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**Hedonic and Utilitarian Motivations  
of Social Network Site Adoption**

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## **Abstract**

When using Social Network Sites (SNSs) such as Facebook, users experience enjoyment, which positively influences their Behavioral Intention to Use them. Whereas this finding is consistent across different studies and confirms hedonic motivations for SNS use, the question whether utilitarian motives also influence users' adoption behavior remains open. Indeed, the findings concerning the influence of Perceived Usefulness differ substantially. Building on both the hedonic and utilitarian foundations of the Technology Acceptance Model (TAM), we study whether SNS adoption is determined by hedonic motivations, utilitarian motivations, or both. We find that SNSs are dual information technologies since both Perceived Usefulness and Perceived Enjoyment are critical influence factors of the Behavioral Intention to Use them. SNS adoption is thus determined by both hedonic and utilitarian motivations.

# 1 Introduction

*Social Network Sites* (SNSs) like *Facebook* have been gaining momentum and attracting a large amount of users. Indeed, three of the twelve most popular websites were SNSs as of December 5, 2012 (Alexa, 2012). Boyd and Ellison (2007, p. 211) define them as “web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection [regularly referred to as SNS-friends], and (3) view and traverse their list of connections and those made by others within the system”. Since the total number of registered members determines the value of an SNS for its members and vendors likewise (Katz and Shapiro, 1985; Gangadharbatla, 2008), there is a growing interest in studies that investigate SNS adoption.

The *Technology Acceptance Model* (TAM) (Davis et al., 1989) is the most used theory in adoption research (Venkatesh and Bala, 2008). It postulates that the adoption of utilitarian information technologies is primarily determined by their *Perceived Usefulness* and *Perceived Ease of Use*. Additionally, it has been shown that the adoption of hedonic information technologies, “aim[ing] to provide self-fulfilling value to the user, ... [which] is a function of the degree to which the user experiences fun when using the system” (Van der Heijden, 2004, p. 696), is better explained when integrating *Perceived Enjoyment* as an additional influence factor.

TAM is a common model used in SNS adoption research. Studies see SNSs as either hedonic or utilitarian information technologies and build on corresponding TAM foundations. Although the hedonic nature of SNSs can be confirmed in the literature since *Perceived Enjoyment* has been found to have a positive influence on SNS adoption behavior (Sledgianowski and Kulviwat, 2008; Hu et al., 2011), the utilitarian nature of SNSs is still unclear. Indeed, the findings concerning the influence of *Perceived Usefulness* on SNS adoption behavior substantially differ from one another. Combining both views regarding the nature of SNSs, we believe that SNSs are *dual* information technologies, that are *both* hedonic- and utilitarian-oriented. We believe that the findings concerning the influence of *Perceived Usefulness* on SNS adoption behavior are heterogeneous because the measurements of *Perceived Usefulness* differ greatly across the studies. Building on a dual TAM background and by using an appropriate operationalization of *Perceived Usefulness*, we are able to address the inconsistent findings in the literature and are able to explain whether SNS adoption is determined by hedonic motivations, utilitarian motivations, or both.

The next section explains the initial TAM as proposed by Davis et al. (1989) as well as *Perceived Enjoyment* as an additional influence factor. We then give an overview of the current state of SNS adoption research and discuss the different studies with regards to their theoretical foundations and their operationalization of *Perceived Usefulness*. Afterwards, we present our research model, hypotheses and measurement model. Following this, we reveal and discuss our findings before concluding our article.

## 2 Background Literature

### 2.1 Technology Acceptance Model

The *Technology Acceptance Model* (TAM; see Figure 1) (Davis et al., 1989) has been used in numerous research articles (Chang et al., 2010) and thus acquired a prominent status in IS adoption literature. It postulates that two beliefs, *Perceived Usefulness* and *Perceived Ease of Use* (see Table 1 for classic definitions of TAM’s initial constructs), are of primary relevance for the information technology acceptance behavior of individuals in work environments (Davis et al., 1989).

