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Abstract

Individuals differ in their propensity to adopt new technologies, and thus the paper integrates technology readiness index (TRI) 2.0 with technology acceptance model (TAM) by investigating how B2B decision makers' technology readiness explains perceived ease of use and perceived usefulness of digital services. The study further investigates how perceived ease of use and perceived usefulness impacts satisfaction, and how satisfaction with the digital services contributes to loyalty towards the company. We test the model among customers of Finnish healthcare service company. The data consists of responses from 385 B2B customers, all experienced with using the company's digital services. Results reveal that in B2B context technology readiness explains acceptance of digital services to a lesser extent than expected, but age and gender appear to moderate these relationships. Perceived ease of use and usefulness significantly enhances satisfaction, and satisfaction further contributes to loyalty. Findings of the study extend our knowledge of technology adoption behaviour in B2B markets where earlier research is scarce.

Keywords: Technology readiness, technology acceptance, satisfaction, loyalty, procurement, B2B.

1 INTRODUCTION

Business buying is at change (Grewal et al., 2015; Wiersema 2013) as digital technologies provide new options for buyer and seller companies to contact, communicate, and stay in touch. Business customers can use a wide variety of digital services to gain information, share their experiences and connect with peers and companies. Recent reports indicate that the increased use of digital channels and digital services for individual purposes leads to a change in business buying behavior (Think with Google, 2015). Consequently companies aim at speeding up and improving the efficiency of their procurement processes by increasing their online presence through various forms of digital content published at company websites and through social media. Yet companies have not used the full potential of digital channels and services (Karjaluoto, Mustonen & Ulkuniemi, 2015) even though clear evidence exists about the benefits of digital communication channels in terms of sales and marketing (Andzulis, Panagopulos & Rapp, 2012; Bone, Fombelle, Ray & Lemon, 2015). While a vast amount of consumer studies on adoption of digital services exist, studies on B2B customers are scarce.

In order to better understand the use of digital services in B2B procurement process the current research integrates a recently introduced streamlined technology readiness index 2.0 with technology acceptance model to examine how technology readiness explains perceived ease of use and perceived usefulness of digital services in B2B procurement process. The study further investigates how perceived ease of use and perceived usefulness impacts satisfaction, and how satisfaction with the digital services contributes to loyalty towards the company. Maintaining customer loyalty is essential both economically and competitively since competition in the digital markets is just a click away, and acquiring new customers is typically more expensive than maintaining the existing customers (Janita & Miranda, 2013; Semeijn, van Riel, van Birgelen & Streukens, 2005). Extant research suggests that demographic factors such as gender and age influence the way individual's generally adopt and use digital technologies (Morris & Venkatesh, 2000; Venkatesh, Thong, Xu, 2012) and thus we also test if these relationships hold across males and females, as well as younger and mature B2B decision makers.

2 THEORETICAL BACKGROUND

2.1 Technology readiness

Technology readiness describes individual's propensity to embrace and use new technologies for accomplishing goals in home life and at work (Parasuraman & Colby, 2015; Parasuraman, 2000). Parasuraman (2000) developed a 36-item technology readiness index (TRI) scale consisting of four dimensions: optimism, innovativeness, insecurity and discomfort. Since then, technology readiness index has been applied for example in the context of self-service technologies (Gelderman, Paul, & van Diemen, 2011; Liljander, Gillberg, Gummerus, & van Riel, 2006), mobile services (Chen, Liu, & Lin, 2013; Sophonthummapharn & Tesar, 2007) and wireless technology users (Chang & Kannan, 2006). Research has incorporated technology readiness with other technology adoption models such as unified theory of acceptance and use of technology (UTAUT) (Helena Chiu, Fang, & Tseng, 2010), technology acceptance model (TAM) (Lin, Shih, & Sher, 2007; Walczuch, Lemmink, & Streukens, 2007) and expectation-confirmation model (Chen et al., 2013). Also cross-cultural validity of the scale has been assessed (Meng, Elliott, & Hall, 2009). Technologies change over time and the rapid development of new technologies led to the development of an updated and streamlined technology readiness index - TRI 2.0 (Parasuraman & Colby, 2015). TRI 2.0 scale has been updated to match with the recent changes in the technology environment, and at the same time the scale has been streamlined to a compact 16-item scale to be more easily adopted as a part of research questionnaires.

