected with other service systems in a continuous manner (Vargo et al., 2010). Forming an abstract phenomenon, service systems can be analyzed within various disciplines and industries (Spohrer, Vargo, Caswell, & Maglio, 2008). In the context of digital services, the field of IS and the whole ICT-sector are especially central. Notions, that ICT related services might form the backbone of modern economic growth (Potts & Mandeville, 2007), only highlight the importance of the subject.

Vargo et al. (2010) propose that service systems' normative function is to connect people, technology, and information through value propositions while aiming at co-creating value for all participants involved in the exchange of resources.

2.1.1 Defining service

Many definitions of service have aroused since 1970's when the paradigm started evolving with the lead of three schools of service marketing: the French, the American, and the Nordic. According to Edvardsson, Gustafsson, and Roos (2005), most scholars have considered services to be activities, deed or processes and interactions. Back in 1977, services have been defined as changes in the condition of a person or something in the possession of the customer (Hill, 1977). Edvardsson et al. (2005) note that a product may consist of goods, services, computer software or combinations of these, elaborating a wider view on service than a mere change in one's condition or possession. Lovelock, Patterson, and Walker (1991) highlights the process nature of a service, by defining service as "a process rather than a thing". Many of the definitions focus on customer aspect, emphasizing how services aim to solve customer problems (Grönroos, 2000).

According to Edvardsson et al. (2005) scholars advance the service-research field via separating services from goods. This involves displaying services distinct from physical products. The distinction between goods and services has been largely based on characteristics associated with services: intangibility, heterogeneity, inseparable consumption and production, and perishability (Vargo et al., 2010). These (IHIP) characteristics have also functioned as means to categorize different services (Vargo et al., 2010). Additionally, they have been used to defend service research against criticism (Edvardsson et al., 2005).

The main criticism concerning the service perspective bases on arguments suggesting that services are similar to goods or the characteristics are not unique to services (Lovelock & Gummesson, 2004; Vargo & Lusch, 2004b). It has also been questioned whether service research offers anything new or different in terms of research (Edvardsson et al., 2005). Applicability of service concepts to fast-progressing industry of Internet services and self-service technologies has also been questioned (Bowen, 2000; S. W. Brown, 2000).

While definitions of service vary in a number of ways under constant updates and modification, scholars seem to accept the process nature of services, at least to a wide extent. For example Grönroos (2006), representing the Nordic school of thought, stresses the process nature by defining service as:

> "[...] processes that consist of a set of activities which take place in interactions between a between a customer and people, goods and other physical resources, systems and/or infrastructures representing the service provider and possibly involving other customers, which aim at solving customers' problems."
> — (Grönroos, 2006, p. 323)

Grönroos (2006) notes, that no common definition exists in the literature, even though the discussion on the matter was extensive already during the 1980s. The

activity and process nature of service is often notable in definitions, though definitions may stress different aspects of the service (Grönroos, 2008). According to Grönroos (2008), there are at least three main aspects to the service concept found in the literature. These aspects categorize service as:

1. An activity
2. A perspective on the customer's value creation
3. A perspective on the provider's activities (business)

Traditionally, the term service has meant an activity. The activity has been viewed as a process, where someone does something to assist someone else. This process offers something of value to the receiving party. (Grönroos, 2008.) Cleaning a hotel room for the benefit of a hotel, allowing the hotel to welcome the next customer to enjoy a clean room, functions as a basic example of a service. The latter aspects represent perspectives that are or can be applied to customer service logic and provider service logic (Grönroos, 2008). Customer service logic (2) is about the customers' purchasing and consumption processes while provider service logic (3) includes organizations' business and marketing strategies (Grönroos, 2008).

Edvardsson et al. (2005) arguments how service is rather a perspective on value creation than just a category of market offerings, emphasizing that the meaning of service does not limit solely to an activity. Edvardsson et al. (2005) point out that business-wise, the service concept may be more important as a perspective than as an activity. This view is also supported by Grönroos (2008).

Another approach to service concept, representing the American School of thought, is provided by Vargo and Lusch (2004a). They define service as "the application of specialized competences, for example, knowledge and skills, through deeds, processes, and performances for the benefit of another entity or the entity itself" (Vargo & Lusch, 2004a, p. 2). Service-dominant logic (S-D-logic) bases on this definition. The S-D logic views services as the fundamental base of exchange (Vargo et al., 2010).

What should a service organization aim for? According to the definition by Gustafsson and Johnson (2003, p.2), an organization providing a service should "create seamless systems of linked activities that solves customer problems or provides unique experiences". Thus, providing a SaaS platform to solve customer problems is a good example of a service.

From the many definitions, this research adopts the definition of Alter (2010). This definition captures a wide range of services, is more suitable for IS context and may suit better for analyzing SaaS. It is also a fresh perspective on service concept and represents IS research. Alter (2010, p. 201) defines services as "acts performed for someone else, including providing resources that someone else will use". This definition is chosen due to Alter (2010) claims, that it encompasses the following services:

- services for external and internal customers

- automated, IT-reliant, and non-automated services
- customized, semi-customized, and non-customized services
- personal and impersonal services
- repetitive and non-repetitive services
- long-term and short-term services
- services with a varying degree of self-service responsibilities.

2.1.2 From goods to services

During the recent decades, the field of marketing has evolved from goods-dominant logic (G-D-logic) towards service-dominant (S-D-logic). G-D-logic has its foundations in economics. According to this logic, tangible output and discrete transactions are central. Attention is focused on the exchange of measurable and exportable goods, transferring the ownership to the buyer for money. Value was seen as something that was added to the product during manufacturing, created by the firm and destroyed by customers. In other words, value was created in exchange (value-in-exchange). G-D-logic considers *operand* resources, the resources on which an operation or act is performed in order to produce an effect (Constantin & Lusch, 1994), primary. Raw materials such as coal or wood can be seen as operand resources, being often visible and tangible. The role of services in G-D-logic limits to value-adding activities such as sales and distribution. (Vargo et al., 2010; Vargo & Lusch, 2004a.)

In the logic dominated by services, intangibility, exchange processes, and relationships are central. Value is seen as something the user perceives when having the product/service at use. Within this logic, value is defined by and co-created with the customer in collaboration with the providing company. (Vargo & Lusch, 2004.) S-D-logic takes use of *operant* resources in the first place. Effects are produced with operant resources (Constantin & Lusch, 1994), such as technology and know-how. Operant resources are rather invisible and intangible. The role of operant resources grew in the late 1900's, when people started valuing skills and knowledge as the most important resources. By the end of the century, operant resources had taken a paramount role (Vargo & Lusch, 2004a). Efforts and support of service sciences base on service-dominant logic, even though the goods-dominant paradigm influences general thinking quite strongly (Vargo et al., 2010).

S-D-logic views marketing as a continuous series of social and economic processes, which require constant learning. Through these processes firms attempt to make ever better value propositions compared to their competitors. (Vargo & Lusch, 2004.)

Service-oriented view emphasizes the role of customers, meaning more than just a change in orientation. The customer is seen as someone to collaborate with and to learn from, requiring adoption to her individual and dynamic needs. The role of goods changes into distribution mechanisms of services. (Vargo & Lusch, 2004.)

Primary foundational premises (FP) of the service concept are found in Table 1, while key differences between G-D-logic and S-D-logic are gathered in Table 2.

TABLE 1: Foundational premises of S-D-logic (Vargo & Lusch, 2004a, 2008a)

FP1.   Service is the fundamental basis of exchange
FP2.   Indirect exchange masks the fundamental basis of exchange
FP3.   Goods are a distribution mechanism for service provision
FP4.   Operant resources are the fundamental source of competitive advantage
FP5.   All economies are service economies
FP6.   The customer is always a co-creator of value
FP7.   The enterprise cannot deliver value, but only offer value propositions
FP8.   A service-centered view is inherently customer oriented and relational
FP9.   All social and economic actors are resource integrators
FP10. Value is always uniquely and phenomenologically determined by the beneficiary

TABLE 2: Distinguishing G-D-logic and S-D-logic, derived from (Vargo & Lusch, 2004a; Vargo et al., 2010; Grönroos, 2008)

	G-D-logic	**S-D-logic**
Source of growth / Resource type	Operand	Operant
Role of goods	As *operand resources* and end products	Goods transmit *operant resources*
Offerings	Goods and services	Servicing and experiencing
Role of customer	Recipient of goods	Coproducer of service
Meaning of value	Determined by producer, embedded in goods, defined as value-in-exchange	Perceived by the customer as value-in-use, firms can only make value propositions
Role of marketing	Maximizing behavior, "marketing to"	Learning via exchange, "marketing with"
Partnerships in	Supply chain	Value-creation network

2.1.3 Differing logics explaining service

As already stated, the service-oriented paradigm started evolving with the lead of North American, the French, and the Nordic schools of marketing in the 1970's. The field reached a higher level of maturity during the following decades, thanks to increasing number of research and scientific publications (Fisk, Brown, & Bitner, 1993). According to Grönroos and Ravald (2011), the development still had no major influence on the marketing discipline, until the publication of Vargo and Lusch (2004a) article "Evolving to a new dominant logic for marketing". Grönroos and Ravald (2011), highlight how the work of Vargo and Lusch (2004a, 2008a) has organized 30 years of service research into one structure and set service thinking as a logic for marketing, *the service-dominant logic*.

The Nordic school bases on another logic called *service logic* (SL). Service logic explains aspects of service in more detail compared to the S-D-logic. Also, the Nordic school stresses two central issues it finds in S-D-logic, the implications the logic has on marketing and the concept of value co-creation (Grönroos & Ravald, 2011). S-D-logic places service as the basis of exchange (FP1), which SL sees restrictive since, according to SL, value creation for all parties is more fundamental than service (Grönroos & Gummerus, 2014). SL sees that factors like price and costs alongside with service influence value creation, the basis of business, for which service is rather a facilitator (Grönroos & Ravald, 2011). What comes to value co-creation, SL does not agree that that the user/customer is always a co-creator of value (FP6) (Vargo & Lusch, 2004a). Furthermore, the notion that service provider could influence customers' value creation via letting customers join the providers' processes as value co-creators, is criticized (Vargo & Lusch, 2004a; Grönroos & Gummerus, 2014). Detailed differences between the logics can be found from Table 3.

Fundamentally, both logics share a purpose: recognizing the importance of service and the interaction between service providers and customers (Grönroos & Gummerus, 2014). "Service" also means the same for SL and S-D-logic, even though definitions differ slightly. The meaning of service is concluded in the following statement by Vargo and Lusch (2008b, p. 36): "service is a simple, yet powerful and multifaceted construct and that it is the correct designation, not only to characterize emerging and converging marketing thought, but also to accurately inform and motivate the associated research, practice and public policy", on which Grönroos and Gummerus (2014) agree on.

A comprehensive summary of differences between the logics has been proposed by Grönroos and Gummerus (2014). The summary is slightly shortened and modified in Table 3.

TABLE 3: Key differences in service logic and S-D-logic (Grönroos & Gummerus, 2014)

Difference	Service logic	S-D-logic
Level of perspective	Managerial; defined concepts	Systemic; abstract; metaphorical
Value	Defined as value-in-use	Value used with different meanings in different contexts
Value generation process	A process including all actions by all actors involved, which ultimately leads to value for a user	Not discussed explicitly; implicitly, an all-encompassing value creation process including all actors (e.g. provider, customer, others)
Nature of value as value-in-use	Value-in-use evolves in a cumulative process, including favorable and unfavorable phases throughout the customer's value creation	-
Value in use: contextual influence	Level of value-in-use changes when social, physical, mental, or other contextual factors alter	Sometimes replaced by the expression of value-in-context, disguising the value-in-use aspect
Value spheres	Three spheres: provider sphere closed to the customer, customer sphere closed to the provider, joint sphere where customers and providers directly interact and may co-create value	Implicitly, one sphere for an all-encompassing value creation process
Interaction	Direct interactions with intelligent resources (people, intelligent systems) enabling co-creation and indirect interactions with non-intelligent resources (most products and systems) not enabling co-creation	Implicitly addressed with the FPs
Co-creation	A joint directly interactive process in which the actors' processes merge into one collaborative, dialogical process, such that a co-creation platform forms	Actions taken by all actors involved in a process, regardless of how they relate to each other
Value co-creation	Actions taken by the actors on a co-creation platform, where the actors may directly and actively influence each other's processes	Actions contributing to value for customers during an all-encompassing value creation process where all actors are involved
Driver of value creation	The customer drives value creation and is in charge of it	The provider drives value creation and is in charge of it

Division of roles in value co-creation	The provider may engage with the customer's value creation and co-create value with the customer	The customer may engage with the provider's process and co-create value with the provider
Customer's role	Creates and determines value (as value-in-use)	Determines value (as value-in-use)
Provider's role	Compiles resources embedded with potential value-in-use, through which the customer's value creation is facilitated	The provider co-creates value
Customer ecosystem's role	During interactions with persons in the social ecosystem, the customer may socially co-create value with them	Not discussed
Marketing: making promises through value propositions	On top of value propositions, provider can undertake direct, interactive actions on a co-creation platform to actively actively and directly influence the customer's value creation and value fulfillment	The provider can only offer value propositions
Reinventing marketing	Marketing may become an organization-wide promise management process	Not discussed

2.2 Digital services

Digital services can be distinguished from "normal" services. K. Williams, Chatterjee, and Rossi (2008, p. 506) define digital services as "services, which are obtained and/or arranged through a digital transaction (information, software modules or consumer goods) over the Internet Protocol (IP)". Especially the method of delivery builds difference to normal services, since it requires the ability and the infrastructure to connect to the Internet: people cannot participate in digital services unaided by computer technology (K. Williams et al., 2008). Still, this does not restrict the services to be completely digital (K. Williams et al., 2008). If digital service requires at least a partial digital interaction, there is no wondering why ICT has a central role in enabling service transactions and co-operation between the various parties (Chesbrough & Spohrer, 2006).

2.2.1 Mobile services

The story of mobile services date back to the rise of 3G technology in the early years of 21st century. Broadly speaking, 3G technology brought Internet, with all its services, available for consumers in their mobile devices. Since the introduction of 3G, the mobile and telecommunications industries have seen massive growth. Smartphones and wireless technologies have been central in the uprise of Mobile commerce.

Several characteristics distinguish mobile services from more traditional Internet services (Nysveen, Pedersen, Thorbjørnsen, & Berthon, 2005). These differences have implications for related stakeholders such as developers and providers of mobile services, marketing practitioners, as well as IS researchers. Probably the most notable distinction builds on the lack of time and space limitations (Balasubramanian, Peterson, & Jarvenpaa, 2002). Furthermore, Balasubramanian et al. (2002) note how time as a resource is scarce in the digital world, thus, one can expect that services which are not limited in terms of availability are highly valued. R. T. Watson, Pitt, Berthon, and Zinkhan (2002) speak of "u-commerce", proposing three "u's" relating to accessibility: ubiquitous access, universal access, and unison access. By ubiquitous it is meant that services can be accessed everywhere, universal relates to the possibility to maintain a connection to the service regardless of location, unison refers to the integration of multiple communication systems enabling a single point of connection or interface (R. T. Watson et al., 2002).

Another key distinction is the personalization of information and services. For maintaining customer relationships, wireless devices have been screened ideal (Kannan, Chang, & Whinston, 2001). The argument bases on the ability to tailor personalized content and services with the help of user behavior data (Kannan et al., 2001). Users' identity and their actions over time within multiple services, can be tracked. By analyzing and using the data, service providers can paint a clear picture of

preferences and use behavior, opening an opportunity to offer services at the point of need, backed up with engaging content (Kannan et al., 2001). Personalization may enhance interactive relationships between a brand and its customers, and thus, eventually lead to service platforms enabling value co-creation. In order to gain successful customer relationships, the co-creation of value should be addressed through personalized interaction, which is regarded meaningful and sensitive to a specific customer (Prahalad & Ramaswamy, 2004). It is also argued, that the experience of co-creation is the base for unique value experienced by individuals - not the service offering itself (Prahalad & Ramaswamy, 2004).

Third fundamental distinction relates to information dissemination (Nysveen, Pedersen, Thorbjørnsen, & Berthon, 2005). Within mobile channels, information can be sent to large filtered populations based on location, behavioral characteristics, purchase behavior, or use of certain systems or subsystems, for example. In general, large customer populations can be reached. Also the fact that smartphones and their applications are typically used to coordinate social interactions within multiple social media platforms (e.g. Facebook, Twitter, LinkedIn, Instagram, Pinterest, news applications), only increases the potential of well-established customer interaction. Communicating information that "go viral" (positively) has become a desirable objective for both, companies and their customers.