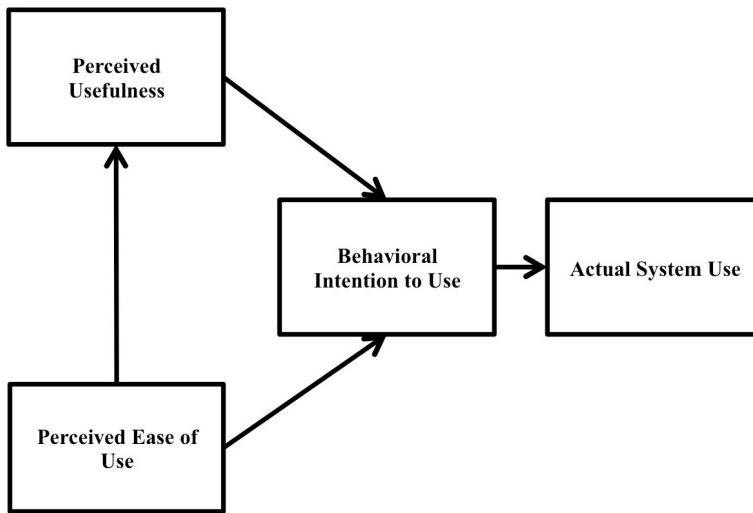


Figure 1. Technology-Acceptance-Model.<sup>1</sup>

Construct	Definition
Actual System Use	Refers to a person's actual use of an information technology (Straub et al., 1995).
Behavioral Intention to Use	"[Behavioral] Intentions ... capture the motivational factors that influence a [person's] behavior; they are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behavior" (Ajzen, 1991, p. 181).
Perceived Ease of Use	"[T]he degree to which a person believes that using a particular system would be free of effort" (Davis, 1989, p. 320).
Perceived Usefulness	"[T]he degree to which a person believes that using a particular system would enhance his or her job [and task] performance" (Davis, 1989, p. 320).

Table 1. Definitions of TAM's Constructs.

Specifically, TAM builds a complete causal chain "linking external variables to ... [an information technology's] ... actual use [in a work environment]" (Davis and Venkatesh, 1996, p. 20): it assumes that there is a causal relationship between the *Behavioral Intention to Use* and actual usage behavior (Fishbein and Ajzen, 1975; Ajzen and Fishbein, 1980; Ajzen, 1991). *Behavioral Intention to Use* is in turn directly determined by the *Perceived Usefulness* of an information technology and its *Perceived Ease of Use*; *Perceived Usefulness* also mediates the effect of *Perceived Ease of Use*.

As described earlier, TAM's initial focus lay on information technologies designed for work environments. These naturally "aim to provide instrumental value to the user" (Van der Heijden, 2004, p. 696) and are called utilitarian systems. Consistent with this utilitarian context, *Perceived Usefulness* centers on the motivations and benefits that are external to the system-user interaction itself, referred to as extrinsic motivations (Brief and Aldag, 1977; Van der Heijden, 2004). For example, the external benefits/extrinsic motivations of a text-processing program can be to foster a

<sup>1</sup> Based on the *Theory of Reasoned Action*, Davis et al. (1989) initially included *Attitude Toward Using* ["[T]he degree to which a person has a favorable or unfavorable evaluation or appraisal of the [usage] behavior" (Ajzen, 1991, p. 188)], as a mediator between the two personal beliefs and *Behavioral Intention to Use* into the TAM. However, it was dropped in later versions because of its low predictive value (Davis et al., 1992; Venkatesh and Davis, 2000; Venkatesh et al., 2003; Venkatesh and Bala, 2008). Henceforth, in contrast to the *Theory of Reasoned Action*, personal beliefs, included in the TAM, were generally understood as direct antecedents of the *Behavioral Intention to Use*.

good writing performance in terms of a well-structured and orthographically error-free text (Davis et al., 1989).

Despite its initial utilitarian focus, the TAM was also used to study the adoption of hedonic information technologies. In contrast to utilitarian systems, hedonic systems (e.g., video games) “aim to provide self-fulfilling value to the user, ... [which] is a function of the degree to which the user experiences fun when using the system“ (Van der Heijden, 2004, p. 696). Due to the change of focus, *Perceived Usefulness* and *Perceived Ease of Use* became insufficient to explain the adoption of such systems. The initial TAM was thus extended to include a new construct called *Perceived Enjoyment*. Since this is “the extent to which the activity of using a specific system is perceived to be enjoyable in its own right, aside from any performance consequences resulting from system use” (Venkatesh, 2000, p. 351), it is the hedonic counterpart of *Perceived Usefulness*. It reflects the hedonic systems’ intrinsic motivations such as fun, enjoyment, and other positive experiences, which stem directly from the system-user interaction (Brief and Aldag, 1977; Van der Heijden, 2004; Venkatesh et al., 2012).