Likewise the original scale, TRI 2.0 consists of four dimensions: optimism, innovativeness, discomfort, and insecurity. Optimism and innovativeness are presented as motivators of technology adoption while discomfort and insecurity are inhibitors of technology readiness, and individual can address both

motivator and inhibitor feelings towards technology simultaneously (Parasuraman & Colby, 2015). Optimism refers to a general positive view of technology, and contains a belief that technology offers individuals with increased control, flexibility and efficiency in their lives. Innovativeness is a driver of technology readiness, and it refers to a tendency to be a pioneer and thought leader in adopting new technologies. Discomfort reflects a perception of being overwhelmed by technology and lacking control over it. Moreover, insecurity reflects distrust towards technology that typically originates from general skepticism towards technology's ability to work properly and includes concerns about the potential harmful consequences of technology. Individuals differ in their propensity to adopt new technologies (Rogers, 1995), and thus we relate technology readiness index with technology acceptance model to assess adoption of digital services during B2B purchase process.

2.2 Technology acceptance model

Technology acceptance model (TAM) was developed to explain user acceptance of information systems (Davis, Bagozzi & Warshaw, 1989; Davis, 1989). It theorizes that perceived ease of use (PEOU) and perceived usefulness (PUSE) are determinants of individual's adoption of information systems (Davis et al., 1989). Perceived ease of use refers to the degree to which an individual beliefs that the use of an information system is free from effort, while perceived usefulness is a perception that using a particular system enhances one's job performance (Davis et al., 1989). It is generally assumed that personality influences individual's technology adoption behaviour (Devaraj, Easley & Crant, 2008; McElroy, Hendrickson, Townsend & DeMarie, 2007) and thus technology acceptance model and technology readiness have been integrated in the prior research (e.g. Walczuch, Lemmink & Streukens, 2007; Lin Shih & Sher, 2007). Nevertheless the current research is among the first to incorporate revised technology readiness index 2.0 with constructs of technology acceptance model and in B2B settings. Walczuch, Lemmink and Streukens (2007) suggest that technology readiness index 1.0 could serve as a logical antecedent of technology acceptance model in technology intensive services. Following Parasuraman (2000), they further suggest that optimism and innovativeness operate as motivators of technology adoption while discomfort and insecurity operate as inhibitors of technology adoption when combined with technology acceptance model (Walczuch et al., 2007). Furthermore, Lin, Shih and Sher (2007) integrated technology readiness index 1.0 with technology acceptance model and argue that perceived ease of use and perceived usefulness operate completely mediating the paths between technology readiness and use intention of information systems. Following prior research we propose that individual's technology readiness influences acceptance of B2B digital services as follows:

H1a: Optimism (OPTI) has a positive influence on perceived ease of use (PEOU) of B2B digital services.
H1b: Optimism (OPTI) has a positive influence on perceived usefulness (PUSE) of B2B digital services.
H2a: Innovativeness (INNO) has a positive influence on perceived ease of use (PEOU) of B2B digital services.
H2b: Innovativeness (INNO) has a positive influence on perceived usefulness (PUSE) of B2B digital services.
H3a: Discomfort (DISC) has a negative influence on perceived ease of use (PEOU) of B2B digital services.
H3b: Discomfort (DISC) has a negative influence on perceived usefulness (PUSE) of B2B digital services.
H4a: Insecurity (INSE) has a negative influence on perceived ease of use (PEOU) of B2B digital services.
H4a: Insecurity (INSE) has a negative influence on perceived usefulness (PUSE) of B2B digital services.
H5:   Perceived ease of use (PEOU) has a positive influence on perceived usefulness (PUSE) of B2B digital services.

2.3 Satisfaction and loyalty

Satisfaction is a positive affective state resulting from the existing relationship with a company (Geyskens, Steenkamp, & Kumar, 1999), and loyalty is defined as an individual's deep commitment to a company (Oliver, 1999). A satisfied customer is motivated to recommend a company to other customers and patronize the company (Lam, Shankar, Erramilli, & Murthy, 2004). Prior research suggests that perceived ease of use (PEOU) and perceived usefulness (PUSE) affect customer satisfaction, and satisfaction in turn contributes to customer loyalty (Flavián, Guinalíu, & Gurrea, 2006; Tu, Fang, & Lin, 2012). In testing if these effects hold in digital B2B purchasing process, we hypothesize:

H6: Perceived ease of use (PEOU) of the digital service has a positive influence on satisfaction (SATD) with the digital service.