Smartphones can be seen as service platforms providing mobile services, which attain the above-mentioned characteristics. According to Tuunainen, Tuunanen, and Piispanen (2011), mobile services can also be conceptualized as consumer information systems (Tuunanen, Myers, & Cassab, 2010).

2.2.2 Smartphones as mobile service platforms

A mobile phone functioning merely for the purpose of making calls and sending text messages is becoming history. Todays' mobile phones largely consist of *smartphones*. It is expected that the adoption of mobile devices has been the fastest of all consumer products (Tuunainen et al., 2011). Generally speaking, smartphones are mobile phones including built-in functions similar to computers. They are devices that can be used as mobile phones and as hand-held computers (Verkasalo, López-Nicolás, Molina-Castillo, & Bouwman, 2010). By dictionary definition, smartphones are "cellular phones able to perform many of the functions of a computer, typically having a relatively large screen and an operating system capable of running general-purpose applications" (Oxford University, 2012).

Through the use of smartphones, users can utilize advanced mobile services such as banking, commerce, chat room, gaming, parking services, and so forth (López-Nicolás et al., 2008). Advanced mobile services can be defined "as data services that have the look and feel of Internet pages and are accessible via mobile or hand-held devices, operating at 2.5 and 3G+ (4G) mobile telecommunication networks." (López-Nicolás et al., 2008, p. 359). This study sees mobile applications as

advanced mobile services, defining applications as "software installed in mobile or tablet devices (utilizing Internet connection). An application (or "app"), can either be pre-installed in the device or downloaded from marketplaces such as the Apple's App Store or Google's Play Store" (Salo, 2013, p. 12). Apps can be downloaded and purchased regardless of time or location, without contacting the service provider physically (Tuunainen et al., 2011).

The user is (to a large extent) in control of applications running on their smartphones, not the operator. Smartphones let users install and use applications according to their needs and interests, equipping the smartphone with services providing desired features (Verkasalo et al., 2010; Tuunainen et al., 2011). According to *The Economist* (2011), most of the devices value represents the provided software and data services. Similarly, Tuunainen et al. (2011) point out how user value is ever more stemmed from apps.

Smartphones have begun to rely on network externalities. Network externalities or "network effects" refer to market situations, where one user of the network is affected, either positively or negatively, when another user joins or leaves the network (Katz & Shapiro, 1994). Apple's FaceTime and Google's Talk are good examples. Both applications provide cost-free video-call capabilities over the Internet. Utility of these applications, and hence utility of the phones, increases side-by-side with the number people using them (Godinho de Matos, Ferreira, & Krackhardt, 2014). Similarly, the potential benefits of employee advocacy platforms for organizations depend solely on the number of users and their use behavior. Thus, it is important to understand which factors contribute to use intention.

Shin (2007) speaks of convergence technologies including distinctive features like ubiquitous availability and quality of context. It is noted that in convergence environment, applications and services are separated from transport network, while services such as voice, data and video can be delivered via integrated and seamlessly connected ubiquitous networks (Shin, 2007). These notions are in line with the usual smartphone setting, including "normal" phone capabilities, and the ability to install additional software that are distributed via marketplaces. Furthermore, Shin (2007) sees that due to increasing convergence of Internet and mobile communications, mobile devices such as smartphones are growing their significance as an integral part of electronic and computer-driven business.

Globally, mobile phone penetration has increased from 12 percent in 2000 to 87 percent in 2011 (ITU, 2011). A major part of the growth is due to smartphones: they account for 65 percent of penetration in the United States, over 50 percent in Europe, and 29 percent worldwide (Vakulenko, Schuermans, Constantinou, & Kapetanakis, 2011). Revenues of $340 billion were expected by 2015, of which smartphones account for 75 percent (Godinho de Matos et al., 2014).

2.3   Software as a Service (SaaS)

The U.S National Institute of Standard and Technology (NIST) defines cloud computing as *a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction* (Mell & Grance, 2011). The NIST perspective on cloud computing consists of five essential characteristics, three service models and four ways to deploy the services (Mell & Grance, 2011). The three service models are Software as a Service (SaaS), Platform as a Service (PaaS), and Infrastructure as a Service (IaaS). The major characteristics of cloud-based services according to Mell and Grance (2011) are *on-demand service*, *broad network access*, *resource pooling*, *rapid elasticity*, and *measured service*. SaaS as a service model is essential from the perspective of this study.

The top layer of services utilizing cloud computing is often referred to as Software as a Service (Buyya, Yeo, Venugopal, Broberg, & Brandic, 2009). Utilizing software as services enables operational agility since organizations are no longer forced to allocate resources to data storage, software development or maintenance of computing resources. Instead, having software services offered on demand, at a lower cost, accompanied by scalability and simplicity, is leading towards new sources of sustainable competitiveness. The paradigm has shifted towards scalable processing power and storage, which are delivered by a number of networked data centers. (Armbrust et al., 2010).

SaaS model implies that consumers have access to provider's applications, which are hosted on cloud-based infrastructure (Mell & Grance, 2011). The application may be accessible through various interfaces and client devices, such as web browsers, mobile applications, wearable technology or software integrations. Usually, consumers cannot access the cloud infrastructure running the application, but are provided with the ability to configure the settings in-application. This is the case with SmarpShare too: customers cannot configure the network, servers, operating systems or storage supporting the application itself, but only have access to the settings concerning their account. Some of other commons examples of SaaS offerings are Google services, social media platforms, and CRM systems.

SaaS is praised for various benefits. Benefits include a diminished need of installing software, a common in-house task of IT-departments (Jadeja & Modi, 2012). Also, SaaS is typically charged *pay-as-you-use*, providing businesses a way to pay only for the resources they need (Marian & Hamburg, 2012). From the perspective of smaller businesses, this has been a warmly welcomed way to reduce costs. Attractiveness has only risen among top management as the services have matured, became easy to use, all while having flexible and customizable ways to access via various interfaces (Benlian, Hess, & Buxmann, 2009).

Much of todays software offerings are delivered via SaaS model. It seems evi-

dent in today's software business, that the only way to generate sustainable revenue is to provide appealing software that attracts actual usage and provides a low barrier to make effective use of the software. Thus, it has become crucial for SaaS providers to understand the core needs and use behavior of their users. Studying user acceptance is one way to gain insights of what users expect of the offered software.

2.3.1 Employee advocacy

This study defines employee advocacy as the behavior, where employees voluntarily support or defend their employer, its brand, or products by externally promoting a preferred image (Men, 2014). The concept of employee advocacy has created a market for SaaS platforms aiming to increase companies reach, credibility, and trustworthiness by making it easier for organizations to help employees build their own professional brand. This section describes the concept of employee advocacy. Also reasoning for companies and individuals interest in the concept is provided.

In the times preceding 1990's, "push marketing" was the status quo for companies to increase the sales of their offerings. During the 90's, marketing took a turn towards relationship marketing and the customer started to gain a centric role. Digital marketing revolutionized marketing traditions. Now customers get to choose the marketing content they want to consume, as well as the channels and timing of their availability. Social media and well-informed customers have started to force companies to take turn towards authentic and transparent presence.

Companies battle for engagement and reach in social media. It is increasingly rare to see mature businesses not having any presence in social media. Companies use social media for marketing efforts, customer support, promotion and generally tapping new audiences which would be hard to reach using traditional marketing means. Leveraging employee advocacy is one way to improve general social media presence.

Employee advocacy is no news, but rather a concept that has emerged to the limelight. Literature, research, and practitioners have long acknowledged the influence employees' as spokespersons can have on brands (Men, 2014; Dreher, 2014). The common arena has shifted to social media. The ever-more connected digital era provides a growing number of means and mediums for employees to initiate conversations about their employer (Men, 2014). For organizations, the shift has aroused the question of how to effectively manage the risks and benefits associated to employees sharing their thoughts on social media. Dreher (2014) suggests the management of social media presence should involve eight components: research (employees social media status), unrestricted internet access, C-suite commitment, social media team establishment, implementation of policies and guides, training and education on social media, integration, and finally objectives and measurement. Employee advocacy platforms inherently provide the means to implement

the components, and help in facilitating employee advocacy in practice.

In employee advocacy, employees utilize their own networks to communicate brand messages in order to personalize, promote or defend the brand, employer or products they represent in their position (Men, 2014). Employers instead provide the relevant content to employees, and encourage to take part in sharing the messages. Compared to traditional communication means, employees voice is often perceived more neutral and credible in the public domain (Men & Stacks, 2013). According to Edelman (2015) Trust Barometer friends and academic experts are the most trusted authors on social media. Furthermore, the perception is highlighted in this era of social media, as digital services are not only improving communication means among employees but also between employees and the general public (Men, 2014). Therefore, employees can effect the public relations of a company, especially in terms of reputation (J.-N. Kim & Rhee, 2011).

By taking part in advocacy, employees can position themselves as influencers, who lead by thought on social media. This way, employees can improve their professional brand and increase the professional network where they operate. Employee advocacy also helps employees to keep up-to-date on what is going on in the company and the business environment. Advocacy may also help to align and communicate company culture across employee networks. Employers may choose whether or not to incentivise activity and achieved results.

Companies may expect increased reach as the networks employees hold on social media are ofter much wider than what can be reached via corporate profiles on social media. Also trustworthiness and credibility may improve by leveraging an open communication policy, where employees can freely discuss company-related matters on social media. From cost perspective, by having employees taking part in communicating company messages, less can be invested in social media advertisement. Employee engagement, successful recruitments, and lead generation are other potential benefits of advocacy.

It is good to note that employee advocacy is voluntary in nature. The behavior may be encouraged and promoted by organizations by recognition, campaigning, culture, and rewards, but in the end, it is a matter of loyalty between the employee and the employer. Being voluntary in nature but encouraged by employers, the use intention of employee advocacy platforms makes an interesting research topic for IS field. These platforms are balancing between mandatory and voluntary use, providing both, utilitarian and hedonic value for the end user.

The growing communication power employees hold has made employee advocacy a buzzword in the fields of public relations, communications, marketing and sales. Employee advocacy has been nominated as a top social media marketing trend in Finland (Kurio, 2014). Edelman (2015) Trust Barometer indicates that tendency towards employee advocacy is higher among people who have adopted new technologies such as social media channels and smartphones. The barometer also hints that people who find new communication tools positive are more likely to

advocate for a company.

The market for platforms for employee advocacy has seen rapid growth during recent years. Platforms are most often SaaS-based, offering global scalability and extensive integration possibilities for other services. Competition in the market has intensified as companies have started to realize the potential exposure their employees hold inside the company. Another driving factor of the industry is the maturing state of social media marketing for business objectives.

The market for platforms specifically meant for employee advocacy is fast-developing, fragmented and immature. Platforms such as SmarpShare, SocialChorus, Gaggleamp, LinkedIn Elevate, and Dynamic Signal have all gained substantial investments and market share. As all offerings are still rather new, research seems scarce on the factors that drive employees use intention of such services.

2.3.2 SmarpShare platform

SmarpShare is a SaaS platform aimed for facilitating employee advocacy. The vendor, Smarp, is based in Helsinki, Finland. The platform has been available from early 2014. SmarpShare is provided as a browser application, accompanied by mobile applications for iOS (Apple) and Android (Google). The platform can also be accessed via nested iframe windows or emails. SmarpShare has gained notable market share in Europe. SmarpShare is a typical digital service, delivered via means of SaaS and mobile services. Competition is global and many vendors have appeared in the market during the last few years.

The author is currently working for Smarp, and thus has insights on the current state of the business and the respective SaaS product. The author works under a title of Customer Success Manager, being responsible for customer on-boarding, education, support, and business continuity of accounts.

Essentially, SmarpShare is an easy-to-use service, where employers can provide relevant content to employees. Employees may also contribute to available content by proposing content. SmarpShare provides the means for employees to discover the content, consume the content, and share the content to their own personal social media channels such as Twitter, Facebook, LinkedIn, Xing, and Weibo. The behavior may benefit employees in multiple ways, including engagement and growth of professional networks, stronger bonds and culture among colleagues, promotion of work-related information, recognition from employer, and keeping generally up-to-date (Leftheriotis & Giannakos, 2014; SmarpShare, 2015).

The customer organization defines what type of content is made available as posts. Typically the provided content has some relation to the industry, company, culture or employees. Typical benefits organization are seeing in employee advocacy include increased reach, trustworthiness, cost savings and ROI for content investments, employer branding, employee engagement, lead generation and ultimately sales (SmarpShare, 2015). In conclusion, one could say that the aim of

employee advocacy is to promote the brand of the company and their employees.

SmarpShare gathers data on the traction the shares generate. By doing so, employees and employers can measure the impact sharing has. An analytics section is provided. Inside the section, metrics such as clicks, reactions, reach and estimated earned media value can be analyzed. Using the provided metrics, the influence per user, per post, and during timely constraints may be examined.

Gamification elements are leveraged to make the experience more engaging and motivating. Employees may gather points for sharing, inviting a colleague, proposing content and generating clicks. Employer then chooses how to activate and incentivise employee for their actions. Rewards may be set inside the platform so that once users collect sufficient amount of points, they will be able to claim the rewards. Also, the top performers during a chosen time can be listed on leaderboards. Figure 1 presents the basic view of the SmarpShare's post feed where the available content can be previewed.

FIGURE 1: View on SmarpShare post feed

3   USERS ADOPTING TECHNOLOGIES

The acceptance and use of technology - adoption, has a long research tradition in IS field. Understanding the adoption processes of ubiquitous digital services is more important than ever. As basically all services are turning digital, studying the acceptance of service offerings has a critical role. The emergence of new types of services, disrupting technologies, and the new means of service delivery have fragmented acceptance research. The existing unified models are further developed in order to explain acceptance in different contexts and use cases. This chapter reviews technology acceptance literature and presents the theoretical framework underlying the proposed research model.

3.1   Towards a unified theory of user acceptance

How and *why* individuals accept and adopt new technology is an important and one of the most mature lines of research in the IS field (DeLone & McLean, 1992; Benbasat & Barki, 2007; Venkatesh et al., 2007). A number of models and theories have been proposed (DeLone & McLean, 1992) in order to provide an answer to the question "What causes people to accept or reject information technology?" (Davis, 1989, p. 320). This research agenda is wide in its scope. There have been many streams of studies. Some have studied implementation success in organizational context (Leonard-Barton & Deschamps, 1988), some task-technology fit (Goodhue, 1995; Goodhue & Thompson, 1995), while others have focused on individual acceptance of technology by using intention or usage as a dependent variable (Compeau & Higgins, 1995; Davis, 1989; Venkatesh et al., 2003, 2012). This study focuses on individual acceptance of end-users.

The main goal of technology acceptance research is to understand usage as the dependent variable. The behavioral action (i.e. usage) is predicted by use intention. The concept of intention as a predictor is seen critical and has a well-established status in IS and reference disciplines (Ajzen, 1991; Taylor & Todd, 1995; Venkatesh et al., 2003). The basic concept explaining the relationships between users' reactions, use intention and actual use behavior is presented in Figure 2.
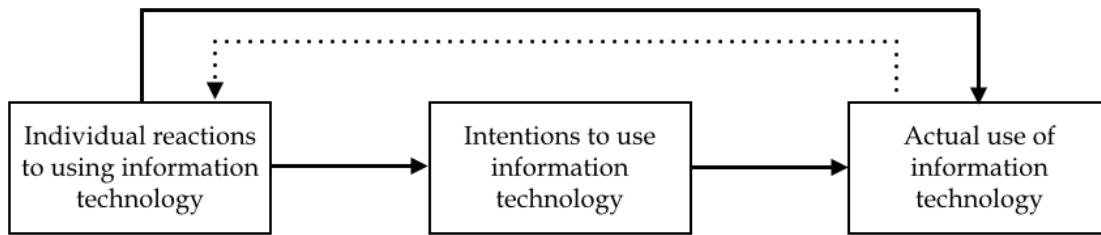
FIGURE 2: Basic concept of user behavior (Venkatesh et al., 2003)

Since acceptance of new technology is behavioral, the literature relates to motivational theory. Davis, Bagozzi, and Warshaw (1992) applied motivational theory to IS domain to explain technology adoption. Another root relies on the Theory of Reasoned Action, proposing that beliefs influence attitudes, which cause intentions that ultimately lead in behavior (Fishbein & Ajzen, 1975).

Following motivational theory, Van der Heijden (2004) explains how user acceptance can be seen to be determined by two types of motivation: extrinsic and intrinsic. Classification of motivation have been proposed in the Cognitive Evaluation Theory (Deci, 1971). If a user is motivated extrinsically, he or she is driven by the expectation of a reward or benefit that is external to the system-user interaction (Van der Heijden, 2004). Davis et al. (1992, p. 1112) define extrinsic motivation as a will to perform activity "because it is perceived instrumental in achieving valued outcomes that are distinct from the activity itself, such as improved job performance, pay, or promotion".