Finally, TAM was used to explain the adoption of dual information technologies such as shopping websites (e.g., Chesney, 2006). Consistent with the fact that these technologies are enjoyable to use and provide external benefits, both *Perceived Usefulness* and *Perceived Enjoyment* have been found to have an influence on the adoption of such technologies (e.g., Childers et al., 2001). As an example, shopping websites like *Amazon.com* provide a utilitarian benefit to their users: they enable them to order goods. In addition, such websites also provide hedonic values through additional functionalities such as the possibility to pre-listen to music or to view movie trailers (Childers et al., 2001). Studies that consider the adoption of dual information technologies are nevertheless still sparse.

In summary, according to the TAM, *Perceived Enjoyment*, *Perceived Usefulness* and *Perceived Ease of Use* are three personal beliefs that predict the *Behavioral Intention to Use* an information technology, which in turn predicts the *Actual System Use*. Whereas *Perceived Ease of Use* captures how easy the interaction with information technologies is, *Perceived Enjoyment* and *Perceived Usefulness* capture, respectively, the hedonic and utilitarian aspects of information technologies.

## 2.2 TAM in SNS Adoption Research

Alarcón-del-Amo et al. (2012) use the initial TAM as proposed by Davis et al. (1989), including *Perceived Usefulness* and *Perceived Ease of Use*, to study SNS adoption. They confirm that both constructs play an important role in SNS adoption behavior.

Sledgianowski and Kulviwat (2008, p. 3) “consider SNSs within a hedonic context, primarily used to bring enjoyment and pleasure to their users”. Hu et al. (2011, p. 447) similarly describe SNSs as a “social hedonic-oriented type of IS, ... primarily used in a nonwork environment” helping “users attain a sense of hedonic fulfillment in achieving personal needs” (Hu et al., 2011, p. 444). Hence, both extend their TAM research model by including *Perceived Enjoyment* as an additional factor and confirm its influence on SNS adoption.

Further, with regards to their perception of SNSs as communication technologies, Sledgianowski and Kulviwat (2008) argue that SNSs can only fulfill this purpose if members are given the opportunity to associate with other members. They thus include *Perceived Critical Mass* [“[T]he degree to which a current or potential user of ... SNSs ... perceives that the website has a significant number of members that he or she can associate with” (Sledgianowski and Kulviwat, 2008, p. 3)] into their TAM model and confirm its influence on SNS adoption. They also view *Trust* [“[T]he belief that the other party will behave in a socially responsible manner, and, by so doing, will fulfill the trusting party’s expectations without taking advantage of its vulnerabilities” (Pavlou, 2003, p. 74)] as “a critical aspect of SNS services because of the potentially harmful opportunistic

behaviors that have beleaguered the confidence in these services” (Sledgianowski and Kulviwat, 2008, p. 4) and confirm its influence on SNS adoption.

Finally, Hu et al. (2011, p. 447) draw from psychological research and assume that “[i]f people who are important to a person think that the person should engage in a certain activity, then the person is much more likely to engage in it” (Fishbein and Ajzen, 1975). Therefore, they also view *Subjective Norm* [The degree to which a persons believes “that most people who are important to him think he should or should not perform the behavior in question” (Fishbein and Ajzen, 1975, p. 302)] as an antecedent of the *Behavioral Intention to Use SNSs*. In their study, they confirm this relationship.

### **3 Discussion of Current SNS Adoption Research**

#### **3.1 SNSs Are Both Hedonic and Utilitarian Information Technologies**

Sledgianowski and Kulviwat (2008) as well as Hu et al. (2011) describe SNSs as hedonic-oriented information technologies. In contrast, Alarcón-del-Amo et al. (2012) assume that SNSs are utilitarian technologies. We believe that both views should be combined and postulate that SNSs are dual information technologies – that is, that they are both hedonic- and utilitarian-oriented.

As suggested by the findings of Sledgianowski and Kulviwat (2008) as well as Hu et al. (2011) and discussed multiple times by, for example, Boyd and Ellison (2007) as well as Thambusamy et al. (2010), SNS members have fun while using SNSs in general and, in particular, experience joy from the social interactions they enable. It thus appears clear that SNSs are at least partly hedonic information systems. However, other findings suggest that SNSs also fulfill utilitarian needs. Raacke and Bonds-Raacke (2008), Subrahmanyam et al. (2008) as well as Bonds-Raacke and Raacke (2010) identify a broad range of SNS functionalities providing users with external benefits, such as the ability to organize events, setting reminders for friends’ birthdays, or locating old friends. Consistent with these findings, Alarcón-del-Amo et al. (2012) identify a strong influence of *Perceived Usefulness* on the *Behavioral Intention to Use SNSs*.