H7: Perceived usefulness (PUSE) of the digital service has a positive influence on satisfaction (SATD) with the digital service.

H8: Satisfaction (SATD) with digital service has a positive influence on loyalty: willingness to recommend the company to other customers (LREC).

H9: Satisfaction (SATD) with digital service has a positive influence on loyalty: willingness to patronize the company (LPAT).

2.4 Demographic factors

Demographic factors such as gender and age are found to influence the way individuals generally adopt and use technologies (Morris & Venkatesh, 2000; Venkatesh et al., 2012). Therefore we will incorporate gender and age as moderators in the model in order to better understand the impact of demographic factors on B2B adoption of digital services and the way they further impact customer satisfaction and loyalty towards the company.
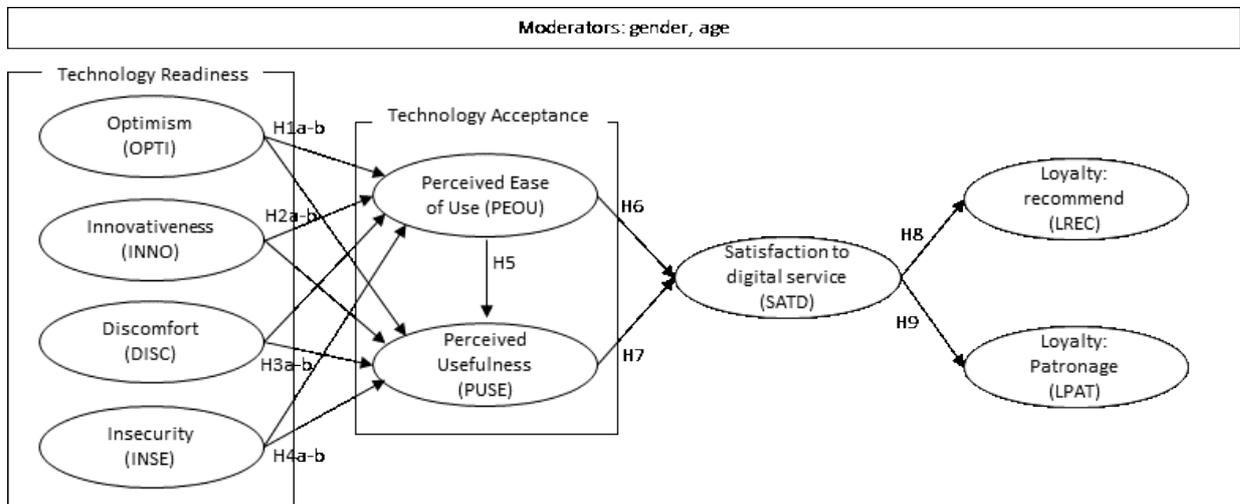

Figure 1.   Conceptual model.

3   RESEARCH METHODS

Data for the research was collected in autumn 2015 among B2B customers of a large Finnish healthcare service company. An online questionnaire was first developed in English and thereafter translated into Finnish by a professional translation company. An online questionnaire was administered to the selected business customers of a company, and targeted on individuals who have a role in buying related decision-making in their organization. An online questionnaire was sent by email to total of 6519 B2B

customers. This resulted in 568 usable responses, the response rate being 11 percent after excluding invalid email addresses from the count. Out of the 568 usable responses we selected 385 respondents who were experienced with using the healthcare service company's digital services including content shared for example through websites, mobile applications, and social media.

The study adopts measure items of technology readiness from Parasuraman and Colby (2015) consisting of a 16-item measurement instrument evaluating individual's personal propensity to adopt and use new technologies at work. The four dimensions of TRI, optimism (OPTI), innovativeness (INNO), insecurity (INSE), and discomfort (DISC), consist of four measure items each. Moreover, four measure items of perceived ease of use (PEOU) and perceived usefulness (PUSE) were adopted from Venkatesh and Bala (2008). Satisfaction with the company's digital services (SATD) was measured using measure items adopted from Szymanski and Hise (2000). Total of five measure items were adopted from Lam, Shankar, Erramilli, and Murthy (2004) to assess loyalty with the company. Three of the loyalty measure items assess individual's willingness to recommend the company to others (LREC) while two items measure willingness to patronize the company (LPAT)

A five-point Likert scale ranging from *Strongly disagree = 1* to *Strongly agree = 5* was used for technology readiness, perceived ease of use, perceived usefulness and loyalty items. Satisfaction was measured using a five-point Likert scale ranging from *Very dissatisfied = 1* to *Very satisfied = 5* and *Very displeased = 1* to *Very pleased = 5*.

