Consumer acceptance of the mobile Internet

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Abstract Technological innovations are often designed to help consumers save time. However, some consumers refuse to use innovations and downgrade their usability with increasing usage time. The purpose of this research is to find out how consumers' personality in younger (vs. older) men (vs. women) affects behavioral choices of the mobile Internet, as an example of new technology, and how usage time affects perceived ease of use of innovative (vs. established) media. The study shows that innovativeness, low desire for social contact, and technology optimism, in interaction with demographics, determine whether consumers choose mobile Internet services over substitutes. Job-related dependency on technology and gender directly affect choice behavior. The study reveals that ease of use is downgraded as more time is spent using the mobile Internet, whereas there is no such relation for established media. The results help explain overoptimistic forecasts that were made in the field of technology acceptance.

Keywords Acceptance · Adoption · Mobile commerce · Mobile Internet services · Ubiquity · Technology

1 Introduction

In B2C markets, newly introduced technology is often designed to help consumers save time. This paper looks at mobile Internet services—that is any Internet application that can be accessed via a handheld mobile device (such as a cellphone, a smartphone, or a personal digital assistant), using mobile network technology. Some authors believe that, with the introduction of Apple's iPhone into the market, the mobile Internet promises to be one of the most important technological developments

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for the future (West and Mace 2010). However, forecasts for the diffusion of both the mobile Internet and mobile commerce worldwide were overoptimistic. Jarvenpaa et al. (2003), p. 44 state that "it will be the innovativeness of users and uses, not the innovativeness of the technology, that will drive m-commerce growth to a new level." To date, it is unclear whether consumers' actual behavioral choices of using mobile Internet services can be explained by their personality, and how the usage time affects the usability evaluations of the technology. Saving time may particularly relevant for consumers because of increasing mobility and the desire of efficiency in daily life; here, the technology promises ubiquitous access to the Internet.

The goals of this paper are to partially fill this void. The study reveals how the personality of older (vs. younger) men (vs. women) drives behavioral choices of new technology (vs. substitutes), and how the time to fulfill tasks using the media translates to the usability perception of the media. The findings help forecast consumer acceptance of new technology in general—and mobile Internet services in particular—better, identify key advantages and disadvantages of the technology, and target consumers based on personality measures that have conditional effects depending on gender and age.

2 Consumer personality and the preference of the mobile Internet over substitutes

Capturing actual technology adoption and use by behavioral acts (vs. intentions or self-reports) and contrasting these measures to the adoption and use of well-established media is necessary in order to obtain a realistic perspective on the acceptance of technological innovations, for three reasons: (1) intention-behavior inconsistencies (Arts et al. 2011); (2) the bias from generalizing findings based on ex-post reflections on past behavior of selected consumer groups (Gatignon and Robertson 1989); (3) the pro-innovation bias in adoption and diffusion research (Rogers 2003). This study considers *behavioral choices* of using new technology compared to established media. Choice behavior can be described as a voluntary act to select a medium (here: the mobile Internet) over one (or more) other medium (media) in order to fulfill a certain task. Consumers make not only choices when they actually adopt or use an innovation, but also in many situations prior to these decisions, for example when touching and sampling new media that are on display in the store or when using a friend's latest medium for a certain task (Kempf 1999). This experience influences the acceptance of new technology (see Wood and Moreau 2006 who refer to the pre-adoption stage of "initial use").

Dabholkar and Bagozzi (2002), p. 187 argue that the consumer differences arising from personality traits are highly relevant for validly predicting behavioral choices of new technology because such variation is "at the heart" of consumers' decision-making process. While age (being young) and gender (male) may affect the behavioral choice of the mobile Internet over well-established media (Rice and Katz 2003), this study considers consumer innovativeness, the desire for social contact (as opposed to technology use) and technology optimism as relevant personality characteristics whose impact on choice behavior is likely to depend on these demographics. The study controls for consumers' job-related dependency on technology because the strict separation between work and leisure is disappearing (Gant and Kiesler 2002).