Combining these findings implies that SNSs are dual information technologies that are partly hedonic and partly utilitarian. Looking at SNSs purely from a hedonic or utilitarian perspective appears insufficient, as it would neglect significant parts of their inherent nature. In terms of the TAM, both *Perceived Usefulness* and *Perceived Enjoyment* should be included in SNS adoption studies, and both are expected to have an impact on the *Behavioral Intention to Use*.

#### **3.2 Perceived Usefulness Measurement Items Have to Fit SNSs’ Contexts**

Although we believe that SNSs are dual information technologies, current SNS adoption studies show inconsistent findings. While multiple studies confirm hedonic motivations for the use of SNSs in the form of *Perceived Enjoyment*, findings concerning utilitarian motivations (i.e., *Perceived Usefulness*) differ substantially. We credit these heterogeneous findings to the use of differing operationalization of *Perceived Usefulness* across studies.

As discussed by Van der Heijden (2004), the classic *Perceived Usefulness* measurement items, such as “[u]sing [the technology] ... would improve my job performance” (Davis, 1989, p. 340), focus on performance, productivity, effectiveness, etc. in a work environment. As a result, the initial work-based scale used for measuring *Perceived Usefulness* is inappropriate for most dual systems, and especially inappropriate for pure hedonic systems, since such systems are seldom used in work environments. Thus, researchers of hedonic and dual information technologies have to pay particular attention while constructing their *Perceived Usefulness* measurements, to make sure they are consistent with their specific usage contexts (Moon and Kim, 2001).

However, current SNS adoption studies follow heterogeneous approaches to construct their *Perceived Usefulness* scales. Table 2 lists the items of *Perceived Usefulness* that are currently used, and the resulting findings regarding its influence on the *Behavioral Intention to Use SNSs*.

Studies	Used Perceived Usefulness items used	Findings
Alarcón-del-Amo et al. (2012)	(1) I consider that the functions of SNS are useful for me (2) Using the SNS contributes to interaction with others people (3) Using SNS enables me to access a lot of information (4) Overall, the SNS are useful	<i>Perceived Usefulness</i> has the greatest total effect on the <i>Behavioral Intention to Use SNSs</i>
Sledgianowski and Kulviwat (2008)	(5) This website helps me be more effective (6) This website helps me be more productive (7) This website requires the fewest steps to accomplish what I want to do with it	<i>Perceived Usefulness</i> has only a weak effect on the <i>Behavioral Intention to Use SNSs</i>
Hu et al. (2011)	(8) I would use an OSNS if it was useful in establishing online social networks with people (9) I would use an OSNS if it was productive in establishing online social networks with people (10) I would use an OSNS if it enhanced my effectiveness in establishing online social networks with people (11) I would use an OSNS if it improved my performance in establishing online social networks with people	<i>Perceived Usefulness</i> has no effect on the <i>Behavioral Intention to Use SNSs</i> .

Table 2. Items used to measure *Perceived Usefulness* and the resulting findings.

In order to measure the *Perceived Usefulness* of SNSs, Alarcón-del-Amo et al. (2012) use two generic items that refer to the overall usefulness of SNSs (1, 4) as well as two items that specifically address the external benefits of SNSs regarding *interaction* and *information access* (2, 3). They find that it has a strong effect on the *Behavioral Intention to Use SNSs*. In a different study, Sledgianowski and Kulviwat (2008) use one item that refers to the individual usage purposes of SNSs in a generic manner (7) and two classic work-based *Perceived Usefulness* items (5, 6). They only identify a weak effect on the *Behavioral Intention to Use*. Hu et al. (2011) develop *Perceived Usefulness* items (8-11) based on the assumption that the only purpose of SNS usage is to “[establish] online social networks” (Hu et al., 2011, p. 457). They find no significant effect of *Perceived Usefulness* on the *Behavioral Intention to Use SNSs*.

Based on the above analysis, we ascribe the heterogeneity of these findings to the use of differing measurements across the studies and come to two conclusions concerning the context of SNS adoption: first, *Perceived Usefulness* items have to be formulated without relating them to the work context, and, second, focusing on only one functionality is inappropriate.