4   RESULTS

A measurement model with 9 latent constructs and 31 observed variables was created in Amos 21.0. The measurement model with the dataset provides a good fit with $\chi 2$ = 660.646 (df = 398; p<0.001), CFI = 0.961 and RMSEA = 0.041. Standardized regression estimates (loadings) for all measure items exceed 0.60 except for three items (OPTI3: 0.587, DISC1: 0.451, and INSE4: 0.461). These items were eliminated from the model based on low factor loadings. After modifications the model shows improved fit with $\chi 2$ = 509.099 (df = 314; p<0.001), CFI = 0.970 and RMSEA = 0.040. We further assessed discriminant validity in order to measure the extent to which the constructs in the model are truly distinct from each other (Hair, Black, Babin, & Anderson, 2010). Discriminant validity is supported, as the square root of the average variance extracted (AVE) value of each construct is greater than the correlations between the constructs (Fornell & Larcker, 1981). In addition, composite reliability values vary from 0.705 to 0.929 supporting convergent validity (Table 1). In terms of convergent validity, AVE values exceed the level of 0.50 for all the other constructs except optimism. Moreover, construct reliability (CR) and Cronbach's alpha (α) values show acceptable internal consistency of the constructs.

	CR / α	AVE	1	2	3	4	5	6	7	8	9
1 OPTI	0.705 / 0.701	0.445	**0.667**								
2 INNO	0.849 / 0.849	0.585	0.365	**0.765**							
3 DISC	0.762 / 0.760	0.516	-0.277	-0.341	**0.718**						
4 INSE	0.792 / 0.782	0.564	-0.421	-0.291	0.547	**0.751**					
5 PEOU	0.917 / 0.915	0.733	0.357	0.115	-0.148	-0.091	**0.856**				
6 PUSE	0.929 / 0.929	0.766	0.368	0.079	-0.057	-0.016	0.848	**0.875**			
7 SATD	0.885 / 0.883	0.793	0.378	0.164	-0.131	-0.084	0.622	0.665	**0.891**		
8 LREC	0.883 / 0.876	0.717	0.308	0.089	-0.159	-0.041	0.682	0.720	0.588	**0.847**	
9 LPAT	0.738 / 0.725	0.587	0.200	0.025	-0.193	-0.113	0.748	0.680	0.539	0.764	**0.766**

Note: Square root of AVE values are on the diagonal and correlations between the constructs are below the diagonal.

Table 1.   Construct reliability.

Results of the path analysis with the total dataset show that out of the four TRI dimensions optimism is the only TRI dimension influencing on perceived ease of use and perceived usefulness of B2B digital services, supporting hypotheses H1a and H1b. The effects of innovativeness, discomfort and insecurity

on perceived ease of use and perceived usefulness are statistically non-significant, and thus hypotheses H2a, H2b, H3a, H3b, H4a and H4b are not supported.

Results confirm a highly significant positive effect of perceived ease of use on perceived usefulness supporting hypothesis H5. Moreover, perceived ease of use and perceived usefulness have a highly significant positive influence on satisfaction supporting hypotheses H6 and H7. In addition, the results confirm a highly significant positive effect of satisfaction on both loyalty items: willingness to recommend a company to other customers (H8) and willingness to patronize the company (H9).

We also analysed R-square estimates of dependent variables in the model referring to the fraction of variance of the dependent variables are explained by the indicators. TRI dimensions altogether explain 14,6 of the variance of perceived ease of use, and 74,1 percent of the variance of perceived usefulness together with perceived ease of use. Perceived ease of use and perceived usefulness explain 72,8 percent of the variance of satisfaction, that explains 62,8 and 63,9 percent of the variance of the two loyalty items, willingness to patronize the company and willingness to recommend the company, respectively.