In contrast, intrinsically motivated user wants to perform the activity "for no apparent reinforcement other than the process of performing the activity per se" (Davis et al., 1992, p. 1112). This means that the interaction with the system can be seen as enough reasoning for the use of the system. The two types of motivation opposite each other. Extrinsic motivation bases on the performance process of a certain activity rather than performing because of the enjoyment to use the system (Kakar, 2014). The following sections paint a picture of how acceptance literature has progressed since the introduction of Technology Acceptance Model (TAM).

3.1.1 Technology Acceptance Model

Probably the most prominent model explaining user acceptance of information technology is the Technology Acceptance Model (TAM) proposed by Davis (1989). TAM has influenced extensively as a root for acceptance research in the IS field. The original model posits *perceived usefulness* and *perceived ease of use* as fundamental determinants of user acceptance (Davis, 1989). In 1992 *perceived enjoyment* was found to be significantly related to perceived ease of use (Davis et al., 1992). Definitions of determinants are provided in Table 4.

TAM implies that behavioral intention significantly determines the actual use of

TABLE 4: Definitions of determinants

Determinant	Definition	Source
Perceived useful-ness	"The degree to which a person believes that using the a particular system would enhance his or her job performance"	(Davis, 1989, p. 320)
Perceived ease of use	"The degree to which a person believes that using a particular system would be free of ef-fort"	(Davis, 1989, p. 320)
Perceived enjoy-ment	"Extent to which the activity of using the computer is perceived to be enjoyable in its own right, apart from any performance con-sequences that may be anticipated"	(Davis et al., 1992, p. 1113)

a system. Intention is determined by perceived usefulness and perceived ease of use. These beliefs form users' attitude towards using the system, which in turn, leads to intention to use (or not) the system. In the end, intention determines the decision of actual use. Perceived usefulness has been seen as an example of extrinsic motivation, while perceived enjoyment (or fun and playfulness) represent intrinsic motivation (Shin, 2007). The 1996 state of the model is presented in Figure 3.
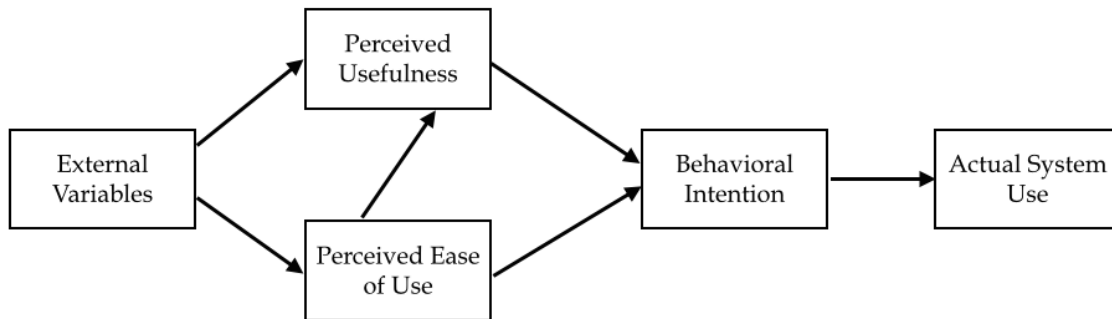
FIGURE 3: Technology Acceptance Model (Venkatesh & Davis, 1996)

The original TAM model has been widened, reworked and revised in various ways (Van der Heijden, 2004). Research of user acceptance has confirmed that perceived usefulness is the strongest predictor of user acceptance, while ease of use and per-ceived enjoyment influence less (Adams, Nelson, & Todd, 1992; Mahmood, Hall, & Swanberg, 2001; Taylor & Todd, 1995; Venkatesh & Davis, 2000). Also, the effect of perceived enjoyment has been proved weaker than the influence of the original determinants (Davis et al., 1992; Igbaria, Parasuraman, & Baroudi, 1996; Igbaria, Schiffman, & Wieckowski, 1994). Perceived ease of use and perceived usefulness (or constructs such as relative advantage or job fit) have widely been seen as main fac-tors explaining acceptance and usage behavior of IT (Igbaria et al., 1996; Venkatesh & Davis, 1996; Taylor & Todd, 1995; Kakar, 2014; Venkatesh & Brown, 2001). Adop-

tion process as a whole is also moderated by arguably many factors. Venkatesh and Davis (2000) propose that subjective norm, experience, and voluntariness moderate the process, highlighting the soon-to-come inclusion of social influences. Also, constructs preceding the original beliefs have been proposed. Constructs such as image, job relevance, output quality, and the demonstrability of results have been identified to effect perceived usefulness (Venkatesh & Davis, 2000). On the other hand, ease of use has been seen to constitute of computer self-efficacy, perception of external control, computer anxiety, computer playfulness, perceived enjoyment and objective usability (Venkatesh & Bala, 2008). The TAM research has routinely explained over 40% of the variance in users' intentions to use a technology (Davis, 1989; Taylor & Todd, 1995; Venkatesh & Davis, 2000).

Although the above statements have proved factual, many exceptions to the pattern have been reported already in the late 90's (Atkinson & Kydd, 1997; Moon & Kim, 2001; Venkatesh, 1999; Van der Heijden, 2004). These papers have investigated IS, which seem to be accepted more due to perceived enjoyment and perceived ease of use than perceived usefulness. Reports have been studying systems such as World Wide Web, home and leisure time related systems such as games or game-based training versions of IS for work. Taking a leap forward, Van der Heijden (2004) added perceived enjoyment to TAM.

TAM has been criticized for its simplicity and parsimony (Lee, Kozar, & Larsen, 2003), while on the other hand these have been viewed as the strengths of the model (Venkatesh et al., 2007). Exceptions in findings also support criticism concerning the explanatory power of TAM, ignorance of social influences, and the suitability to study hedonic use of IS. Regardless of the criticism, TAM has been extensively used to analyze adoption of different technologies, though rarely has the model been applied in its original form. Additional factors have extended TAM to suit the research context better.

Ho Cheong and Park (2005) for example extended TAM to study the adoption of mobile Internet. The proposed model integrated perceived playfulness, content quality, system quality, Internet experience and perceived price level as constructs. These determinants were added in addition to the original perceived usefulness and ease of use. Perceived playfulness has been found to precede attitudes towards Web surfing (Moon & Kim, 2001). Moon and Kim (2001) has noted that much of TAM research solely focuses on extrinsic motivation, signaling the need to move towards including intrinsic motivators. Interestingly, Ho Cheong and Park (2005) report that perceived usefulness and perceived enjoyment do not even directly influence use intention, but rather moderately precede the attitude towards technology.

Shin (2007) validated a version of TAM studying acceptance of Wireless Broadband Internet technology. The proposed model ignores perceived ease of use, and replaces it with perceived enjoyment. Furthermore, their perspective sees perceived availability influencing perceived usefulness, while quality perception influences perceived enjoyment. These factors together influence the attitude leading to in-

tention. Shin (2007) also proposes social pressure as a direct determinant of use intention.

All and all, it is safe to say that regardless of context, there are various versions of TAM that can greatly vary in terms of constructs. There are no universally applicable versions of TAM.

3.1.2 Unified Theory of Acceptance and Use of Technology

While many theoretical models had been developed from theories in psychology and sociology, it was not until 2003, when a synthesis of existing models resulted in a unified theory of acceptance and use of technology (UTAUT) (Venkatesh et al., 2003). UTAUT comprised eight theories (Table 5) with differing viewpoints and distilled critical determinants and contingencies preceding behavioral intention to use technology (Venkatesh et al., 2012). UTAUT was primarily suitable for organizational context, evaluating the acceptance of employees (Venkatesh et al., 2012).

UTAUT has four core determinants preceding use intention and actual use, namely: performance expectancy, effort expectancy, social influences, and facilitating conditions (Venkatesh et al., 2003). The model echoes the history of TAM research, performance expectancy reflecting perceived usefulness, and effort expectancy reflecting ease of use. External variables were comprised to social influences and facilitating conditions. Impacts of the determinants are variantly moderated by gender, age, voluntariness and experience.

It has been stated that UTAUT can function as a useful tool for managers when success potential of technology introduction needs to be assessed. The model also helps to understand the determinants of acceptance which, in organizational context, may be crucial when designing training or marketing for user populations less willing to adopt or use the new systems. (Venkatesh et al., 2003).

Users of several kinds of information technologies have been studied using UTAUT, including mobile technologies (Park, Yang, & Lehto, 2007), mobile banking (Zhou, Lu, & Wang, 2010), mobile wallet (Shin, 2009) and mobile devices/service (Carlsson, Carlsson, Hyvonen, Puhakainen, & Walden, 2006). Usually one or more of the preceding factors have been modified in order to suit the model to research context.

Being originally validated for organizational context, UTAUT's suitability to study consumer and mobile context has been questioned. For example, Carlsson et al. (2006, p. 1) state quite suspiciously how "UTAUT to some extent and with some reservations can be used as a starting point to find some explanations for the adoption of mobile devices/services." Also, meta-analyses of UTAUT studies have shown that only a rare few of studies actually leverage the UTAUT framework empirically, and even fewer in quantitative manner (Dwivedi, Rana, Chen, & Williams, 2011; M. D. Williams, Rana, Dwivedi, & Lal, 2011). Aiming not to take part in this rather surprising trend in acceptance research, this study chooses to leverage a

TABLE 5: Theoretical foundations of UTAUT adopted from (Venkatesh et al., 2003)

Theory	Core constructs	Author
Theory of reasoned action (TRA)	Attitude towards behavior, subjective norm	(Sheppard, Hartwick, & Warshaw, 1988; Fishbein & Ajzen, 1975; Davis, 1989)
Technology Acceptance Model (TAM)	Perceived usefulness, perceived ease of use, subjective norm (in TAM2)	(Davis, 1989; Venkatesh & Davis, 2000)
Motivational Model (MM)	Extrinsic and intrinsic motivation	(Davis et al., 1992; Vallerand, 1997)
Theory of Planned Behaviour (TPB)	Attitude toward behavior, Subjective norm, Perceived behavioral control	(Ajzen, 1991; Harrison, Mykytyn Jr, & Riemenschneider, 1997; Mathieson, 1991; Taylor & Todd, 1995)
Combined TAM and TPB	Attitude toward behavior, subjective norm, Perceived behavioral control, Perceived usefulness	(Taylor & Todd, 1995)
Model of PC Utilization (MPCU)	Job-fit, complexity, long-term consequences, affect towards use, social factors, facilitating conditions	(Thompson, Higgins, & Howell, 1991)
Innovation Diffusion Theory (IDT)	Relative advantage, ease of use, image, visibility, compatibility, results demonstrability, voluntariness of use	(Rogers, 1995; Moore & Benbasat, 1996)
Social Cognitive Theory (SCT)	Outcome expectations - performance, outcome expectations - personal, self-efficacy, affect, anxiety	(Bandura, 1986; Compeau & Higgins, 1995)

modified UTAUT2 as a research model, and will empirically test the model using quantitative research methods.

3.1.3 Unified Theory of Acceptance and Use of Technology 2

The latest version, UTAUT2, extended the scope to fit consumer context. UTAUT2 was published in 2012, forming a research model which can be seen "up-to-date", but lacking in the level of maturity. Studies replicating and generalizing the model, as well as proving the models validity, are still limited in numbers. The paper introducing UTAU2 proposes applying the model in different countries, across age groups, and studying differing technologies, but also identifying additional constructs (Venkatesh et al., 2012). The proposal is noted in the current study by applying the model in a setting, where users come from different countries, varying in age, and using an employee advocacy platform delivered via SaaS. The original model is slightly altered to cater the context of the study better. Furthermore, an additional construct will be introduced.

Compared to the former version, UTAUT2 improved in explaining the variance in behavioral intention (56% to 74%) and technology use (40% to 52%) (Venkatesh et al., 2012). UTAUT2 was validated in a consumer context, especially with a target population of mobile Internet users. Building difference to the prior model aimed for organizational context, UTAUT2 (Figure 4) takes notice of hedonic motivation, price value, and habitual behavior, proposing that these constructs also precede behavioral intention. Definitions of determinants are provided in Table 6.

Moderators were slightly updated too. Voluntariness was removed from the model, assuming that consumer behavior is primarily voluntary. Experience was also found to moderate the effect of behavioral intention. Thicker lines in Figure 4 signal updates on the former models. Taking these aspects into account, the UTAUT2 model will extend the applicability of the model to also fit consumer context, not being limited to only organization context. (Venkatesh et al., 2012).

Upon introducing the UTAUT2, Venkatesh et al. (2012) reviewed the research citing to original UTAUT model. Similarly to the conducted meta-analyses on UTAUT, it was found that much of the research citing to UTAUT only used the theory as a general reference, but did not apply nor extend the model (Venkatesh et al., 2012). The research model proposed in this study applies the UTAUT2 framework in practice, altering and extending the framework to better cater the research context.

UTAUT2 was chosen as the base theory for two reasons. Firstly, the model has been validated with actual users of software products. Secondly, users are expected to evaluate both: the enjoyment using the platform (hedonic motivation) and the professional and practical value (perceived usefulness), when considering whether or not to start using an employee advocacy platform. Venkatesh et al. (2012) remarks, that hedonic information systems are rather ubiquitous in todays consumer ICT market. The platforms for employee advocacy also compete in terms

of hedonic aspects such as the most enjoyable user experience. This justifies the inclusion of hedonic aspects.

TABLE 6: Definitions of UTAUT2 determinants

Determinant	Definition	Author
Performance expectancy	"The degree to which an individual believes that using the systems will help him or her to attain gains in job performance"	(Venkatesh et al., 2003)
Effort expectancy	"The degree of ease associated with the use of the system"	(Venkatesh et al., 2003)
Social Influence	"The degree to which an individual perceives that important others believe he or she should use the new system"	(Venkatesh et al., 2003)
Facilitating conditions	"The degree to which an individual believes that an organizational and technical infrastructure exists to support use of the system"	(Venkatesh et al., 2003)
Hedonic motivation	"The fun or pleasure derived from using a technology"	(S. A. Brown & Venkatesh, 2005)
Price value	"Consumers' cognitive tradeoff between the perceived benefits of the applications and the monetary cost for using them"	(Dodds, Monroe, & Grewal, 1991; Venkatesh et al., 2012)
Habit	"The extent to which people tend to perform behaviors automatically because of learning"	(Limayem, Hirt, & Cheung, 2007)
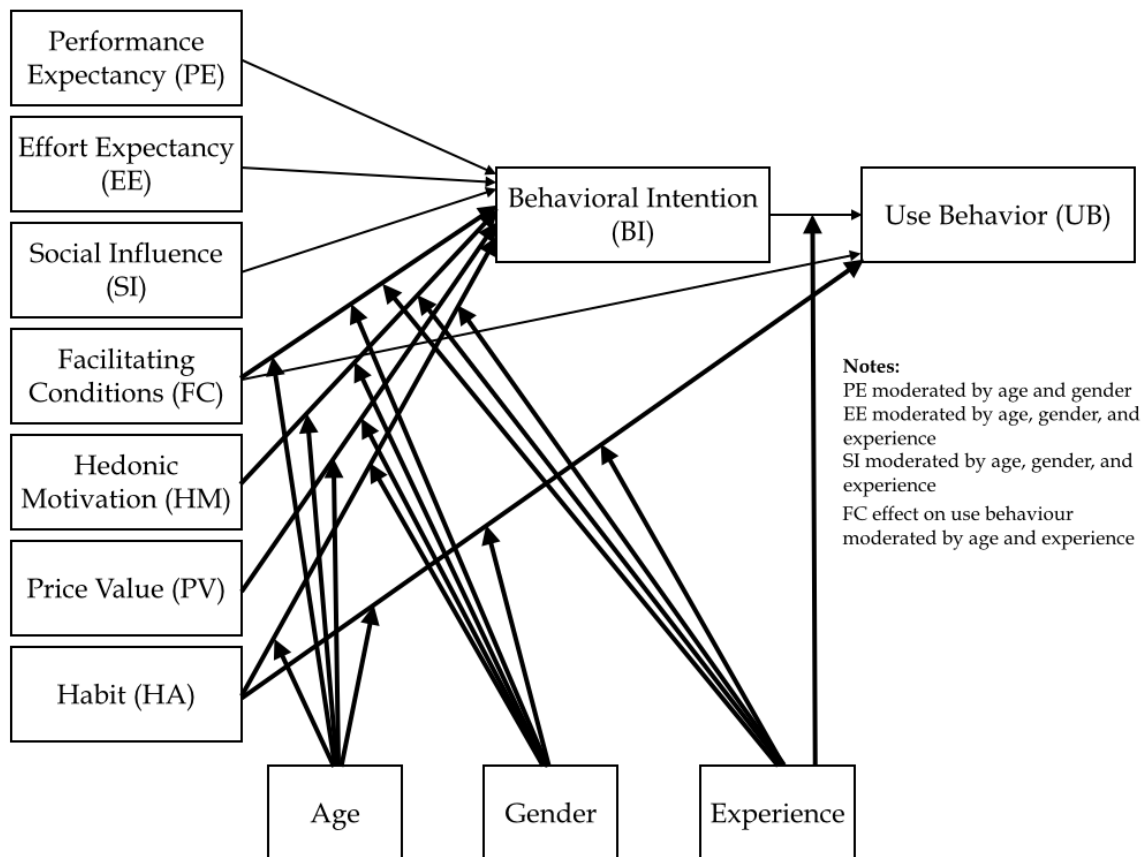
FIGURE 4: UTAUT2 model (Venkatesh et al., 2012)

3.2   Value in IS context

How is the value of an information system (IS) perceived? IS products are multi-faceted and able to provide value to users in many ways (Kakar, 2014). IS products can be categorized into three distinctive classes: predominantly utilitarian, predominantly hedonic and a hybrid, being a combination of the preceding two (Kakar, 2014). According to Leftheriotis and Giannakos (2014), employees see both hedonic and utilitarian value in operating in social media. As employee advocacy platforms are providing the means to operate in social media in a measurable, gamified, and efficient manner, this study categorizes the platforms as hybrids.