## 4 Research Model

Based on our discussion above concerning SNS adoption research, we now build on both the hedonic and utilitarian foundations of the TAM as well as use a *Perceived Usefulness* measurement scale that fits the specific usage contexts of SNSs in order to study whether SNS adoption is determined by hedonic motivations, utilitarian motivations, or both. Figure 2 presents our research model.

As described earlier, SNSs are both hedonic and utilitarian information technologies (Raacke and Bonds-Raacke, 2008; Sledgianowski and Kulviwat, 2008; Subrahmanyam et al., 2008; Bonds-Raacke and Raacke, 2010; Hu et al., 2011; Alarcón-del-Amo et al., 2012). Moreover, TAM’s *Perceived Enjoyment* and *Perceived Usefulness* capture the hedonic and utilitarian aspects of an information technology (e.g., Van der Heijden, 2004). Hence, drawing from our previous

argumentation, both constructs can be expected to have an impact on the *Behavioral Intention to Use* SNSs. We hypothesize that:

**H1:** There is a positive relationship between the *Perceived Usefulness* of a Social Network Site and the *Behavioral Intention to Use* it.

**H2:** There is a positive relationship between the *Perceived Enjoyment* of a Social Network Site and the *Behavioral Intention to Use* it.

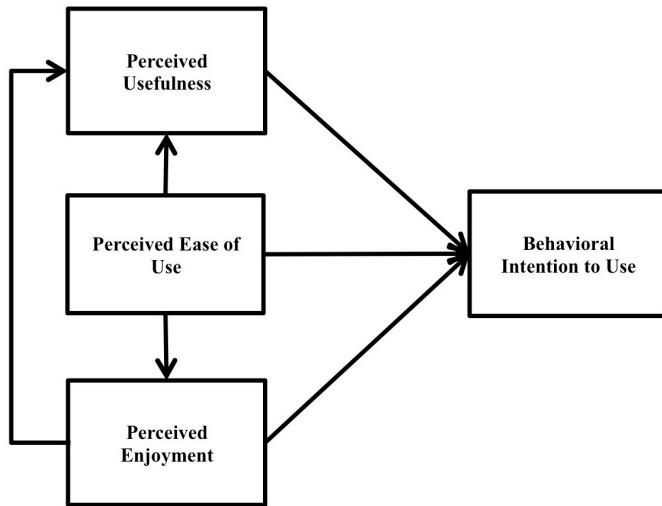


Figure 2. Research model.

Further, *Perceived Enjoyment* has been confirmed multiple times to have a positive influence on *Perceived Usefulness* (e.g., Venkatesh et al., 2002; Sun and Zhang, 2006). The rationale behind this is that intrinsic motivations amplify people’s perceptions of extrinsic motivations (Batra and Ray, 1986) and increase the deliberation and thoroughness of cognitive processing (Bagozzi et al., 1999). Hence, we hypothesize that:

**H3:** There is a positive relationship between the *Perceived Enjoyment* of a Social Network Site and its *Perceived Usefulness*.

Additionally, in line with the initial TAM and its multiple extensions/modifications, the *Perceived Ease of Use* of an information technology is commonly accepted to be an important antecedent of *Behavioral Intention to Use* and *Perceived Usefulness* (e.g., Venkatesh and Davis, 2000; Venkatesh and Bala, 2008). Also, multiple studies confirm that *Perceived Ease of Use* has a significant positive influence on *Perceived Enjoyment* (e.g., Davis et al., 1992; Moon and Kim, 2001; Van der Heijden, 2004; Chesney, 2006). The most common explanation for this is that an easy-to-use system saves time for the user, thus allowing him/her to spend additional time enjoying the experience of it (Van der Heijden, 2004; Hu et al., 2011). Hence, we hypothesize that:

**H4:** There is a positive relationship between the *Perceived Ease of Use* of a Social Network Site and the *Behavioral Intention to Use* it.

**H5:** There is a positive relationship between *Perceived Ease of Use* of a Social Network Site and its *Perceived Usefulness*.

**H6:** There is a positive relationship between the *Perceived Ease of Use* of a Social Network Site and its *Perceived Enjoyment*.