4.1   Differences across gender

Prior research suggests that demographic factors such as gender and age influence acceptance of information technologies (Venkatesh et al., 2012). We took a deeper look at the results by examining possible differences across male (n=149) and female (n=236) respondents, as well as younger decision-makers (18-55 years; n=259) and mature decision makers (>55 years; n=126).

We first compared the model across male and female respondents. In terms of technology readiness, optimism has a statistically significant positive effect on perceived ease of use and perceived usefulness for male respondents. For female respondent, optimism and discomfort have a statistically significant effect on perceived ease of use of digital services. Following the theory, optimism has a positive effect on perceived ease of use, and discomfort negatively influences perceived ease of use. Path-by-path analysis shows that the difference across male and female respondents is statistically significant (p<0.05) only in the effect of discomfort on perceived ease of use of digital services. Optimism is the most influential technology readiness dimension influencing perceived ease of use for both male and female respondents.

Results of our comparison across male and female B2B decision makers show that male and female respondents differ (p<0.05) in the effect of perceived ease of use on perceived usefulness. The effect is stronger for female respondents compared to males (Table 2).

	Total sample		Male (n=149)		Female (n=236)		Model differences
Path	Std. β	C.R.	Std. β	C.R.	Std. β	C.R.	Sig.
H1a: OPTI → PEOU	0.360***	5.407	0.382***	3.611	0.339***	4.052	0.580 ns.
H1b: OPTI → PUSE	0.115**	2.682	0.178*	2.391	0.092 ns.	1.784	0.860 ns.
H2a: INNO → PEOU	0.014 ns.	0.264	0.091 ns.	1.039	-0.009 ns.	-0.133	0.740 ns.
H2b: INNO → PUSE	-0.015 ns.	-0.421	-0.034 ns.	-0.574	-0.005 ns.	-0.111	0.139 ns.
H3a: DISC → PEOU	-0.111 ns.	-1.911	0.097 ns.	1.025	-0.224**	-3.048	4.863 *
H3b: DISC → PUSE	0.047 ns.	1.257	0.036 ns.	0.559	0.061 ns.	1.344	0.069 ns.
H4a: INSE → PEOU	0.062 ns.	1.117	0.065 ns.	0.742	0.057 ns.	0.833	0.000 ns.
H4b: INSE → PUSE	0.067 ns.	1.905	0.071 ns.	1.211	0.080 ns.	1.916	0.156 ns.
H5: PEOU → PUSE	0.810***	16.276	0.745***	9.195	0.849***	13.396	4.889 *
H6: PEOU → SAT	0.366***	4.240	0.451***	3.603	0.323**	2.669	0.014 ns.
H7: PUSE → SAT	0.520***	5.923	0.479***	3.813	0.536***	4.372	0.839 ns.
H8: SAT → LREC	0.799***	13.377	0.790***	7.336	0.790***	11.133	0.135 ns.
H9: SAT → LPAT	0.792***	10.765	0.782***	6.520	0.794***	8.531	2.110 ns.

Note: * <0.05, ** p<0.01, *** p<0.001, ns. = non-significant (p>0.05).

Table 2.   Results with the total sample and gender as a moderator.

4.2 Differences across age groups

Information technology adoption and usage patterns are found to differ across age segments, and thus we compared the model across younger decision makers and mature decision makers based on a distinction derived from the prior research (e.g. Laukkanen, Sinkkonen, Kivijärvi & Laukkanen, 2007; Moschis, Curasi & Bellenger, 2004). In the current study mature decision makers are defined as those over the age 55, while the segment of younger decision makers includes decision makers aged 18-55 years. The number of mature users is increasing due to the rise in life expectancy as well as high birth rates after the Second World War (Moschis, 2003) and therefore understanding information systems use among mature customers is becoming increasingly important.

In terms of technology readiness, results indicate that optimism and insecurity have a positive influence on perceived ease of use of B2B digital services among younger decision-makers. For mature B2B decision-makers, optimism and insecurity have a statistically significant positive effect on perceived usefulness. Other hypothesized paths between TRI dimensions and perceived ease of use and perceived usefulness are statistically non-significant among young and mature age segments. Path-by-path analysis shows that the difference is statistically significant only in the case of insecurity on perceived ease of use. It is surprising and against the theory that insecurity is found to have a positive effect on perceived ease of use for younger B2B decision-makers and on perceived usefulness for mature B2B decision makers. Again, out of the four technology readiness dimensions optimism is the most influential dimension influencing on perceived ease of use and perceived usefulness of B2B digital services.