Utilitarian systems provide *instrumental value* to the user. The use of such systems is normally productive, goal-directed and task performance-oriented. When developing utilitarian systems, developers mainly focus on functionality with task requirements. The goal is also to provide as little distraction as possible in order to enhance users' task perform. Utilitarian systems are mostly related to work environments since they encourage efficient usage. In utilitarian systems, the extrinsic motivation can be seen as the main driver of the users' intention to use the system. (Van der Heijden, 2004).

Hedonic systems provide *self-fulfilling value* to the user (Van der Heijden, 2004). The use can be regarded experimental. Comparing the user values of these two dimensions, hedonic values are more subjective and personal whereas utilitarian values are seen more rational (Babin, Darden, & Griffin, 1994). According to Arnold and Reynolds (2003), hedonic systems include positive moods, high level of satisfaction and playfulness. Such systems are strongly linked to home and leisure time activities, such as games for example. In hedonic systems, developers mainly focus on visual functions such as images, colors, sounds and, in general, aesthetic layouts. Hedonic systems do not have such goals as utilitarian systems because the use itself and its prolognesity can already be seen as a goal. (Van der Heijden, 2004).

Hybrids provide both instrumental and self-fulfilling value. In the context of employee advocacy, and when generally using social media platforms, users expect the platforms to provide the functional means for seamless operation. At the same time, satisfactory fun and playfulness are expected. A sample of the hybrid nature of the systems would be sharing an image on Facebook. The platform makes it effortless to upload the image, add the desired comment, choose the audience, and engage a friend or two by tagging them. After having posted the image, users will be notified on the likes and comments of the chosen audience, which will drive the fun and satisfaction associated to the use. Both, utilitarian and hedonic value is delivered.

3.3 User acceptance of SaaS platforms

The massive shift towards cloud-based ICT services has been regarded as the biggest changes in the history of IT (Marston, Li, Bandyopadhyay, Zhang, & Ghalsasi, 2011). Much of cloud-based software is delivered via SaaS model and the shift has been revolutionary. Delivering software as a service has fundamentally changed the way IT-services are provided, delivered, invented, scaled, updated, maintained and charged (Marston et al., 2011). This shift has made purchasing of software as a service more attractive than traditional means of delivery, changing the way organizations and users perceive the purchase, implementation and use processes of software (Armbrust et al., 2010).

The adoption of SaaS has gained notable attention in IS literature. Especially how organizations perceive SaaS-delivered software and adapt the new fundamentals, has been studied extensively. Less emphasis has been put on the individual acceptance of the many kinds of applications delivered as SaaS.

Luoma (2013) notes how recent IS literate is pretty unified on the core drivers of organizational adoption of SaaS. The potential cost savings are a prominent driver of adoption. Organizations do not need to capitalize on hardware or personnel running IT resources, as the resources can be accessed in a scalable manner as demand occurs (Armbrust et al., 2010; Benlian & Hess, 2011; Marston et al., 2011; Vaquero, Rodero-Merino, Caceres, & Lindner, 2008; P. Watson, 2012). Moreover, organizations only need to *pay-as-they-use* (Marston et al., 2011). Another prominent driver is the gained flexibility: organizations can focus on their core value propositions, and only utilize the resources needed at the moment (Armbrust et al., 2010; Benlian & Hess, 2011). The literature has identified plenty of positive drivers of organizational SaaS adoption such as improved service quality (Benlian & Hess, 2011; Choudhary, 2007), scalability concerning provisioning (Armbrust et al., 2010; Marston et al., 2011), and simpler overall management (Bibi, Katsaros, & Bozanis, 2012). All drivers resonate the organizational perspective, but none of these drivers explain the use intention of individual users sufficiently.

Studying SaaS acceptance of micro and small businesses, Gupta, Seetharaman, and Raj (2013) finds perceived ease of use and convenience as the most influential factors contributing to adoption. According to their findings, security and privacy concerns were the second strongest factor in line. Cost reductions were perceived third. Interestingly, Gupta et al. (2013) found SMEs considering clouds unreliable. Traditional means were rather used for sharing and collaborating. Even though this study does not yet concentrate on the individual acceptance, it highlights the importance of perceived ease of use and convenience associated to SaaS.

Du, Lu, Wu, Li, and Li (2013) studied the user acceptance of globally known e-commerce platform, Alibaba. The research model combined an e-service quality component. Other constructs were derived from TAM-literature. The study found perceived usefulness as the strongest direct predictor of use intention. E-service

quality (ease of use, reliability, and responsiveness) and social influence were found as direct determinants too. In line with prior acceptance studies, ease of use influenced perceived usefulness with considerable strength.

Virtual communities and online games are often delivered via SaaS. H.-W. Kim et al. (2012) found that desire for online self-presentation influences purchase intention in the context this context. The influence proved strong. This finding motivated the author to test the influence of self-presentation in employee advocacy context. Supporting the idea, desire for online self-presentation has been showed to directly influence the use intention of social networking services (Chauhan, 2014).

SaaS come in many forms and for many purposes. Use context may vary from strictly mandatory industrial use, to fully voluntary usage such as social networking and gaming. Thus, the services may cater either utilitarian or hedonic value, or both. Therefore, it may be hard, if not impossible, to capture user acceptance of "all" software delivered via SaaS means. Thus, the question of whether acceptance behavior should be studied using unified models fitting in an array of use contexts is debatable.

Taking a holistic view on SaaS, Wu (2011) studied the acceptance of *SaaS solutions* and developed an explorative model for SaaS adoption. In the study, perceived ease of use and perceived usefulness were positioned as the direct determinants of behavioral intention. The study finds these two constructs preceding use intention. However, the study was conducted on CEOs and senior management of multiple organizations, rather than multiple users of single SaaS solution. Thus, the study may represent organizational views instead of individual users.

Research seems scarce on the end-user acceptance of SaaS offerings, especially studies where UTAUT2 would have been empirically tested. It is expected that SaaS influences the business environment more dominantly, thus organizational perspectives are more common. Some studies were still found. The studies do not leverage UTAUT completely, but only partially use the same constructs.

One example of such studies investigated the acceptance of Google Docs. This study found perceived usefulness and satisfaction to positively influence the use intention of Google Docs office tools (Tan & Kim, 2015).

Studying the consumer acceptance of mobile wallets, another specified use context, ease of use and perceived usefulness were proven to precede attitude towards the innovation, ultimately leading to use intention (Shin, 2009). In the context of mobile wallet, not so surprisingly, perceived security and trust were also shown to be direct determinants of use intention.

In the context of mobile application acceptance, a Bachelor's thesis suggests habit to influence use intention strongly, while hedonic motivation, performance expectancy, and effort expectancy influenced less (Kit, Ni, Badri, & Yee, 2014). Price value, social influence and facilitating condition were not found significant in preceding use intention of mobile apps.

One may conclude that findings relating to end-user acceptance of SaaS solu-

tions are fragmented and theoretically inconsistent. Proposed models are many. Hardly any of the related research propose models specifically aimed to study consumer use intention of SaaS offerings. UTAUT2 is also not often fully utilized in studies of end-user SaaS adoption. Furthermore, it seems like the strength and significance of constructs varies a lot across the found studies, making it hard to compare the results of this thesis work reliably.

3.4   Self-presentation theory and intention

Why do people tend to present themselves in a good light? Why does it seem that most professional online profiles intend to make a good impression? The self-presentation theory (Goffman, 1959; Leary, 1995) opens the why behind peoples' tendency to present a desired image of themselves. The theory suggests two principal motives explaining self-presentation (Goffman, 1959). The first motive proposes people possess a will to influence others and be rewarded through their presentation. An example of this would be a well-thought LinkedIn profile, highlighting the qualities of the employee. The reasoning for the profile would be to impress one's professional network, current employer, or potential future employers. The second motive posits that people present an image of themselves to assure a personal identity, which resonates with people sharing similar qualities. General behavior in social media is a good example of the latter. People gather up, form groups and build relationships with similar others. H.-W. Kim et al. (2012) see the second motive especially relevant for social networking sites, where self-presentation helps to find alike peers.

Goffman (1959) notes how effective social interaction requires people, who hold and present their identity. Therefore, one might expect that online self-presentation is a key factor driving participation to social networking online (H.-W. Kim et al., 2012). Following the notions, it is rational to expect that the desire for online self-presentation also determines the intention to take part in employee advocacy and social profiling in general.

4 RESEARCH METHODOLOGY

This study aims to explain the determinants influencing the use intention and usage of SmarpShare employee advocacy platform. In order to build this understanding, a quantitative research approach was undertaken. This chapter opens the reasoning behind the chosen research method. Furthermore, the data collection procedure and the conducted data analysis are presented.

4.1 Quantitative research approach

This research aims to find the extent to which explanatory factors influence the use intention of a software. The objective is best achieved with a suitable methodology and method (Hirsjärvi, Remes, & Sajavaara, 2014, p.13-15). Basically, there are two differing ways to conduct research: empirical and theoretical. This study takes the path of empirical research. Furthermore, empirical studies may be divided into quantitative and qualitative. In order to test the proposed research model, a quantitative approach is chosen.

Quantitative research builds on collected numerical data related to target population and context. By centering around numerical measures, quantitative research may be utilized to find the frequency (how often?) or quantity (how much?) of events. Also, questions of 'What?', 'Where?', and the correlation or causal effect between factors may be addressed. (Nummenmaa, Holopainen, & Pulkkinen, 2014, p.15-16). In this case, the study addresses the question of *how much* the proposed factors influence the use intention of the studied software. Furthermore, causal effects between the factors are explored.

Some characteristics are used to evaluate the quality of quantitative research. As a guiding principle, quantitative research should be repeatable in order to maintain its reliability (Hirsjärvi et al., 2014, p.231). On another note, results should be generalizable so that the sample represents the whole targeted population (Hirsjärvi et al., 2014, p.140).

According to Hirsjärvi et al. (2014, p.137-138) the purpose of the study may represent some of the following: an exploratory research, an explanatory research, a

descriptive research or a predictive research. The current study aims to test the proposed research model in order find the reasons ('Why', 'How much' and cause-effect relations) behind use intention, thus, the study may be considered as a combination of exploratory and explanatory research. The hypotheses are derived from theory and empirically tested with the help of the collected data. Thus, the research may be considered deductive in nature. For similar research settings, surveys are commonly used as research methods.

4.2   Survey as a research method

Quantitative research is commonly categorized in three types: experimental research, surveys, and case studies (Hirsjärvi et al., 2014). This research chooses survey as the research method. According to Hirsjärvi et al. (2014) surveys may come in the forms of questionnaires, interviews, or observations, where data is collected standardized while the sample represents a certain population. Standardized data collection should be carried out to secure comparable data for analysis (Hirsjärvi et al., 2014, 193). Data collection was carried out as an online questionnaire in this study.

Questionnaires can be used to seek information about respondents' behavior, actions, attitudes, knowledge, values, attitudes, opinions or beliefs (Hirsjärvi et al., 2014, 14). Factors preceding use intention are essentially behavioral and attitudinal in nature. Therefore questionnaire was chosen as the way to proceed. Following the notion for standardized data collection, all respondents in this study were exposed to exactly the same questions. The questionnaire also remained unchanged during the data collection.

Questionnaires are commonly seen as an efficient way to collect extensive amounts of data. This is due to the potential of getting multiple respondents, as well as the chance to address many questions with minimal effort. Another positive notion is that the researcher may expect less bias as respondents take part from their own natural environment instead of an arranged research setting. Still, questionnaires don't come without limitations.

Some regard questionnaires as rather shallow in nature and the theoretical impact of such research is considered modest (Hirsjärvi et al., 2014). Also, Hirsjärvi et al. (2014) presents the following aspects as limitations related to questionnaires:

- Honesty of respondents. As researcher has no control over participants, the research setting cannot guarantee serious and honest responses.

- Misunderstanding of questions or response options. The researcher cannot be sure how the given questionnaire has been interpreted.

- Respondents awareness of research object. Do respondents actually now what the questionnaire is all about?

- Loss in respondents. Not enough respondents have taken part.

Regardless of limitations, a self-administered questionnaire was formed using a service called Typeform. Typeform was used to host the questionnaire online. This way, only a link had to be distributed to respondents. In order to test the questionnaire, it was piloted with selected personnel of SmarpShare and 3 academics from University of Jyväskylä. SmarpShare staff was excluded from the actual study. The valuable feedback resulted in some tweaks in wording. Overall, the test group found the survey intuitive, easy to use and understandable. The questionnaire was conducted in English. The measurement items are described in the following section. Motivational letters can be found as appendix.

4.3 Target population and data collection

The target population consists of users of SmarpShare, who operate the software in a context balancing between mandatory (use encouraged by employer) and voluntary (own professional social media presence). The concept of employee advocacy does promote voluntariness, but the actual use environment varies dependent on company culture. Understanding the factors behind use intention will provide useful insights for both: the software vendors of similar kind and organizations leveraging the use of social media to drive brand value in terms of visibility and authenticity.

A randomized selection of users who had been active (accessed the platform) between May 2015 and November 2015 was carried out. Both user roles, basic and administrative, were included in the sample. Also, users were located across the globe.

List of users' emails was extracted from SmarpShares database resulting in 7947 potential respondents. With encouraging invitation messages, a 3-phased 3-week email survey was conducted. The author chose not to incentivize respondents. Instead, opportunities to participate in future campaigns and testing were offered. Users were able to unsubscribe from the mailing list throughout the survey.

The first round of invitations to participate were sent to all 7947 potential participants on November 12th. According to Mailchimp's data, 7866 of all invitations were successfully delivered, thus N=7866. According to Mailchimp, a total of 2032 respondents opened the invitation and 358 actually clicked the link to the survey.

After having removed bounced back emails and unsubscribed users, a total of 7826 emails were left. A reminder was sent to all these emails 6 days after the first invitation, on November 18th. Again, according to Mailchimp 1639 actually opened the reminder, and 238 clicked the link to the survey.

After cleaning the email list once again, the last call to participate was sent on 26th of November to 7769 respondents. 1561 users opened the email and 164 directed themselves to the survey. With the help of Typeform's tools, only unique

responses were included in the final results. The campaign resulted in 446 valid responses, generating an effective response rate of 52% (responses/users entering the survey). From the total target population, the response rate was 5.6% (responses/potential respondents).

4.4   Key measures and scales development

Survey measures and measuring items are adopted from previous user acceptance studies. The UTAUT2 model by Venkatesh et al. (2012) was used as a general framework. Following the example of Wu (2011), the UTAUT constructs of Performance Expectancy and Effort Expectancy were replaced with Perceived Usefulness and Perceived Ease of Use. Social Influence was treated similarly to UTAUT2 though measuring items were slightly altered. Constructs of Facilitating Conditions, Behavioral Intention and Hedonic Motivation follow UTAUT2 framework. Measuring items for Hedonic Motivation originate from work of H.-W. Kim, Chan, and Gupta (2007). The construct of Desire for Online Self-Presentation was not included in UTAUT2. This construct and the measuring items were derived from work of H.-W. Kim et al. (2012). Satisfaction of users was also measured, even though the construct was left out of the proposed research model. All constructs, their measuring items and respective authors are listed in Table 7. Measure item PU4 was included in order investigate whether end users perceptions are in line with marketing arguments of employee advocacy concepts. This study expects that employees are willing to enhance their digital footprint to ensure future employment and professional advancement, therefore, PU4 was added as a measurement item. DOSP3 instead was included to see whether end users are generally motivated to establish preferred image of themselves in social networks. Habit and price-value constructs were not measured due to the concept being rather new for end-users and essentially free of charge.