Consumer innovativeness This construct may be defined as "a tendency to be a technology pioneer and thought leader" (Parasuraman 2000, p. 311; see also Schreier et al. 2007). We expect the influence of innovativeness on choosing the mobile Internet over substitutes to be moderated by gender. This assumption is supported by literature on gender differences in technology adoption (Venkatraman 1991) and by the findings of Nysveen et al. (2005). They show that perceived self-expressiveness of one's identity has a stronger influence on future usage intentions of mobile chat services for men than for women. Thus men, compared to women, may tend to make their choices more on the basis of how much potential they see in showing others how innovative they are. We also assume that the influence of innovativeness on the choice of the mobile Internet is moderated by age. Previous research shows that young users of mobile devices demonstrate both their innovativeness and the consumption of mobile services on cellphones to members of their peer group (Thorbjørnsen et al. 2007). We express our arguments as H1:

> H1: The greater the level of consumer innovativeness in men (vs. women) [a] and in younger (vs. older) consumers [b], the more likely they will be to choose a mobile Internet device over an established medium.

Desire for social contact (vs. technology use) Research into the acceptance of self-service technology shows that there are consumers who like using technology and prefer to avoid personal contact with sales staff, while others show the opposite tendency (Dabholkar and Bagozzi 2002). We postulate that the effect of the desire for social contact on the probability of choosing a mobile Internet device is stronger for women (vs. men), because women attach greater importance to interpersonal relations and their personalities are characterized as more dependent (Cross and Madson 1997). Also, the relationship between the desire for social contact and the choice of a mobile Internet device may be stronger for older (vs. younger) consumers because they value personal interaction to a greater extent, as shown by Czaja and Sharit (1998) in the context of PC use. This leads us to H2:

> H2: The lower the desire for social contact in women (vs. men) [a] and in older (vs. younger) consumers [b], the more likely they will be to choose a mobile Internet device over an established medium.

Technology optimism Parasuraman (2000), p. 311 defines technology optimism as "a positive view of technology and a belief that it offers people increased control, flexibility, and efficiency in their lives." It refers to the perceived optimism of the better fulfillment of needs through the use of technology in individuals' daily lives. We hypothesize that males (vs. females) and younger (vs. older) people with a greater level of technology optimism are more likely to favor a mobile Internet device over an established medium. Men's (vs. women's) behavioral choices of new technology may be driven by their acknowledgement that it will help them organize their lives and be more efficient (Edison and Geisler 2003). Schiffman and Sherman (1991) provide evidence that older consumers, more than younger consumers, question the need for and the value of innovations. H3 is stated as follows:

H3: The higher the level of technology optimism in men (vs. women) [a] and in younger (vs. older) consumers [b], the more likely they will be to choose a mobile Internet device over an established medium.

3 Usage experience of the mobile Internet: time and perceived ease of use

One important facet of the usage experience of new technology is the time spent using technology (Kleijnen et al. 2007). Time becomes more and more relevant to individuals in a world of increasing mobility, technological advancement and productivity (Kingsley 2007). While we would expect that consumers choosing a technological innovation (here: the mobile Internet) over an established medium need less time to fulfill a task—confirming the innovation's advantages (here: ubiquity and convenience; Balasubramanian et al. 2002)—it is unclear how the time needed to solve a certain task relates to the perception of ease of use. Ease of use describes the effort a user has to make in order to use technology (Davis 1989). This study contrasts the mobile Internet as a technological innovation to two types of rather established media: Internet on laptops and non-technological media.

Venkatesh and Ramesh (2006) find that the relationship between ease of use and self-reported use of websites is stronger for the mobile Internet than for the wired Internet on laptops or PCs. Königstorfer and Gröppel-Klein (2007) show that consumers using a mobile device need more time to conduct online transactions than consumers using a laptop. Failures while using the device caused time delays and made users angry. Interestingly, users of the mobile Internet (vs. wired Internet on a laptop) felt angrier and discounted ease of use to a greater extent. Therefore, consumers using the mobile Internet, regardless of their gender and age, may be more sensitive to time delays and therefore more likely to discount its ease of use with increasing time than when they use the Internet on a laptop.

Theoretical support for this assumption is provided by schema theory. An existing, learned schema to use the Internet on laptops or PCs may make consumers act by automaticity when visiting websites and making transactions (Mandler 1979). This learned behavior might imply easy data entry, a large display, and a fast network connection, for example (Zeng et al. 2003). Consumers should thus assimilate the experience of using established media with pre-existing schemas of using the media. These assimilation effects may also come into play when using non-technological media that are established from the perspective of consumers (Mandler 1979). However, when consumers use the same technology (i.e., in our case Internet networks) on a medium with inherent disadvantages compared to media they are familiar with, consumers may compare this experience—in terms of ease of use—to existing schemes that serve as reference situations; contrast effects are likely to occur. We therefore state H4 as follows:

H4: The more time consumers need to use a mobile Internet device, the more negatively they will perceive the ease of use of the medium [a]. This relationship does not hold for the use of an established, non-technological medium [b] and the use of the Internet on a laptop [c].