Furthermore, results indicate that younger and mature B2B decision makers differ also in the effect of perceived usefulness on satisfaction with the digital services. Perceived usefulness has a highly significant effect on satisfaction for younger B2B respondents while the effect is statistically non-significant for mature B2B decision makers.

	18-55 years (n=259)		Over 55 years (n=126)		Model differences
Path	Std. β	C.R.	Std. β	C.R.	Sig.
H1a: OPTI → PEOU	0.423***	5.495	0.213 ns.	1.769	0.220 ns.
H1b: OPTI → PUSE	0.073 ns.	1.459	0.211*	2.392	3.033 ns.
H2a: INNO → PEOU	0.023 ns.	0.353	-0.065 ns.	-0.649	0.455 ns.
H2b: INNO → PUSE	0.018 ns.	0.448	-0.092 ns.	-1.400	1.722 ns.
H3a: DISC → PEOU	-0.095 ns.	-1.398	-0.183 ns.	-1.678	0.145 ns.
H3b: DISC → PUSE	0.005 ns.	0.121	0.097 ns.	1.334	0.798 ns.
H4a: INSE → PEOU	0.149*	2.222	-0.109 ns.	-1.132	3.957 *
H4b: INSE → PUSE	0.033 ns.	0.789	0.138 *	2.146	1.083 ns.
H5: PEOU → PUSE	0.833***	13.742	0.782***	8.469	0.045 ns.
H6: PEOU →SAT	0.257*	2.567	0.497**	3.188	1.749 ns.
H7: PUSE → SAT	0.676***	6.287	0.240 ns.	1.606	6.244 *
H8: SAT → LREC	0.851***	11.572	0.630***	6.238	1.631 ns.
H9: SAT → LPAT	0.827***	9.176	0.673***	5.308	0.152 ns.

Note: * <0.05, ** p<0.01, *** p<0.001, ns. = non-significant (p>0.05).

Table 3.   Results: Age as a moderator.

5   DISCUSSION

Parasuraman and Colby introduced an updated and streamlined technology readiness index 2.0 in 2015, and to the authors' best knowledge the current research is among the first to utilize technology readiness index 2.0 in academic research since its introduction. Prior research applying the previous TRI 1.0 version of technology readiness suggests that individual's technology propensities affect adoption of technologies and information systems (Lin et al., 2007; Walczuch et al., 2007). However, results of the present study among B2B decision makers of a Finnish healthcare service company do not fully support

the prior findings. It seems that some technology readiness dimensions influence adoption of digital services among B2B buyers while other hypothesized paths between technology readiness and perceived ease of use and perceived usefulness are statistically non-significant. Earlier research suggests that demographic factors such as age and gender influence technology adoption (Venkatesh et al., 2012). Thus we compared the results across male and female decision makers as well as younger (18-55 years old) and mature (>55 years old) B2B decision makers to find out if these relationships hold among different segments.

In terms of technology readiness index, results with the total sample indicate that optimism positively influences perceived ease of use and perceived usefulness of digital services among B2B customers. Optimism reflects a generally positive view of technologies, and individuals with optimistic orientation adopt new technologies openly paying attention mainly on their positive aspects (Parasuraman & Colby, 2015). We find that optimism has the most influential effect on perceived ease of use of digital services, followed by perceived usefulness. However, rest of the hypothesized paths between technology readiness dimensions and perceived ease of use and perceived usefulness are statistically non-significant with the total dataset, indicating that innovativeness, discomfort and insecurity do not play a role when B2B decision makers assess ease of use and usefulness of digital services. This could be a sign of possible mediation effect of such constructs that we did not take into account in our study (Zhao, Lynch & Chen, 2010). Thus, further research of possible mediation effects, other than perceived ease of use, would be required.