TABLE 7: Measurement items

Construct	Measurement item	Author
PU1	Using SmarpShare saves me time.	(Verkasalo et al., 2010)
PU2	Using SmarpShare enables me to do things better.	(Wu, 2011)
PU3	Using SmarpShare improves my performance.	(Wu, 2011)
PU4	Using SmarpShare helps me to advance professionally.	Own
PU5	The functionality of SmarpShare is satisfactory.	(Wu, 2011)
PEOU1	The interface of SmarpShare is user-friendly.	(Wu, 2011)
PEOU2	It is easy to understand how to use SmarpShare.	(Wu, 2011)
PEOU3	It is easy to learn to use SmarpShare.	(Wu, 2011)
PEOU4	It is easy to make use of SmarpShare.	(Wu, 2011)
SI1	Discussion about SmarpShare effect my usage.	(Wu, 2011)
SI2	I want to use the service because my colleagues/friends do so and I want belong to the group.	(Verkasalo et al., 2010)
SI3	People whose opinions I value prefer that I use SmarpShare.	(Venkatesh et al., 2012)
FC1	I have the resources necessary to use SmarpShare.	(Venkatesh et al., 2012)
FC2	I have the knowledge necessary to use SmarpShare.	(Venkatesh et al., 2012)
FC3	SmarpShare works well together with other technologies I use.	(Venkatesh et al., 2012)
FC4	I can get help from other when I have difficulties using SmarpShare.	(Venkatesh et al., 2012)
HM1	Using SmarpShare is fun.	(Venkatesh et al., 2012)
HM2	Using SmarpShare is enjoyable.	(Venkatesh et al., 2012)
HM3	Using SmarpShare is very entertaining.	(Venkatesh et al., 2012)
BI1	I intend to continue using SmarpShare in the future.	(Venkatesh et al., 2012)
BI2	I will try to to use SmarpShare in my daily life.	(Venkatesh et al., 2012)
BI3	I plan to continue to use SmarpShare frequently.	(Venkatesh et al., 2012)
DOSP1	I use SmarpShare to remain active on social media.	(H.-W. Kim et al., 2012)
DOSP2	I use SmarpShare to establish a professional image for myself on social media.	(H.-W. Kim et al., 2012)
DOSP3	I want to establish a preferred image for myself in social networks.	Own

Wording in the measurement items was kept as similar to previous studies as possible. Minor updates were made to improve the understandability of the measurement items. Items PU4 and DOSP3 were based on assumptions of Smarp-Share's utility and usage. Following the example of Venkatesh et al. (2012), a five-point Likert-scale was chosen for measurement items. Scale ranged from "totally disagree" (1), "disagree" (2), "neutral" (3), "agree" (4) to "totally agree" (5). As the scale attempts to reveal actual experiences of users, the option of "I don't know" was left out. Although the scale is of ordinal form, it is often used as an interval scale (Metsämuuronen, 2005, p.94).

4.5 Hypothesis generation

The hypothesis to be tested and the proposed research model are developed in this chapter. The proposed research model integrates factors from three key research models presented in IS acceptance literature: the UTAUT2 (Venkatesh et al., 2012), TAM-DTM (López-Nicolás et al., 2008), and the explorative model for SaaS adoption by Wu (2011). Furthermore, the factor of desire for online self-presentation is drawn from a model proposed by H.-W. Kim et al. (2012). The UTAUT2 model functions as the basis for the developed research model.

Research regarding users acceptance of information systems and digital services have provided valuable insights into how and why users decide to adopt and use certain technologies. However, it is difficult, if not even impossible, to build a holistic model that would take into account the characteristics of the users and the respective technology. The proposed research model aims to specifically cater the acceptance of employee advocacy platforms, and other social media management tools.

The behavioral intention, i.e. the degree to which individual intend to use the technology in the future (Venkatesh et al., 2012), is determined by various factors. This study draws from the literature and posits the following factors as determinants preceding the use intention of employee advocacy platforms: perceived usefulness, perceived ease of use, social influence, facilitating conditions, hedonic motivation and desire for online self-presentation.

4.5.1 Perceived usefulness (PU)

According to TAM and many of its extensions, the behavioral intention to use a technology is increased by PU (Venkatesh et al., 2003). This study expects PU to also be present in the adoption of employee advocacy platforms. PU has been widely reported to explain use intention as a key factor in both, voluntary and mandatory contexts (López-Nicolás et al., 2008). PU has been shown to explain use intention of many digital services such as mobile banking (Luarn & Lin, 2005) and advanced mobile services (Wang, Lin, & Luarn, 2006). However, some studies suggest PU

is not a significant factor for behavioral intention. For example, when Ha, Yoon, and Choi (2007) studied the adoption of mobile games, they did not find support for causality between PU and BI. While studying mobile chat services, Nysveen, Pedersen, and Thorbjørnsen (2005) instead found PU as a significant determinant only among male respondents, while within female sample the relationship was not found significant. This study expects PU to have a positive effect on the use intention of employee advocacy platforms.

H1: PU has a positive effect on BI.

4.5.2 Perceived ease of use (PEOU)

López-Nicolás et al. (2008) defines PEOU as the degree to which individuals consider using the respective system is easy to access, learn and utilize. Several constructs have been used capture the concept of PEOU. Venkatesh et al. (2003) for example used effort expectancy as the descriptive determinant. Effort expectancy was defined as the degree of ease associated with the use of the system (Venkatesh et al., 2003). May the construct go under which name ever, many studies have reported that PEOU may affect both, PU and BI (López-Nicolás et al., 2008; Venkatesh & Davis, 1996, 2000). This study leverages the PEOU measurement items suggested by Wu (2011) and expects PEOU to have positive effects on PU and BI. User-friendly and easy-to-use systems are generally seen more appealing, especially when using mobile applications and SaaS-based software. Thus, PEOU is also expected to influence HM positively.

H2a: PEOU has a positive effect on PU.

H2b: PEOU has a positive effect on BI.

H2c: PEOU has a positive effect on HM.

4.5.3 Social influence (SI)

The introduction of employee advocacy platform into an organization requires internal marketing, education, and a cultural change, in order to see the benefits materialize. The reasons for introducing and utilizing a new tool needs to be convinced and communicated to people across the organization. Thus, social influence is a requisite for successful implementation. In the context of socially collaborative tools leveraging common objectives, such as employee advocacy platforms, we may expect SI to have a significant effect on factors preceding behavioral intention. Especially, because employee advocacy platforms are introduced to be commonly used for the good of both parties: the employer and the employee. Venkatesh et al. (2003) defines SI as the extent to which users perceive that important others (such

as family, friends, colleagues, managers) believe they should use the particular technology. Wu (2011) widens the scope by defining SI as the degree to which users consider whether or not to use the particular systems because of the effect of mass media, expert opinions, and word-of-mouth. Prior research strongly suggests that SI constructs are mainly significant when the use is mandated, and less significant when use is voluntary (Venkatesh et al., 2003). Venkatesh et al. (2003) also notes, how the effect of SI in acceptance process is complex and presumably subject to many influences.

According to López-Nicolás et al. (2008), SI has positive effects on attitude towards technology innovation, perceived benefits, PU, and PEOU. For example, social influence has been demonstrated to affect person's perception of the usefulness of wireless Internet Lu, Yao, and Yu (2005). The constructs of attitude and perceived benefits are dropped from the scope of this study. Following the example of Venkatesh et al. (2003), attitude towards technology innovation and perceived benefits are expected to be results of other key factors: perceived usefulness and ease of use. Attitudinal constructs have been shown non-significant when PU and PEOU have been present in model tests (Taylor & Todd, 1995; Thompson et al., 1991). The role of SI as a factor preceding use intention is still evident. Similarly to the theory of Diffusion of Innovation (Rogers, 1995), it has been proposed that regardless of the given context, users' perceptions of the services' usefulness may increase when exposed to persuasive social information (Venkatesh & Davis, 2000). UTAUT models see social influence as a direct determinant of BI to use. Rather than having SI as a direct determinant, this study adopts the view of López-Nicolás et al. (2008) and posits SI as an indirect determinant of BI. López-Nicolás et al. (2008) notes how individuals' attitudes, behavior, and perceptions are influenced by the information they receive from their social environment. Naturally, this influence shapes the confidence and ability one holds towards using the technology (López-Nicolás et al., 2008). Furthermore, it may be assumed that users perceive less required effort if others within users' social circle have indicated the system is easy to use (López-Nicolás et al., 2008). Verkasalo et al. (2010) suggests when others qualify something enjoyable, potential users are likely to modify their perceptions respectively. Following the analogy, this study assumes when others perceive something as easy to use, potential users are likely to change their perception accordingly. Based on these assumptions, this study expects SI to have an indirect positive effect on BI via PU and PEOU.

Employee advocacy ideology assumes people are willing to present themselves online in a good light, especially in work-related contexts. Professional brand or a profile in some dominant social channels, at least, is something today's working life seems to require. Pressure to present oneself online is induced by future employers, social channels such as LinkedIn, colleagues and educational institutions. Following these notions, and the theory of social self-presentation, this study expects social influence to positively effect the desire for online self-presentation. Below are the

hypotheses for expected effect of social influence.

H3a: SI has a positive effect on PU.

H3b: SI has a positive effect on PEOU.

H3c: SI has a positive effect on DOSP.

4.5.4   Facilitating conditions (FC)

Facilitating conditions refer to the perceptions users hold of the resources and support that are available to perform use behavior (S. A. Brown & Venkatesh, 2005; Venkatesh et al., 2003). In the 2003 version of UTAUT model, where consensus was on mandated organizational use behavior, facilitating conditions were posited as direct determinants of use behavior (Venkatesh et al., 2003). The UTAUT2 model instead is more tailored to consumer technology context, and views facilitating conditions as direct determinants of use intention (Venkatesh et al., 2012). In the consumer setting, it can be expected that the users who have favorable facilitating conditions are also more likely to possess higher intention to use the respective technology (Venkatesh et al., 2012). Even though employee advocacy platforms may be introduced to users primarily by the organizations they work for, users leverage their own personal networks for the usage and supposedly find using the platform most enjoyable from their preferred devices. Also, since access to the service is not limited or necessarily even directly linked to the resources the employer provides, the consumer-oriented perspective is included.

H4: FC have a positive effect on BI.

4.5.5   Hedonic motivation (HM)

The view of hedonic motivation (HM) follows the perspective of the UTAUT2 model. Venkatesh et al. (2012) defined hedonic motivation as the fun or pleasure derived from using a technology. Studies have found HM (or perceived enjoyment) to influence the intention to use a technology directly (Van der Heijden, 2004; Venkatesh et al., 2012; Thong, Hong, & Tam, 2006). Hedonic information systems have been ubiquitous in the consumer IT market for quite a while. Such services as mobile games, social media platforms, and mobile applications leverage visuality, appealing user experience, and fun and pleasure orientation to stand out of a crowded market. These aspects have grown as key competitive advantages, also within the key players in the employee advocacy platforms markets. According to employee advocacy platforms marketing efforts, the solutions aim to provide both, utilitarian (professional brand, recognition, efficiency) and hedonic benefits (fun, gaming, engagement). Similarly to the study of mobile Internet by Venkatesh et al.

(2012), it is expected that both features, utilitarian and hedonic, coexist in the context of employee advocacy. Thus, we may expect HM to have an important role in preceding the intention to use these solutions. To extend the view in UTAUT2, it is also expected that hedonic motivation drives the desire for online self-presentation, especially in the use cases where aspects of social media (such as profiling) are included. People simply care for attention online and enjoy getting it.

H5a: HM has a positive effect on BI.

H5b: HM has a positive effect on DOSP.

4.5.6   The desire for online self-presentation (DOSP)

As explained in section 3.1, the motives rooted in people's will to present themselves, are also expected to drive participation in employee advocacy efforts, and increase the intention to use such solutions. A few studies have demonstrated how the desire to self-present, i.e. the extent to which an individual wants to present a preferred image of oneself in a social network, can influence purchasing intention, and use intention. H.-W. Kim et al. (2012) demonstrate how the desire for online self-presentation can positively influence intention to buy digital goods. Moreover, the desire for online self-presentation has been demonstrated to directly influence the use intention of mobile social networking (Chauhan, 2014). Generally, employee advocacy platforms are tools, with which users are able to self-present themselves on social networking sites efficiently and measurably. Thus, it is expected that DOSP will positively influence both, BI and PU, in this research context.

H6a: DOSP has a positive effect on BI.

H6b: DOSP has a positive effect on PU.

4.6   Research model

As the current study aims to explain factors determining the use intention of SmarpShare, the impact of use intention to actual use is left out of the research scope. Also, the effect of price value is excluded, since users face no additional costs associated to the use of SmarpShare. The habit construct was left out of the research scope since it is expected to influence directly to actual use, not the intention (Venkatesh et al., 2012). With these modifications to preceding research models, the following research model is developed with the respective hypothesis to be tested. The research model is presented in Figure 5.
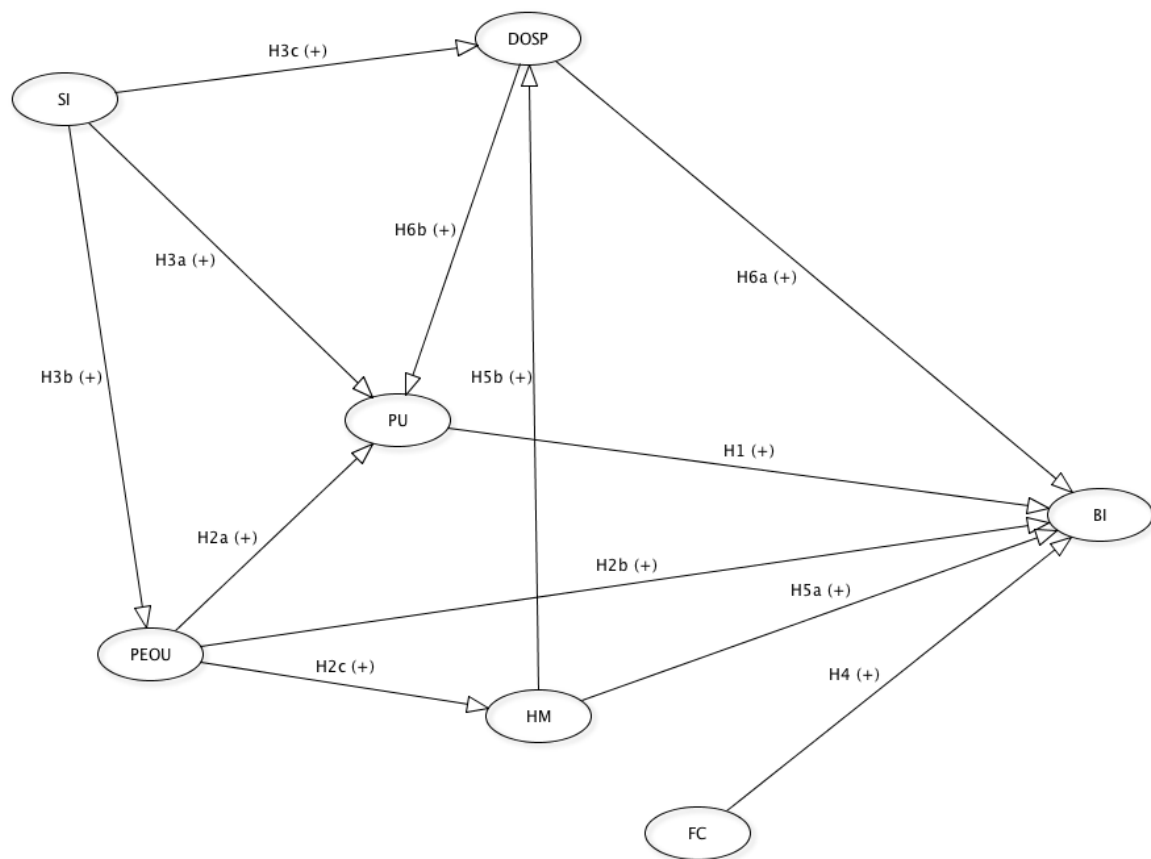
FIGURE 5: Research model

4.7 Data Analysis

A partial least square (PLS) analysis is used to test the proposed research model and hypotheses. PLS is a form of structural equation modeling (SEM), which is regarded as an efficient type of analysis for evaluating causal models with multiple constructs (Haenlein & Kaplan, 2004). Basically, SEM is used to test the proposed research model using the collected data (Metsämuuronen, 2005, p.634). In SEM context, the relationships between variables are often indicated with directed arrows in a "structural model" (inner model) (Hair, Hult, Ringle, & Sarstedt, 2014, p.14). In this case, the proposed research model represents the structural model. Confirmatory factor analysis instead is often referred as "the measurement model". Measurement model (outer model) shows the relationships between all indicators and latent factors (Hair et al., 2014, p.12).