4 Study 1

4.1 Method

Sample A quasi-experimental design was applied to a non-self-selected, broad population sample (mean age 43 years, range 18 to 69 years). One hundred sixty nine participants (of which 47.9 % were men) out of an original sample of 190 participants fulfilled all the requirements necessary to be included in the study. Fifteen participants who switched the media and six participants who had prior knowledge about the solution of the task were excluded from the analyses. Quota sampling technique according to demographic data (gender, age) for the city's residents was used. Participants were recruited in the pedestrian area of a city and received monetary compensation for their participation.

Design and procedure If consumers agreed to participate, they were asked to take a seat in the area outside a café. Next, they were asked to solve a task with the ostensible goal of analyzing how consumers orient in the city center. The task was context-specific and participants could choose between the mobile Internet and an established, non-Internet-based medium to solve the task. By context-specific, the factors location and time are meant, which can also be described by the term ubiquity. Action/interest is considered as a third contextual factor and reflects a user's identity —that is his or her individual needs and preferences (Balasubramanian et al. 2002; Figge 2004). To induce a contextual task, participants were asked to imagine the following situation: "You want to surprise your best friend with a really special present for her birthday. Because she is a great fan of Australia, you want to take her out for dinner to an Australian restaurant. You want to find an Australian restaurant right here and now and make a reservation. You can choose between the following tools: the Yellow Pages, a city map, and a mobile digital assistant with Internet access. Please try to find the telephone number and the address of the restaurant, and please show me where it is located." After participants had completed the task, they answered a questionnaire and were fully debriefed.

Selection of stimuli An MDA offering access to the Internet was chosen as an example of a mobile Internet device. For examples of media not based on technology we used the print version of the Yellow Pages and a printed, folded city map. A pretest showed that the Yellow Pages and city maps were the non-Internet-based media that people associated most closely with solving a task of the sort featured in the experiment.

Measures The interviewer observed the behavioral reactions of the participants and recorded the amount of time it took the participants to solve the task, without them noticing. The latent variables were measured via five-point rating scales (1=*totally disagree*, 5=*totally agree*). The items for consumer innovativeness are based on previous literature (e.g., Goldsmith and Hofacker 1991; "In general, I am among the first in my circle of friends to use new technology," "I am one of those who always search for the latest technological products," "I like to show to my friends how I use new technological products," "I like using the latest technological products while others

are around;" α=.82). Desire for social contact was measured by adapting the items used in previous research studies (e.g., Dabholkar 1996) to the context of our study ("If I have to choose, I prefer a personal conversation to an electronic alternative," "I prefer personal contact to communicating with technological devices," "It bothers me if I have to use a piece of technology when I could interact with a person instead;" α=.66). Technology optimism was measured by three items ("Using technological products is a waste of money" (reversely coded), "Using technology makes my life easier," "Technological products are simply gadgets" (reversely coded; α=.76; e.g., Parasuraman 2000)). Job-related dependency on technology—that is the subjectively perceived degree to which individuals depend on using technology in their job—was included as a control variable. We expected that individuals who rely heavily on technology in their job and feel dependent on this would be more likely to choose mobile Internet devices in a private, context-specific situation. A three-item rating scale measured this variable ("My profession requires the use of technology," "In my job, I would be lost if I didn't use technology," "My position requires the use of technology;" α=.83). Prior experience with the Internet was assessed by a binary variable (yes/no). Perceived ease of use was measured via three items ("I find the [medium] easy to use," "Learning to use the [medium] is easy for me," "My interaction with the [medium] is clear and understandable;" α=.78; Davis 1989).