Supporting prior research, perceived ease of use has a highly significant positive effect on perceived usefulness. Also, results of our study confirm that perceived ease of use and perceived usefulness of digital services increase satisfaction with the sales company's digital services. Therefore companies should pay attention to usability of their information systems, and design and develop such digital services for their B2B customers that are convenient to use and do not require too much effort from the customer. Furthermore, satisfaction with the company's digital services is found to increase loyalty with the sales company suggesting that impact of digital services on company's performance should not be underestimated. Based on our results customer loyalty is positively related to satisfaction, and B2B customers who are satisfied with digital services are generally more willing to patronize the company and more willing to recommend the company to others. Recent studies indicate that individuals are increasingly sharing their experiences through digital channels and the importance of electronic word-of-mouth has been noted also in B2B markets (Molinari, Abratt, & Dion, 2008). Therefore companies should place effort to develop such digital services that fulfil and exceed customer expectations and thus result in highly satisfied customer base.

Comparison across male and female respondents reveals that male and female B2B decision makers differ in terms of discomfort on perceived ease of use of digital services. Discomfort of technology is found to reduce perceived ease of use of digital services for female respondents while no such effect exists for males. Discomfort is about being overwhelmed by technology and lacking control over it. In general, males are found to have a more favourable attitude towards technology adoption (Venkatesh, Morris & Ackerman, 2000) and thus they may not become as easily overwhelmed by digital technologies as females. Moreover, males and females differ on the effect of perceived ease of use on perceived usefulness, the effect being stronger for female respondents.

Comparison across younger and mature B2B customers shows that the difference in the effect of TRI dimensions on perceived ease of use and perceived usefulness is statistically significant only in the case of insecurity on perceived ease of use. Even though path-by-path analysis doesn't show other differences across younger and mature B2B customers, results reveal some differences when looking at the effects independently. Optimism and insecurity influence perceived ease of use for males, while optimism and insecurity influences perceived usefulness for females. Somewhat surprisingly, and against the theory, insecurity was found to increase perceived ease of use of digital services among younger B2B decision makers and perceived usefulness among mature B2B decision makers. Insecurity reflects general distrust and scepticism towards new technologies, and includes concerns about the potential harmful consequences of technology (Parasuraman & Colby, 2015). Insecurity is an inhibitor of technology

readiness, but based on the results insecurity was found to have a slightly significant positive effect when comparing the results across younger and mature decision makers.

Moreover, younger and mature B2B decision makers were found to differ also in the effect of perceived usefulness on satisfaction. Perceived usefulness was found to increase satisfaction among younger B2B customer, while no such effect exists for mature B2B customers. This implies that different issues contribute to satisfaction across different age segments, and thus a further research would be required to compare the results across different age groups.

Results of prior studies conducted with the previous version of technology readiness index 1.0 indicate that technology readiness would influence perceived ease of use and perceived usefulness to a larger extent than what results of our study support (Lin et al., 2007; Walczuch et al., 2007). There are several possible explanations for this. Prior studies relating technology readiness with technology acceptance model have been conducted with version 1.0 of technology readiness, and the measurement scale has been remarkably altered since then. The previous technology readiness 1.0 scale consist of 36 belief statements while only 16 items remain in technology readiness index 2.0. Out of the 16 technology readiness 2.0 items only 11 are identical with the technology readiness index 1.0 and 5 measure items are new. Revisions in technology readiness index reflect particularly on insecurity and optimism dimensions. Changes across TRI 1.0 and TRI 2.0 measurement instruments are remarkable and therefore comparing the results across TRI 1.0 and TRI 2.0 should be interpreted with caution. Furthermore, information technologies develop at a rapid speed and general attitude among people towards technologies has most probably changed since the introduction and the first empirical studies of the TRI 1.0.

Moreover, research context may partly explain the differences across our study and those conducted earlier. For example the study of Walczuch, Lemmink and Streukens (2007) does not examine technology readiness and technology acceptance with any particular information system, but they asked the respondents to name a software the respondents use the most, and complete a questionnaire based on their feelings towards that particular software application. Therefore a wide variety of software may have been under investigation. Their data was collected among employees of a Belgian company, which is a significantly different research setting from ours. The current study investigates the relations between technology readiness and technology acceptance among B2B customers of a Finnish healthcare service company, who all have a role in buying related decision making. There may be factors related to the company's digital services specifically that explain these findings. Even though all respondents were experienced with using the company's B2B digital services, it may be that replicating the study, for example, in a more technologically oriented industry sector might alter these results. On the other hand business buying is typically more controlled by the company and affected more significantly by organizational factors than buying as an individual consumer. This may well explain why individual's technology propensities do not play such an important role in technology acceptance among B2B customers compared to consumers.

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