There are two differing approaches to evaluate parameters of a SEM: covariance-based and variance-based (Haenlein & Kaplan, 2004). According to Chin and Newsted (1999, p.309), the covariance-based approach "attempts to minimize the difference between the sample covariances and those predicted by the theoretical model...To reproduce the covariance matrix of the observed measures". In covariance-based approach, the model parameters are estimated first. Secondly, values for latent variables in each data set (i.e., case values) are regressed onto the set of overall indicators.

PLS analysis represents the variance-based approach. Unlike the covariance-based approach, PLS begins with estimating case values. Instead of minimizing the difference between covariances and reproducing a covariance matrix, PLS aims to maximize the variance of dependent variables explained by independent variables. (Haenlein & Kaplan, 2004). Just like all other SEM, a model for PLS includes a structural part, which indicates the relationships between latent variables (proposed research model). Measurement component instead shows how latent variables and their indicators relate to each other (i.e., how strong the causal relations are in the measurement model). Finally, the components of weight relations are used to evaluate the case values of latent variables. (Chin & Newsted, 1999.)

The process of a PLS analysis is pretty straightforward. Firstly, the weight relations linking indicators (measurement items) to their respective variables (constructs) are estimated. The weight relations are based on weighted averages of indicators. Secondly, the weight relations are used as an input to calculate case values for variables. Lastly, inputting the case values in a set of regression equations, the parameters for structural relations are determined. (Fornell & Bookstein, 1982.)

The data analysis in the study is carried out using Smart-PLS software. Smart-PLS allows the testing of hypotheses, the assessment of convergent and discriminant validity, and the unidimensionality of the scales (Hair et al., 2014). PLS was chosen as the method of analysis as it may be used for both: reflective and formative indicators (Fornell & Bookstein, 1982). Moreover, PLS works well with complex

models, even with smaller sample sizes (Haenlein & Kaplan, 2004). This study tests the correlation between the independent factors (SI, PU, PEOU, HM, FC, DOSP) and the dependent factor of BI to use the respective software.

To prepare the data for analysis, it was exported from Typeform service. A three-stepped process suggested by Hirsjärvi et al. (2014) was followed to ensure that only valid responses were included in the analysis. In the first step, the completeness of the data was reviewed. This can be achieved by checking whether data includes faults or missing items (Hirsjärvi et al., 2014). As all measurement items were obligatory in the survey, there were no empty responses. Responses were interpreted faulty if they had no variance at all (ie. only one scale item was chosen throughout the questionnaire). Two responses were removed. Also, data was checked for duplicated responses. Typeform made this easy as the service provided a Network ID for each response. All data coming from same Network ID were checked for duplicates, but no identical responses were found. In the second step, data should be completed, if there are missing items. As mentioned, there were not. In the third step, data was coded (survey items were renamed) and arranged in a form suitable (saved as CSV) for SmartPLS. Analysis was carried out using SmartPLS.

5 RESULTS

This chapter presents the results of the performed survey and data analysis. Section 5.1 presents the demographical background of respondents. Section 5.2 breaks down the received responses by measurement item. In Section 5.3 a measurement model is analyzed. Finally, in Section 5.4 the structural model is formed and the support of hypothesis and applicability of the proposed research model is evaluated.

5.1 Demographics of target population

Both genders are evenly represented in the target population. 46.9% of respondents were female and 53.1% were male. Respondents represent typical workforce as 89.9% are aged between 26 and 55. The population is also rather highly educated as 85.9% held a Bachelors' or higher degree. Detailed demographical information is presented in Table 8.

TABLE 8: Demographics

Demographics	Frequency	Valid percentage
Gender		
Male	237	53.1%
Female	209	46.9%
Other	0	0.0%
Total	446	100.0%
Age		
15-25	24	5.4%
26-35	138	30.9%
36-45	143	32.1%
46-55	120	26.9%
56-65	21	4.7%
65+	0	0.0%
Total	446	100.0%
Education		
Lower secondary level	3	0.7%
Upper secondary level	15	3.4%
High School / Vocational	45	10.1%
Bachelor's or equivalent	153	34.3%
Master's degree or equivalent	223	50.0%
Doctorate or equivalent (e.g. PhD)	7	1.6%
Total	446	100.0%

SmarpShare is a tool that is most often introduced to employees by employers. Majority of the respondents (42.4%) work for companies employing more than 10 000 employees. 15.2% were working for small companies (<500 employees). Big companies (501-10 000) employed 38.4% of respondents. Most respondents (24.4%) worked in Other departments. Sales (19.2%) and Finance / Accounting (15.5%) were next in line. Majority were working in a managerial role (31.4%). Employment information is presented in Table 9.

TABLE 9: Employment

Employement	Frequency	Valid percentage
Size of employer organization		
1-10	5	1.1%
11-50	18	4.0%
51-100	18	4.0%
101-200	23	5.2%
201-500	22	4.9%
501-1 000	60	13.5%
1 001-5 000	83	18.6%
5 001-10 000	28	6.3%
10 000+	189	42.4%
Department		
Communication	31	7.0%
Customer Service	34	7.6%
Finance / Accounting	69	15.5%
Human Resource	28	6.3%
IT / ICT / MIS	44	9.9%
Marketing	50	11.2%
Other	109	24.4%
Sales	81	18.2%
Position		
Clerical	16	3.6%
Operational	86	19.3%
Managerial	140	31.4%
Technician	32	7.2%
Project Management	77	17.3%
Accounting	34	7.6%
Other	61	13.7%

Even though use as a factor was left out of the research model, the frequency of use was asked in the questionnaire. 81.6% of all respondents use SmarpShare weekly or more often. Therefore, it is expected that users are familiar with the software and have been able to reflect their acceptance in a representative manner. Respondents' frequency of use is shown in Table 10.

TABLE 10: Use frequency

Use	Frequency	Valid percentage
Many times a day	15	3.4%
Daily	106	23.8%
Few days a week	105	23.5%
Weekly	138	30.9 %
Once a month or so	56	12.6%
Less than monthly	26	5.8%

Users clearly prefer (67.5%) the browser user interface of SmarpShare. Mobile usage was preferred by 16.1% of respondents. Usage via email was chosen by 15.2.%. Rest (1.1%) would have preferred some other interface. Moreover, respondents were asked which operating systems their mobile devices are running. The distribution is presented in Table 11.

TABLE 11: Mobile operating system distribution

Mobile Operating System	Frequency	Valid percentage
Android (Google)	93	20.9%
iOS (Apple)	284	63.7%
Windows phone	66	14.8%
I don't have a smartphone	3	0.7%

5.2   Response normality

This section describes the normality of the collected data by measurement item. For a successful SEM analysis, it is good to have an overview of how data is distributed. In order to build the overview, variables, and their respective normality was estimated by calculating the mean, median and standard deviation per measurement item. Furthermore, kurtosis and skewness were calculated to assess non-normality.

Kurtosis measures whether the distribution of data is too peaked, ie. the responses would be narrowly distributed in the center for example. Skewness instead measures the symmetry of data distribution, ie. whether the data stretches towards the left or the right tail. According to general guidelines, data may be regarded as skewed if the indicating number is either above +1 or below -1. Similarly for kurtosis, above +1 means data too peaked, while below -1 may be interpreted too flat. (Hair et al., 2014, p.54). Table 12 presents the mean, median, standard deviation, kurtosis and skewness per measurement item. The alarming indicators are presented in bold.

TABLE 12: Measurement item mean, median, standard deviation, kurtosis and skewness

Item	Mean	Median	Standard deviation	Kurtosis	Skewness
PU1	3.812	4.000	1.055	-0.051	-0.665
PU2	3.386	3.000	0.963	0.071	-0.398
PU3	3.383	3.000	0.974	0.113	-0.494
PU4	3.439	4.000	0.968	0.019	-0.453
PU5	3.888	4.000	0.894	**1.150**	-0.931
PEOU1	4.090	4.000	0.904	0.860	**-1.019**
PEOU2	4.278	4.000	0.852	**2.471**	**-1.418**
PEOU3	4.363	5.000	0.788	**2.600**	**-1.430**
PEOU4	4.126	4.000	0.902	0.921	**-1.022**
SI1	3.096	3.000	0.899	0.351	-0.228
SI2	2.561	3.000	1.120	-0.766	0.198
SI3	2.821	3.000	1.037	-0.343	-0.156
FC1	4.061	4.000	0.903	0.828	-0.927
FC2	4.209	4.000	0.830	**1.405**	**-1.066**
FC3	3.971	4.000	0.933	0.644	-0.855
FC4	3.312	3.000	0.997	0.057	-0.180
HM1	3.608	4.000	1.023	0.085	-0.596
HM2	3.578	4.000	1.008	0.193	-0.598
HM3	3.166	3.000	1.033	-0.249	-0.214
BI1	4.052	4.000	0.908	**1.317**	**-1.075**
BI2	3.265	3.000	1.093	-0.530	-0.302
BI3	3.789	4.000	0.964	0.744	-0.880
DOSP1	3.650	4.000	1.116	-0.154	-0.735
DOSP2	3.814	4.000	0.999	0.565	-0.877
DOSP3	3.496	4.000	1.058	-0.227	-0.512
DOSP4	4.092	4.000	0.892	**2.061**	**-1.245**

5.3 Measurement model results

Following the process described in Section 4.7, the weight relations of indicators (measurement items) and their respective variables (factors) are estimated first. The measurement model is essentially the same as the proposed research model. Research model is presented in Figure 5. All variables and measurement items were included in the measurement model analysis.

Item loadings stand for the coefficients the items possess for the latent factors (Hair et al., 2014, p.77). T-values instead estimate whether the relationship is significant or not (Hair et al., 2014, 134). Item loadings varied from 0.54 (FC4) to as high as 0.953 (HM1,HM2). All measurement items except FC4 possessed a fairly high item loading (>0.7). Furthermore, the significance of relationships seems acceptable across the collected data, expect for FC4 (t-value 9.315). FC4 is dropped from the structural model analysis as it does not present sufficient item loading and its t-value is comparably low. Loadings of measurement items are presented in Table 13.

Next, the reliability and validity of the measurement model are estimated by calculating case values for the factors. A common way to assess the reliability of scales is to use the Cronbach's Alpha (Cronbach, 1951). Cronbach's Alpha (CA) estimates reliability by measuring the inter-correlations of indicators (Hair et al., 2014, p.101). Cronbach's Alpha ranges from 0 to 1, where 1 indicates high reliability. The acceptable value for Alpha is debated, but generally values above 0.7 can be regarded reliable (Venkatesh et al., 2012; Tavakol & Dennick, 2011). The Cronbach's Alphas per factor are presented in Table 13.

Another way to assess reliability is to measure Composite Reliability (CR). Differing from Cronbach's Alpha, Composite Reliability considers indicators' reliability separately, and uses the indicators' outer loadings in estimating reliability (Hair et al., 2014, p.100). Composite Reliability reaches an acceptable level when exceeding 0.7 (Fornell & Bookstein, 1982). All factors included in the measurement model meet the general requirements (CA>0.7 & CR>0.7) for reliability. HM and PEOU indicate most reliability in terms of CA and CR. In contrast, FC and SI show smallest indicators.

The average variance extracted (AVE) presents the mean of the squared loadings per factor (Hair et al., 2014, p.103). Convergent validity may be evaluated using AVEs. Generally, convergent validity measures the degree to which measurement items explain the variance in factors (Hair et al., 2014). In order to achieve an acceptable level of convergent validity, AVE values should be above 0.5 (Hair et al., 2014; Fornell & Bookstein, 1982). Analysis revealed FC having the smallest AVE (0.585), while HM (0.864) and PEOU (0.804) had the highest values. All AVEs are presented in Table 14.

Discriminant validity tests whether measurement items are actually unrelated. Discriminant validity can be estimated with the help of cross-loadings and Fornell-

TABLE 13: Reliability and measurement item loadings

Factor	CA	CR	Item	Loading	STDEV	T Value
BI	0.871	0.921	BI1	0.909	0.011	86.272
			BI2	0.825	0.020	41.485
			BI3	0.938	0.007	142.100
DOSP	0.880	0.918	DOSP1	0.870	0.015	58.211
			DOSP2	0.899	0.012	74.690
			DOSP3	0.852	0.016	53.191
			DOSP4	0.809	0.022	36.546
FC	0.754	0.846	FC1	0.821	0.027	30.836
			FC2	0.834	0.024	34.337
			FC3	0.823	0.019	43.180
			FC4	0.540	0.058	9.314
HM	0.921	0.950	HM1	0.953	0.005	187.780
			HM2	0.953	0.005	181.086
			HM3	0.882	0.017	51.804
PEOU	0.918	0.942	PEOU1	0.868	0.016	55.972
			PEOU2	0.923	0.012	77.239
			PEOU3	0.912	0.014	66.356
			PEOU4	0.881	0.014	63.349
PU	0.856	0.898	PU1	0.808	0.020	40.663
			PU2	0.862	0.014	60.511
			PU3	0.835	0.017	48.917
			PU4	0.755	0.026	28.971
			PU5	0.725	0.027	26.787
SI	0.717	0.832	SI1	0.862	0.017	50.437
			SI2	0.704	0.043	16.330
			SI3	0.796	0.028	28.291

Larckner criterion (Hair et al., 2014, p.105). Cross-loading among factors is evident. This is expected to be induced by the survey items not being randomized. This was a clear flaw in the design of the data collection. Even though cross-loadings exist, the test for heterotrait-monotrait ratio (HTMT) indicates that acceptable level of discriminant validity is achieved, as all relations between constructs had less than 0.9 as HTMT value (Hair et al., 2014; Henseler, Ringle, & Sarstedt, 2015).

Fornell-Larckner criterion assumes all square roots of AVE (diagonal values in bold) are consistently higher than the correlations between factors (Hair et al., 2014, p.105). This study fills the criterion, as can be seen from Table 14.

TABLE 14: AVEs, correlations and square rooted AVEs

	AVE	BI	DOSP	FC	HM	PEOU	PU	SI
BI	0.795	**0.892**						
DOSP	0.737	0.747	**0.858**					
FC	0.585	0.531	0.510	**0.765**				
HM	0.864	0.668	0.628	0.452	**0.930**			
PEOU	0.804	0.571	0.567	0.734	0.550	**0.896**		
PU	0.637	0.720	0.704	0.522	0.684	0.592	**0.798**	
SI	0.624	0.487	0.474	0.359	0.502	0.332	0.509	**0.790**

Reflecting the overview of all indicators, this study has reached a satisfactory level in regards of reliability and validity. The following section explains the third step, where the calculated case values are used as input in a set of regression equations. This method provides the way to determine parameters for structural relations. Results of the calculations are presented in the structural model.

5.4 Structural model and hypothesis tests

Following the process described in Section 4.7, a structural model for analysis was created and tested with SmartPLS software. The model indicates the relationships between the variables, ie. relationships present in the proposed research model. The applicability of the structural model is estimated for each path coefficient present in the model.

To determine statistical significance, a complete bootstrapping was carried out in SmartPLS. The bootstrap had a sample size of 5000 cases and 300 iterations of re-sampling. Measurement item FC4 was excluded from the model due to low item loading.