Scale testing We performed an exploratory factor analysis with principal components extraction and Promax rotation on all personality variables including perceived job-related dependency on technology. The results showed the anticipated factor structure: the items loaded highly on the constructs that they were intended to measure. All the scales were uni-dimensional. We then subjected the measures to confirmatory factor analyses. The results indicated an acceptable fit of the confirmatory measurement model of the four constructs (χ^2=101.8, df=59, p<.001; GFI=.92; CFI=.95; RMSEA=.066). The composite reliabilities were between .67 and .84, exceeding the .60 criterion recommended by Bagozzi and Yi (1988). To assess convergent validity, we examined the magnitude and significance of factor loadings. All items loaded on their respective constructs (λ≥.56), and each loading was significant (p<.001), thus providing evidence of convergent validity (Bagozzi and Yi 1988). Pairwise correlations between the factors were examined and χ^2 difference tests were performed to determine whether these correlations differ significantly from 1 (Bagozzi and Yi 1988). All tests were significant at the .001 level and 1 is not included in any confidence interval for the correlations. Fornell and Larcker's (1981) criterion, which requires that the average variance extracted is higher than the squared correlation between the pairs of the latent variables, is met, thus providing evidence of discriminant validity. In sum, the confirmatory analyses suggest that the scales have sound psychometric properties.

4.2 Results and discussion

Behavioral reactions Sixty six of the original sample of 190 participants (34.7 %) solved the task using the mobile Internet device, while 124 participants (65.3 %) chose the established media. Of the 66 participants who used the mobile Internet

device, 14 started to use the established media and then switched; one participant switched in the other direction. As expected, mobile Internet users needed less time (M_{MI}=2:16 (±2:28) min) than the users of the Yellow Pages and the city map (M_{YC}= 4:04 (±1:51) min, $t(162)$=5.18, p<.001).

Hypotheses testing We tested H1–H3 using a binary stepwise logistic regression analysis. Table 1 gives the results of the logistic regression analysis. The quality criteria for the Likelihood-ratio-test ($\chi^2(14)$=102.89, p<.001), the Goodness-of-fit-statistics $\hat{C}$ ($\chi^2(8)$=12.30, p=.14), and the Pseudo-R^2-statistics (McFadden R^2=.50; Cox and Snell R^2=.46; Nagelkerke R^2=.65) are fulfilled. The personality variables influence the choice of the mobile Internet device in interaction with demographic variables. The interaction effect of innovativeness and gender is supported: innovativeness has a greater impact on the choice of the mobile Internet in men (vs. women; H1a). Being younger, however, does not act as a moderator; we therefore reject H1b. With regard to the desire for social contact (vs. technology use), we find an interaction effect with gender, which supports H2a, but not with age (H2b has to be rejected), on the participants' choice of the mobile Internet. Partial support is also

Table 1 Effect of consumer personality, age, and gender on choice of medium

Dependent variable: choice of the mobile Internet device	B	Wald-statistics	p	Effect coefficient	Hypothesis testing
Constant	−4.59	9.94	**	0.01	
Consumer innovativeness	0.53	2.40		1.70	
Consumer innovativeness × gender	1.14	9.05	**	3.13	H1a
Desire for social contact	−0.33	0.38		0.72	
Desire for social contact × gender	−0.93	7.07	**	0.39	H2a
Technology optimism	0.41	0.14		1.50	
Technology optimism × age[1]		13.81	*		H3b
18-20 (n=14)	0.36	0.11		1.44	
21-30 (n=28)	1.91	6.37	*	6.78	
31-40 (n=28)	−0.50	0.81		0.61	
41-50 (n=39)	3.36	6.86	**	28.80	
51-60 (n=33)	1.75	2.49		5.78	
Job-related dependency on technology	2.31	18.26	***	10.06	
Male	1.61	7.99	**	5.02	
Age[1]		22.58	***		
18-20 (n=14)	4.54	8.31	**	93.94	
21-30 (n=28)	1.00	0.49		2.71	
31-40 (n=28)	3.56	6.30	*	35.08	
41-50 (n=39)	−1.37	0.65		0.25	
51-60 (n=33)	0.82	0.34		2.27	

[1] The reference group is the group of individuals aged over 60 (n=27); p values>.10 not shown

*p<.05, **p<.01, ***p<.001

found for H3: the interaction between optimism with regard to technology and gender does not reach statistical significance. Thus, H3a is not supported. However, H3b is partially supported, because technology optimism is a stronger predictor of the choice of the mobile Internet in some younger consumers (the 21–30 years age group and the 41–50 years age group) compared to the reference group of the older participants. As expected, perceived job-related dependency on technology is found to be a significant direct predictor of the choice of the mobile Internet. Also, male gender and younger age (there were significant differences between the 18–20 years age group and the reference group of the over 60-year-olds, and between the 31–40 years age group and the reference group) increase the likelihood of choosing of the mobile Internet.