The structural model is presented in Figure 6. Values for path coefficients, item loadings, and R^2's are illustrated in the figure. Hair et al. (2014, p.169) suggests confirming the model fit by determining the strength of path coefficients, Cohen's

f^2's for effect size, and finally the predictive abilities (R^2) of factors. The suggestion is followed, and the final results of the model fit analysis are presented in Table 15.
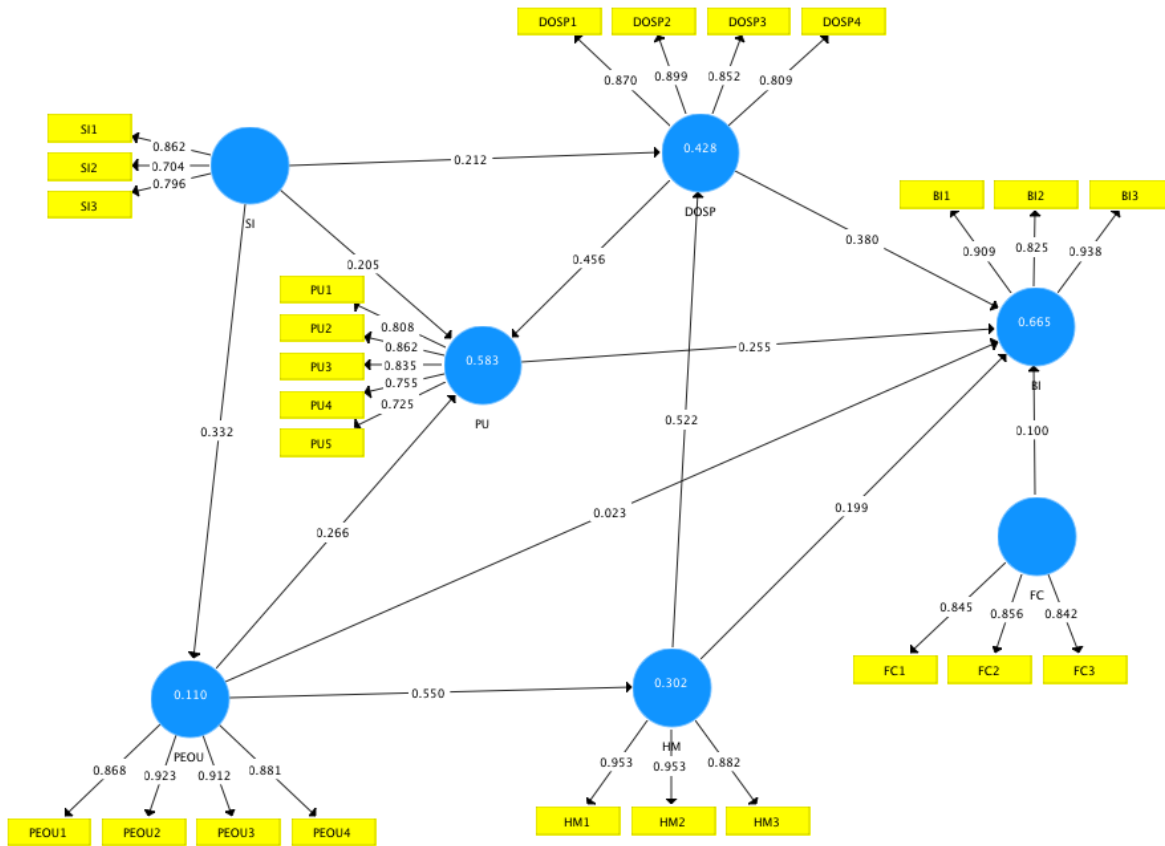

FIGURE 6: Structural model

Path coefficients illustrate the strength of the relationship between factors: the further the value is from 0, the stronger the correlation (Hair et al., 2014, p.171). The scale is between -1 and 1: negative values indicate negative correlation while above zero signals positive correlation. T-values again justify the significance of relations: only relations possessing significant correlation should be taken into account (Hair et al., 2014, p.171). This study sets a limit to significance at 5%, thus, only relations exceeding 1.96 in t-value are considered significant.

All correlations between factors were found positive. DOSP had a strong overall effect in the model. The factor contributed to BI ($\beta = 0.380, p \leq 0.001$) and PU ($\beta = 0.456, p \leq 0.001$), demonstrating support for hypothesis H6a and H6b. Similarly, HM correlated positively to BI ($\beta = 0.199, p \leq 0.001$) and DOSP ($\beta = 0.522, p \leq 0.001$), providing evidence in support of H5a and H5b. PEOU had significant effect on HM ($\beta = 0.550, p \leq 0.001$) and PU ($\beta = 0.266, p \leq 0.001$). Thus, H2c and H2a are supported. The direct effect of PEOU to BI was found insignificant ($\beta = 0.023,$ †), thus H2b is rejected. H1 was supported as PU had direct positive effect on BI ($\beta = 0.255, p \leq 0.001$). SI had only weak to moderate effect on DOSP

($\beta = 0.212, p \leq 0.001$), PEOU ($\beta = 0.332, p \leq 0.001$) and PU ($\beta = 0.205, p \leq 0.001$). Effects support all hypothesis: H3c, H3b, and H3a. The direct effect FC→BI could be accepted as significant only barely ($\beta = 0.100, p \leq 0.05$), indicating weak support for H4. Support for hypothesis is concluded below.

H1: PU has a positive effect on BI.	Supported
H2a: PEOU has a positive effect on PU.	Supported
H2b: PEOU has a positive effect on BI.	Rejected
H2c: PEOU has a positive effect on HM.	Supported
H3a: SI has a positive effect on PU.	Supported
H3b: SI has a positive effect on PEOU.	Supported
H3c: SI has a positive effect on DOSP.	Supported
H4: FC have a positive effect on BI.	Weakly supported
H5a: HM has a positive effect on BI.	Supported
H5b: HM has a positive effect on DOSP.	Supported
H6a: DOSP has a positive effect on BI.	Supported
H6b: DOSP has a positive effect on PU.	Supported

F^2-values were used to check the effect power of each factor in the model. Effect power may be interpreted as small (0.02), medium (0.15) and large (0.35) (Venkatesh et al., 2012; Hair et al., 2014; Cohen, 1977). For FC, the effect power was found insignificant ($f^2 = 0.014$, †). Also, the effect power of PEOU towards BI, was found insignificant. For the rest of the relations effect power was above small level. The majority of factors had medium to large effect power. HM→DOSP and PEOU→HM had strongest effect power.

R^2 is an indicator of predictive accuracy of factors (Hair et al., 2014, p.174). The value states how much of variance in the factor can be explained. The research model explained variance in BI at a considerable level with $R^2 = 0.665$. Path coefficients, t-values of relationships, Cohen's f^2's and R^2-values are presented in Table 15.

5.5 Summary

This chapter presented the results of the completed survey. First, the demographical distribution of respondents was analyzed. Normality of the collected data was evaluated prior to assessing the measurement model in terms of reliability, validity, and statistical significance. Finally, the results of the structural model were presented. Results included an analysis of path coefficients of relationships, effect power of constructs, and ultimately the predictive accuracy of the factors preceding behavioral intention. All measurement items were representing constructs with statistical significance. Furthermore, all correlations were found positive. The direct effect of PEOU to BI was found insignificant. Rest of the relationships were found significant.

TABLE 15: Structural model results

Direct effects	Hypothesis	β	t-value	f^2	R^2	R^2adj
PU → BI	H1	0,255 ***	4,495	0,075 *		
PEOU → PU	H2a	0,266 ***	6,768	0,114 **		
PEOU → BI	H2b	0,023 †	0,391	0,001 †		
PEOU → HM	H2c	0,550 ***	14,859	0,433 ***		
SI → PU	H3a	0,205 ***	5,434	0,078 *		
SI → PEOU	H3b	0,332 ***	7,481	0,123 ***		
SI → DOSP	H3c	0,212 ***	5,365	0,059 *		
FC → BI	H4	0,100 *	1,967	0,014 †		
HM → BI	H5a	0,199 ***	4,246	0,056 *		
HM → DOSP	H5b	0,522 ***	13,393	0,355 ***		
DOSP → BI	H6a	0,380 ***	8,330	0,188 ***		
DOSP → PU	H6b	0,456 ***	10,810	0,293 ***		
BI					0,665	0,661
PU					0,583	0,580
DOSP					0,428	0,425
HM					0,302	0,301
PEOU					0,110	0,108

*** $p \leq 0.001$;   ** $p \leq 0.01$;   * $p \leq 0.05$;   † - not significant

In the following chapter the achieved results are discussed from the perspective of the placed research questions. The contribution of the study is addressed from academic and practical perspectives. Limitations of the efforts are determined. Suggestions for future studies are provided.

6   DISCUSSION

This chapter discusses the results of the conducted survey. Research questions are addressed by presenting which hypothesis were supported and which not. Contribution to IS acceptance research and SaaS employee advocacy business is discussed. Limitations are determined and some recommendations for future research are proposed along with a revised research model. Finally, the study is concluded in a summary.

6.1   Key findings

The structural model provided evidence in support of the proposed research model. All relationships were positive in nature as hypothesized. Only one correlation was found insignificant, and another one weak in strength. The proposed hypothesis and the gained support is further discussed next by addressing the stated research question.

RQ1: Which factors determine the use intention of an employee advocacy platform?

This study finds that individuals' intention to use an employee advocacy platform is primarily driven by one's desire to present themselves online, perceived usefulness, and hedonic motivation. Facilitating conditions have a weak direct effect on intention. Indirectly, social influences can improve the desire for self-presentation, perceived usefulness, and perceived ease of use. Moreover, perceived ease of use can have strong effect on hedonic motivation, and moderate effect on perceived usefulness. Hedonic motivation also seems to notably drive the desire for online self-presentation.

RQ2: To what extent do Perceived usefulness (PU), Perceived ease of use (PEOU), Social influence (SI), Facilitating conditions (FC), Hedonic motivation (HM) and Desire for online self-presentation (DOSP) explain employees' use intention of SmarpShare?

The results indicate that all factors have significant effects on behavioral intention to use an employee advocacy solution. The proposed research model explains variance in behavioral intention at a moderate level with $R^2 = 0.665$.

Perceived usefulness was hypothesized (H1a) to have a direct positive effect on behavioral intention. The hypothesis was clearly supported: perceived usefulness had moderate ($\beta = 0.255, p \leq 0.001$) effect on behavioral intention. The direct effect of perceived usefulness has been widely supported in acceptance literature (Du et al., 2013; Venkatesh et al., 2012, 2003; Van der Heijden, 2004; Wu, 2011). The result is in line with previous findings even thought the effect power of perceived usefulness was not as high as expected.

Perceived ease of use was hypothesized to have a positive effect on perceived usefulness, behavioral intention and hedonic motivation (H2a, H2b, H2c). The positive effect was evident in determining perceived usefulness ($\beta = 0.266, p \leq 0.001$) and hedonic motivation ($\beta = 0.550, p \leq 0.001$), thus H2a and H2c were supported. The results showed no statistical significance in support of H2b. The finding is contrary to results presented by Wu (2011). This in an interesting finding, as it has been debated whether perceived ease of use actually influences behavioral intention, or does the effect of perceived ease of use play a mediating role through other constructs. Studying hedonic information system, Van der Heijden (2004) has found perceived ease of use to effect behavioral intention even stronger than perceived usefulness. This study finds perceived ease of use effecting hedonic motivation strongly (strongest correlation with $\beta = 0.550$), but behavioral intention at an insignificant level. Many studies have indicated the direct effect for intention weak (López-Nicolás et al., 2008; Zhou et al., 2010; Venkatesh et al., 2012; Mallat, Rossi, Tuunainen, & Öörni, 2009), or have not included the direct effect at all (Schierz, Schilke, & Wirtz, 2010). Not only the insignificant direct effect to intention was interesting, but also it seems that the hedonic motivation is strongly dependent on ease of use. This finding suggests that experiencing fun using the system, requires the platform to be easy to use. Employee advocacy platforms compete in attractiveness and ease of use. From the perspective of this study, it seems like the competition revolves around the factors that actually determine the use intention.

Effects of social influence were hypothesized as positive on perceived usefulness, perceived ease of use and desire for online self-presentation (H3a, H3b, H3c). All hypotheses were supported with statistical significance. Wu (2011) and López-Nicolás et al. (2008) have demonstrated similar findings. The coefficients of relationships were at low to moderate level, indicating that the role of social influence does not massively determine perceived usefulness, perceived ease of use or desire

for online self-presentation. Strongest individual effect was on perceived ease of use. While advocacy solutions are mostly introduced in an organization settings, it is rather surprising that social influence was not stronger as a factor. It might be, that individuals find it hard to express or admit that their intentions have been influenced by others.

Facilitating conditions were expected to influence behavioral intention positively (H4). The evidence supports the hypothesis weakly. In the context of software, facilitating conditions relate to the need of support the users experience. The results indicated skewness towards "totally agree" when users were questioned for perceived ease of use. This hints that the software is actually perceived as *easy to use*, which would reduce the need of support. This might explain why the effect of facilitating conditions was weak and only barely significant. Overall, the effect of facilitating conditions have proved either small or insignificant as a direct determinant of behavioral intention (Carlsson et al., 2006; Venkatesh et al., 2012)

Again, hedonic motivation was expected to have a positive effect on behavioral intention and desire for online self-presentation (H5a, H5b). Both hypotheses were supported. The direct effect ($\beta = 0.199$) on behavioral intention is in line with Venkatesh et al. (2012) findings, though, in this context hedonic motivation was found to influence slightly less than perceived usefulness ($\beta = 0.255$). Being close to equal in strength might be typical in cases of hybrid IS (utilitarian and hedonic value). Interestingly, hedonic motivation was found to influence desire for online self-presentation strongly ($\beta = 0.522$). This is an interesting finding, as it suggests that the users' perceived fun and pleasure drive their will to present themselves online, ultimately leading to increased behavioral intention to use the software. Looking at how widely and quickly different social media channels have been adopted, the finding is rational. Venkatesh et al. (2012) has suggested the following: "in the context of social computing, social outcomes such as higher status in the community or being unique in the group may be important additional drivers of IT use.". The attention and recognition (expected to be fun and intrinsically rewarding) gained via online self-presentation may, in fact, increase the use intention of the respective system.

The desire for online self-presentation was the most interesting add-on to existing acceptance models. It was hypothesized that desire for online self-presentation would effect behavioral intention and perceived usefulness positively (H6a, H6b). Both hypotheses were supported. Theoretically, this is an important finding. With the provided evidence, it is clear that desire for online self-presentation can be an influential construct preceding behavioral intention, at least in the context of software utilizing social profiling. Similarly, the perceived usefulness of such services can be expected to increase due to users desire to present themselves online. The desire for online self-presentation has been shown to effect purchase intention in virtual communities (H.-W. Kim et al., 2012). Similarly, this study finds that the desire for self-presentation can drive system acceptance in the context of software

where social aspects and profiling are leveraged. Chauhan (2014) has demonstrated similar results.

Findings are rather consistent with existing user acceptance research. Especially the direct effects of perceived usefulness and hedonic motivation were as expected. Also, the indirect effects of perceived ease of use and social influence are in line with prior research. Interestingly, the direct effect of facilitating conditions was weak, and for ease of use insignificant. The findings relating to the role of desire for online self-presentation are key contributions of the study.

6.2 Contribution to research

This paper proposed and tested a research model, with which end user acceptance of social SaaS can be analyzed. Generally, the findings contribute to how acceptance of SaaS offerings utilizing social aspects happens. The question of which factors are driving the intention to use such systems is addressed. The results are of relevance to academia, especially for IS research on information system acceptance.

Firstly, two meta-analytical papers have shown that that only a small fraction of research citing to UTAUT has actually leveraged the models in an empirical quantitative research settings (Dwivedi et al., 2011; M. D. Williams et al., 2011). Dwivedi et al. (2011) for example found that from 450 available studies citing the original UTAUT paper by Venkatesh et al. (2003), only 43 actually used the framework empirically (of which only 27 were quantitative). About half of the studies (23) used external variables. The other half (21) used the model in the original form. These findings are interesting, as one would expect that widely accepted models are also widely leveraged in practice. This doesn't seem to be the trend yet. The current study contributes to the minor branch of research, where UTAUT2 has been quantitatively tested in a specific empirical setting. The original model was slightly updated in this case to address the research setting better. Moreover, the current study took a rather narrow perspective by studying only one particular information system, which can be categorized as a hybrid providing both utilitarian and hedonic value. Therefore, the results advance discussion on the general applicability of modified UTAUT models to study individual user acceptance of a specific technology, a SaaS-delivered solution leveraging social profiling.

Having altered the original UTAUT2 model paid off in the current study, as the results show that desire for online self-presentation can have a substantial impact on behavioral intention to use a SaaS product utilizing social profiling. Not only did the desire for online self-presentation have the strongest direct effect on behavioral intention, it also influenced perceived usefulness strongly, and was strongly influenced by hedonic motivation. These findings imply that the desire for online self-presentation can substantially influence use intention, and thus should be considered more often when studying use intention in a similar context.

Moreover, the results indicate and support existing literature on the indirect

effect of perceived ease of use on behavioral intention. In the light of the results, perceived ease of use effects more to hedonic motivation and perceived usefulness, than directly to behavioral intention.

Acceptance literature has long discussed the differences in acceptance in cases of predominantly utilitarian and hedonic information systems. This study approaches the acceptance of a hybrid platform, which provides both hedonic and utilitarian value. The findings suggest that perceived usefulness ($\beta = 0.255$) and hedonic motivation ($\beta = 0.199$) influence behavioral intention with close to equal strength, indicating that determinants are well-balanced when studying a hybrid IS.

Facilitating conditions were found to have only little effect in the described use case. It is expected that platforms which are easy-to-use, visually appealing, and clear to navigate by design require minimal support. Thus, the role of facilitating conditions diminishes.

Another interesting finding was the strong influence ease of use had on hedonic motivation. This implies that the easier the system is to use, the stronger the motivation to experience fun using it.

Figure 7 presents a revised research model that is proposed for further studies. It is expected that the proposed model captures user acceptance of SaaS offerings that leverage social media or social aspects such as profiling, commenting and discussion. Solutions of the kind are described with the term *social SaaS*. Examples of *social SaaS* would be employee advocacy platforms, social media channels, social media tools and virtual realities.
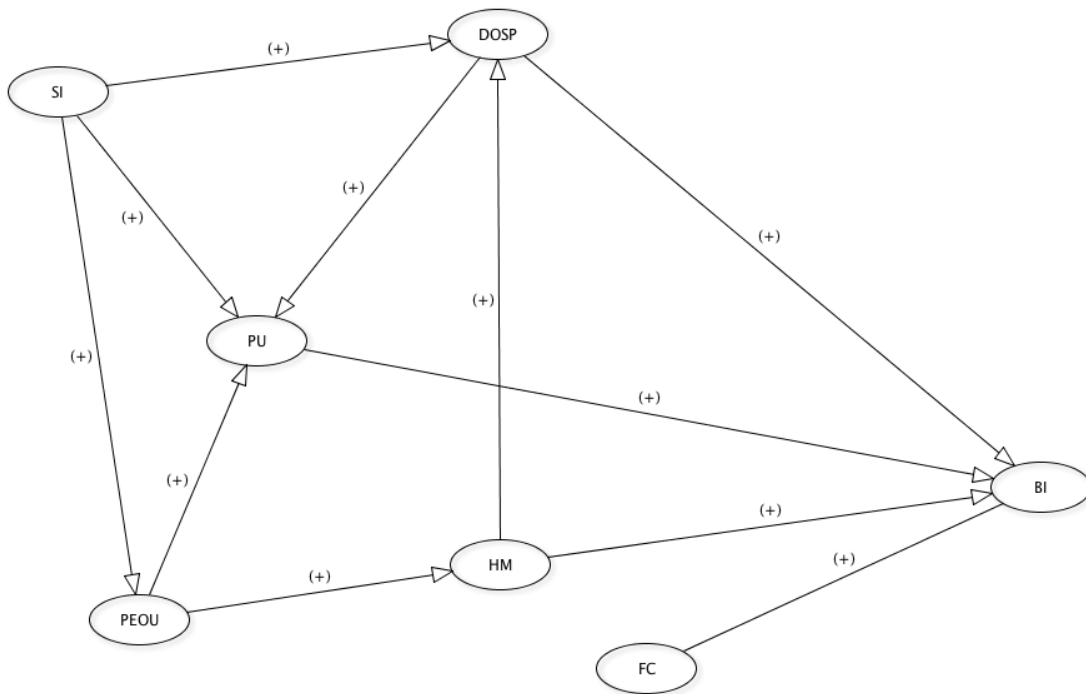
FIGURE 7: Proposed model for social SaaS acceptance

6.3 Contribution to practice

The results are of relevance for SaaS vendors, their customers, and end-users in general. Results may support decisions on which factors should be considered, and to what extent, when increased use intention and activation of customers or end-users is desirable. For end-users, the results provide insights on which factors seem to contribute to acceptance of such systems. End-users may reflect their behavior on the results.

For practice, especially for employee advocacy vendors, the results indicate that efforts in terms of development work and business have been addressed to right aspects, to some extent. Multiple solutions are already available in the market, and many seem to have put emphasis on usefulness, ease of use, the desirability of self-presentation, and fun of using the system users may experience. Based on the results, prolonging, improving and clarifying such efforts may be suggested. This study shows that all of the aspects are significant in driving the initial intention to use the offering. The findings may be turned into a simple set of guidelines.

An easy-to-use platform increases the usefulness users perceive.

Employee advocacy platforms are generally tools to make it easier and faster to manage one's activity on social media. Platforms should be designed to be as easy

to use as possible, in order to drive the perceived usefulness. Users may be lacking the time and the will to put the effort in learning how to use a system, which is primarily in a supportive role in their day-to-day life.

Users are more prone to derive fun from using the platform, the easier the platform is to use.

Vendors may expect that the easier the platform is to use, the more fun users derive from using it. Due to for example sense of control, lack of effort, and familiar user experiences, users tend to enjoy using a platform they perceive as ease to use. Designing a visually appealing and logical user interface plays a big role here. The platforms should be designed as engaging, providing reasons for users to return.

If important others encourage using the system, users perceived ease of use and usefulness, and their desire to self-present online, may increase.

Generating word-of-mouth and initiating discussions where users can be engaged will influence their use intention. Communication channels towards and among users, and between the administrative personnel at the customer premises, may be opened to initiate discussions about usage and to encourage further use. Social influence may also be supported by alarming on successful use, diminished use, or by automating reports with proposed actions. Generally, social influence may occur in following channels: user-to-user, user-to-admin, user-to-vendor, admin-to-vendor. All means for communication can be expected to enhance user intention.

The more useful users find the platform, the higher intention they possess to use it.

By understanding what users value in the system, vendors can create a clearer picture of the needs and wants of the users. Collecting and analyzing data on these needs and preferences is important in order to make the functionalities viable on the platform. Practical functions, that are easy to use and make use of, preferably even fun to use, will drive use intention. Not only is it essential to cater the needs and wants of users, but also care should be taken not to develop unwanted or unnecessary features, which could possibly deteriorate use intention.

Users who have high desire to present themselves online, find the platform more useful, and have higher intention to use it.

How to present oneself online and what is the value of creating a professional brand and social media presence should be constantly communicated towards users. Moreover, the desirability of presenting oneself online can be increased with produced content such as articles, videos, blogs, memes, playful navigation on the platform, gamification elements, questionnaires, benchmark results of online presence, or

other more innovative means.

The fun and pleasure derived from using the platform increases will to self-present and leads to higher intention to use the platform.

This is where gamification elements can be pivotal. Whether it be badges, points, scores or other gamified elements on the platform, users may derive more fun from use when these elements are in place. Other means to make use more compelling can be as simple as humorous content, personalization, or engaging temporal design (Christmas edition of the platform for example).

Support may increase use intention, but not so strongly.

In an ideal world, only a fraction of SaaS end-users should experience the need to rely on customer support. Vendors cannot influence much of other facilitating conditions (such as choice of device or Internet access) except the customer support they provide. Even though customer support may not massively influence use intention of users, general guidance on platform use and FAQs will surely not do harm.

Having an emphasis on the above-mentioned aspects in marketing, sales, development, and design of the product and processes eases the work of customer organizations, where the actual implementation is realized. Customer organizations may also perceive it easier to introduce the solutions as the actual drivers of intention have already been communicated prior to sales. For vendors, the findings are positive as they justify the already taken directions. For customers, the findings may increase the trustworthiness of vendors, as the results show that the promoted factors actually drive user intention and acceptance. End-users experience of using the platform may also be improved by stressing the aspects.

6.4   Limitations and evaluation of the research

No research goes without limitations. The theoretical part of the current study reviews plenty of literature on IS acceptance, but not in a fully systematic manner. Even thought the theoretical foundation relies on widely accepted constructs, it cannot be argued that the proposed models are complete, or fully capture the use intention of employee advocacy platforms.

On overarching challenge along the way was to find relevant acceptance studies, where end-user acceptance would have been empirically tested in a SaaS setting using UTAUT/2. Even though SaaS has revolutionized the way software is delivered and consumed nowadays, research on end-user acceptance of SaaS offerings seems scarce. In their meta-analytical paper, M. D. Williams et al. (2011) warns about the lack of empirical results in the UTAUT context. Even though citations

counts for UTAUT2 studies seemed high, not many studies were found in a similar research setting. Organizational acceptance of SaaS and cloud services seems extensively studied, but end-user acceptance way less. Comparisons and differences in acceptance of various types of SaaS offerings were especially missed.

Another remark shall be made on the vast opportunities of factors that can potentially contribute to behavioral intention to use SaaS platforms. Even though theories of acceptance are well-grounded and widely accepted, many additional potential constructs outside the theories were found. Throughout the study, the author considered including factors such as perceived security, trust, satisfaction, habit, compatibility, reliability, responsiveness and many others. The line just had to be drawn somewhere. One must question how many constructs would be sufficient to capture the use case at hand. Further studying and test runs should be done with additional constructs to better capture the use intention of employee advocacy platforms.

Studying the acceptance of only one available solution is a limitation. The achieved results resemble only the acceptance of one particular system. Moreover, as no other studies on acceptance of employee advocacy solutions were found, it was hard to reflect the results on relating studies. While the results provide a projection of influential factors, the results cannot be generalized to a wider array of offerings without further studying and testing. In order to better capture the use intention of similar systems, a comparison between different solutions should be conducted.

The empirical part of the study was essentially conducted using a self-administrated questionnaire, which possesses multiple limitations and risks for bias. According to Podsakoff, MacKenzie, Lee, and Podsakoff (2003), bias in the chosen method can be induced by respondents themselves (tendency to show consistency, acceptability, rational, or suspected correlation), by characteristics of the questions (simplicity, readability, scale length) or by the context of the survey (time, place, medium). Furthermore, a major flaw in the research design was not to randomize all questionnaire items in the survey (Straub, Boudreau, & Gefen, 2004). Even though factor loadings were strong for the leveraged measurement items (see Figure 6), non-randomizing is expected to have induced a fair bit of cross-loading. A heterotrait-monotrait ratio (HTMT) analysis indicated that acceptable level of discriminant validity was still achieved, as all relations between constructs had less than 0.9 as HTMT value (Hair et al., 2014; Henseler et al., 2015).

Behavioral studies investigate subjective experiences on subjective scales. There is no certainty that given responses represent the actual behavior. Also, by providing anonymity and not confirming the validity of responses from respondents themselves, one cannot be sure whether respondents have understood the measurement items, have respondents been honest, or have respondents taken the questionnaire seriously.

Furthermore, using only a single method to collect data, and only during one

point in time (three weeks in November 2015), limit the possibilities to generalize the results. To gain better support for the findings, also qualitative methods such as interviews and open questions should be taken.

Overall, respondents were a rather small group (5.6%) from the total targeted population. Approaching users with email was effective and cost-efficient, but the loss of potential respondents was rather high. Even though N=446 is a sufficient amount of respondents for the chosen analysis, it is expected that this group only represents the most active group of SmarpShare users. Analysis of inactive users would have revealed more insights on intention and the lack of it.

The potential moderating effects of age, gender and experience were not studied. Also, the final effect of behavioral intention to actual use was left out of the research model. Habitual use could have also been included in the model.

The collected data showed some tendency for kurtosis and skewness. The measurement items which possessed kurtosis and skewness deviated less than items on average (0.97). PEOU2 and PEOU3 were especially skewed towards the right tail and highly peaked. These findings may be caused by uniform opinions, an actually easy-to-use platform, or too identical measurement items.

Fortunately, the process for conducting a PLS analysis is rather simple, thanks to SmartPLS. Some confusion was aroused by the reporting standards, as it seems similar analysis are reported in many levels of detail. May the report here be sufficient or not, the achieved results paint a good picture of the determinants of use intention of SmarpShare.

6.5   Further research

Understanding how technologies are accepted is important. Acceptance of systems progresses as available technology changes and evolves. Nevertheless, understanding how different and new types of IS are accepted, especially in differing use contexts, requires further studying. Importance is only highlighted nowadays as services are digitalizing at an ever accelerating rate, and as societies and individuals are more and more dependent on their digital devices, and the capabilities they are providing.

Overall, the author was a little disappointed to find how little empirical quantitative research is actually conducted on end-user acceptance. Citation counts on the matter are extensive, and interesting research settings are endless, but only a handful of studies have taken UTAUT frameworks into practice to provide insights on the constructs preceding user intention. To better grasp the acceptance of different technologies, more empirical research should be conducted on end-users and consumers. At the bare minimum, existing theoretical models should be systematically tested in various research settings, to assess the realistic applicability of the theories.

The era of employee advocacy has barely begun. Companies are struggling to

get their voices heard, as communication in social media is accelerating and only the most notable messages gain traction. The trustworthiness and relevance of traditional marketing channels such as TV and newspaper is diminishing. The late endeavors for companies have taken place in social media. Now, with employee advocacy, the scope of audience may expand to the networks of employees, with the help of employees. The big question remains: how to effectively encourage and support the use intention of advocacy solutions? What are the prerequisites of successful employee-employer relationship to make leveraging of collaborative social media tools possible?

How employee advocacy platforms and other social SaaS are accepted requires more research. Firstly, a comparison between several solutions should be made to validate a theoretically sound model. Secondly, there may be other important factors such as perceived service quality (Du et al., 2013; Benlian, Koufaris, & Hess, 2011), security and trust (Wu, 2011), marketing efforts (Wu, 2011) or sharing and collaboration culture (Safari, Safari, & Hasanzadeh, 2015) determining intention. These constructs should be further studied and tested. Thirdly, the proposed research model should be tested among users and non-users. Mobile adoption could also be studied separately.

Generally, more research should be conducted on the factors driving social media use of employees, especially in the manner in favor of the employer. What are the actions employers could and should do to maximize the positive effect of employees social media use? And how to do this in a non-exploitative and voluntary spirit? Moreover, questions like what are the long term benefits of employee advocacy for organizations and the advocating employees, and how to ensure the continuance of employee advocacy solutions, should be considered.

6.6   Concluding summary

This thesis studied the factors determining the use intention of an employee advocacy solution. The study aimed to find out which factors influence the use intention of SmarpShare, and to what extent.

To elaborate a service perspective towards IS, related literature was reviewed. The theory and the proposed research model bases on existing and well-grounded theories explaining user acceptance. The proposed research model positioned perceived usefulness, perceived ease of use, social influence, facilitating conditions, hedonic motivation and the desire for online self-presentation as determinants of use intention.

The utilized research method has been widely leveraged among researchers in the field. A self-administrated questionnaire was conducted. The questionnaire was targeted to users of SmarpShare. The 3-week long email campaign resulted in a sufficient amount (N=446) of valid responses. A partial least square (PLS) analysis was used to test the hypothesis and the proposed model. SmartPLS software was

used for the analysis.

Empirical results supported the proposed model for the most part. The model explained 66.5% of the variance in use intention. All relations expect one were found significant. Perceived ease of use was found not to influence behavioral intention directly. The significant relations supported the proposed hypotheses. The desire for online self-presentation, the perceived usefulness and the hedonic motivation of users were found as direct determinants of use intention. Facilitating conditions were found to determine use intention weakly. Social influences were found to have indirect effect on use intention via the desire for online self-presentation, perceived usefulness, and perceived ease of use. Furthermore, perceived ease of use was found to precede hedonic motivation strongly and perceived usefulness moderately. The hedonic motivation instead determined the desire for online self-presentation strongly.

In terms of validity and reliability, all significant relationships were found to fulfill common criteria for appointed measures (Cronbach Alpha, Composite Reliability, AVE's, and factor loadings).

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APPENDIX 1 INVITATION TO PARTICIPATE

smarp

SmarpShare user study

We value your insights on our product. Therefore, we're conducting a survey on SmarpShare's user acceptance. Come along, it only takes 10 minutes!

TO THE SURVEY

APPENDIX 2 WELCOMING LETTER

smarpshare

Welcome!

We'd love to hear about your usage of our product! Therefore, we're conducting a research on SmarpShare's user acceptance, aiming to find the factors driving use intention of SmarpShare.

By filling the form, you will help us in developing SmarpShare towards a better user experience. The survey takes only 10 minutes. Your responses are completely anonymous. You can only take the questionnaire once. Please do so before the survey closes on December 3rd, 2015. Questions marked with an asterisk (*) are required. Should you have any questions, please drop an email at research@smarp.com.

Your input is highly appreciated!

Best regards,
Smarp Research Team

Let's begin!   press **ENTER**

APPENDIX 3 SAMPLE SURVEY ITEM

1 → Usefulness

a. Using SmarpShare saves me time.*

1	2	3	4	5
Strongly disagree		Neutral		Strongly agree

b. Using SmarpShare improves my performance.*

1	2	3	4	5
Strongly disagree		Neutral		Strongly agree

c. Using SmarpShare enables me to do things better.*

1	2	3	4	5
Strongly disagree		Neutral		Strongly agree

0 of 45 answered