Testing H4 A moderated regression analysis was computed to test H4a and H4b. The time needed to fulfill the task (measured in seconds, mean-centered), media choice (Yellow Pages and city map=0, mobile Internet=1), their interaction, gender, age (mean-centered), and their interaction were included as independent variables in the analysis. Perceived ease of use of the media was modeled as dependent variable. The results reveal the predicted interaction effect ($b=.002$, $p<.05$, model $R^2=.18$). For consumers who used the mobile Internet device, the time needed to solve the tasks negatively impacts ease of use ($b=-.004$, $p<.001$). For consumers who used the Yellow Pages and the city map, there is no significant correlation between time and ease of use ($b=-.001$, $p=.27$). None of the control variables influences ease of use (p's$>.68$). The results thus support H4a and H4b.

Study 1 took place outdoors, in a contextual situation with respect to location ("right here"), time ("right now") and action/interest ("make a reservation for your best friend's birthday"). Thus we ensured that the ubiquity aspect of mobile technology played to its advantage. Nevertheless, only around one-fourth to one-third of the population (the latter figure includes participants who switched medium) are prone to choosing (i.e., similar to "initially using;" Wood and Moreau 2006) mobile Internet services even though they had the opportunity to use the latest mobile device and were not charged any fees. Although this figure is likely to change in the course of time with increasing technology advancement, our findings can explain the overly optimistic forecasts made for the diffusion of mobile Internet services in the past. More importantly, Study 1 shows that personality variables, in interaction with gender and age, affect the behavioral choices of consumers. These results will be discussed in the general discussion.

One shortcoming of Study 1 is the potential bias caused by participants' self-selection. Because of the experimental setting, objective time performance and subjective evaluations of the technology may differ between the user groups as a result of self-selective background variables, and not because of the inherent characteristics of the media in use. Study 2 was conducted to address this issue. Also, Study 2 considers the iPhone—a landmark innovation in the telecommunications market (West and Mace 2010)—as a mobile Internet device, and extends the range of media. Wireless Internet services on laptops were the most frequently suggested way of solving the task that was introduced in Study 1. Thus, Study 2 considers both the Internet on laptops and non-Internet-based media as substitutes of the mobile Internet.

5 Study 2

5.1 Method

Sample, design, and procedure Sixty consumers (50.0 % men, mean age 42 years, range: 19 to 65 years) were recruited in front of a café according to quota sampling (see Study 1). Participants were asked to solve each of three tasks—one after the other—using one of three media each time. The following media were considered: a third generation Apple iPhone connected to wireless networks as a mobile Internet device (MID), a laptop (Apple MacBook with a 13-in. screen) connected to wireless networks as an Internet-based substitute (WIL), and a print version of the Yellow Pages and a city map as an example of a non-Internet-based substitute (YC). The order of both the tasks and the media was counterbalanced. Task 1 was similar to Study 1's task. Task 2 and 3 (finding the telephone number and the location of a copy shop and a theater, respectively) were pre-tested to be equally time-consuming. Time was measured from the moment the participants had read the task description until they completed the task, without them noticing. After each task, participants were interviewed. Perceived ease of use was measured as in Study 1 (α_{MID}=.72; α_{WIL}=.67; α_{YC}=.75). A debriefing took place at the end of the study.

5.2 Results and discussion

Behavioral reactions The average time needed to solve the tasks amounted to 1:35 min using the mobile Internet, 1:29 min using the Internet on the laptop, and 2:30 min using the Yellow Pages and the city map. A mixed ANOVA reveals significant differences between the media ($F(2,118)$=26.87, p<.001); neither the order of media use nor the order of the tasks (p's>.35) influenced the time performance. Pairwise comparisons (Bonferroni) show that both the Internet media required less time than using the Yellow Pages and the city map (p's<.001), whereas there is no difference between using the Internet on the iPhone or the laptop (p=1.00).

Testing H4 Three regression analyses were computed to test H4a–H4c. The time needed to fulfill the task, gender, age, and their interaction were modeled as independent variables and ease of use of the media as dependent variable. The time needed to solve the tasks using the mobile Internet device negatively impacts ease of use (b=−.005, p<.05) with no effects of any other independent variables (p's>.34, R^2=.18). H4a is again supported. A second regression analysis reveals that there is no significant correlation between the time needed using the Internet on the laptop and ease of use (b=.000, p=.97). Age is the only significant predictor, with more negative perceptions as age increases (b=−.012, p<.05, R^2=.06). A third analysis shows that there is a positive correlation between age and ease of use of the Yellow Pages and the city map (b=.020, p<.001), whereas the effect of time on ease of use does not reach significance (b=−.003, p=.06; R^2=.11). Again, gender has no influence. The results thus support H4b and H4c.

6 General discussion, implications, and limitations

This study reveals how consumer personality factors determine actual behavioral choices of technological innovations compared with established media depending on demographics that are most relevant in technology adoption (Vandecasteele and Geuens 2010): age and gender. It is also a response to Kleijnen et al. (2007) who call for assessing actual behavioral measures and relating these to psychographic variables. Based on the results, previous conclusions about the determinants of older (vs. younger) men's and women's tendency to accept or resist technological innovations (vs. established media) may have to be reconsidered. Contrary to what we expected, the effects of innovativeness and desire for social contact on choice behavior are unaffected by age and 41–50-year-old consumers with high technology optimism chose the mobile Internet more often than some younger consumers. Trocchia and Janda (2000) conducted in-depth interviews with older consumers and conclude that some older people are open to Internet use and, furthermore, demonstrate their openness to others in order not to be perceived to be lagging behind or not to be excluded from social groups.

   Although the results of Study 1 support some of our assumptions about gender effects, in particular on the role of consumer innovativeness in men, they do not confirm all hypothesized relationships. H3a assumed that men (vs. women) with greater technology optimism would be more likely to choose a new technology over established media. One reason why this hypothesis is rejected could be that, more than ever today, women acknowledge that technology makes their daily lives easier, and gender differences regarding associated variables have disappeared (Arts et al. 2011; Vandecasteele and Geuens 2010).

Managerial implications What can companies do to prevent innovations from flopping? First, companies should identify key advantages ('killer applications') of new technology compared with substitutes. The list of substitutes should include media that seem old-fashioned from the product developer's perspective, such as reference books. Although consumers may evaluate such substitutes more negatively, practitioners should be aware that a negative (i.e., time-consuming) usage experience of an innovation potentially harms usability perceptions. Reference situations of established media are likely to shape consumers' expectations in these contexts.

   Second, this study helps brands to segment and target consumers based on both personality measures and demographics, which are not independent from each other. The chances that consumers make first contact with a technological innovation are the highest for males who perceive themselves as highly innovative and for females who have a low desire for social contact. Perceived dependency on technology at work is a driving factor independent of age and gender. Although older consumers may need more time to use a new technology, age seems to be less relevant to predict consumers' choice behavior.

   Third, this research has methodological implications that advance the field of marketing research with respect to the adoption and use of technological innovations. The procedure employed in our studies reduces the bias of considering innovations as favorable per se and allows consumers to resist and reject new technology through behavioral acts regarding an ostensibly unrelated task and without neglecting or

stigmatizing certain consumers (e.g., considering individuals who reject innovations as 'laggards'). Examining actual choices and use experiences instead of verbally stated usage intentions may explain overoptimistic forecasts of diffusion rates (e.g., The Arc Group 2000 with respect to m-commerce).

Limitations and future research As any empirical research, our studies have limitations. One limitation is the acknowledgement that the mobile Internet (vs. established media) may not play to its full advantage in the context-specific situations as induced in the studies. Of the three media under examination, mobile Internet devices may be the only media that are readily accessible during the whole day, given that consumers carry the devices with them. In the studies, the media were provided to consumers to enhance internal validity. Thus, the perceived convenience of having immediate access to the medium (vs. having to get access to the media first) was kept constant. Future research may find out whether the convenience of having immediate access to the Internet (vs. having to wait) impacts on the evaluations of the Internet. For example, it would be interesting to know whether the negative relationship between time performance and ease of use of the mobile Internet disappears when convenience aspects are made salient to consumers (e.g., not having to boot the device, having the device in the pocket while traveling). Also, researchers may find out which consumer segments are most likely to differ in their statement of adoption intentions and actual behavioral measures of adoption (Arts et al. 2011) to get further insight into intention-behavior inconsistencies.

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