## 5 Measurement Model

In order to measure *Perceived Ease of Use*, *Perceived Enjoyment* and *Behavioral Intention to Use*, we decided to use proven scales so as to ensure the reliability and validity of our measurement model (Davis, 1989; Davis et al., 1992; Venkatesh et al., 2003; Hu et al., 2011). However, as discussed previously, due to the heterogeneous *Perceived Usefulness* measurements used in current SNS adoption studies, we constructed new items that fit the specific usage contexts of SNSs.

A common approach to constructing context-specific *Perceived Usefulness* measurement scales for hedonic and dual information technologies is to first identify the benefits external to the system-user interaction itself and then use these to define the items (e.g., Childers et al., 2001; Moon and Kim, 2001; Van der Heijden, 2004; Chesney, 2006). As an example, Van der Heijden (2004) studies the adoption of a website that offers information about movies. Based on the external benefit “[being] informed about new movies” (Van der Heijden, 2004, p. 704), he then formulates *Perceived Usefulness* items such as “[b]y using [the website] ... I am better informed about new movies” (Van der Heijden, 2004, p. 704).

Based on this method, we first identified the SNSs’ external benefits, based on the literature (Raacke and Bonds-Raacke, 2008; Subrahmanyam et al., 2008; Bonds-Raacke and Raacke, 2010). However, in contrast to other information technologies such as shopping websites, we found that SNSs offer not only one utilitarian motivated functionality, but rather a broad range of functionalities, such as picture posting or party planning. Moreover, these functionalities are also used to different extents by different users (Raacke and Bonds-Raacke, 2008; Subrahmanyam et al., 2008; Bonds-Raacke and Raacke, 2010). Raacke and Bonds-Raacke (2008), for example, find less commonly reported uses such as learning about events, academic purposes and dating purposes which were only used by 33.7%, 10.9%, and 7.9% of their respondents, respectively. Additionally, Bonds-Raacke and Raacke (2010) report significant differences between the sexes.

Hence, with regards to measurement reliability and validity, we found it inappropriate to formulate items based on specific external benefits, since, for example, one member might find SNSs to be useful for posting pictures but not for party planning. Therefore, we decided to build on the two generic items of Alarcón-del-Amo et al. (2012) and used four generic, overarching *Perceived Usefulness* items that refer to SNSs as a whole. In this manner, we ensured that our measurements fit the individual SNS usage purposes of all members while still preserving the utilitarian nature of the scale and its content validity (Moon and Kim, 2001).

Table 3 presents our four *Perceived Usefulness* items as well as the three-item scales of the other studied constructs. All items were measured using a seven-point Likert-type scale ranging from “strongly agree” to “strongly disagree”.

	Behavioral Intention to Use	Perceived Ease of Use	Perceived Enjoyment	Perceived Usefulness
Item 1	I intend to use SNSs in the next 6 months	I find SNSs to be easy to use	I have fun using SNSs	Overall, SNSs are useful
Item 2	In the future, I am very likely to use SNSs	It was easy to learn how to use SNSs	Using SNSs is pleasant	SNSs benefit me
Item 3	I predict that I will use SNSs in the next 6 months	Using SNSs is not difficult	I find using SNSs to be enjoyable	SNSs are an effective tool
Item 4	-	-	-	I consider that SNSs are useful to me
Sources	Venkatesh et al. (2003); Hu et al. (2011)	Davis (1989)	Davis et al. (1992)	Alarcón-del-Amo et al. (2012)

Table 3. Items of our measurement model.

## 6 Findings

For our main study, we surveyed students from a German university attending an *Introduction to computer science* course, resulting in a sample size of 415 complete questionnaires. 220 respondents were male (53 percent); 195 were female (47 percent); the average age was 21.17 years (standard deviation: 2.63); for *Perceived Enjoyment*, *Perceived Usefulness*, *Perceived Ease of Use*, and *Behavioral Intention to Use*, the mean (standard deviation) was 5.11 (1.14), 5.47 (1.07), 5.52 (1.02), and 6.27 (1.15), respectively (based on the item average of each construct).

To test our measurement model for reliability, validity, and model fit, we computed Cronbach's alpha for each construct using SPSS 21.0.0.0 and performed a confirmatory factor analyses using AMOS 21.0.0.0. Parameters were estimated using maximum likelihood and, since our data was not distributed joint multivariate normal, a bias-corrected bootstrapping approach with 2000 replications was used to test for significance (Byrne, 2001; Krasnova et al., 2010). Cronbach's alpha was greater than .82 for all constructs; all items loaded high (more than .720) and significant ( $p < .01$ ) on their parent factor; Table 4 presents the Composite-Reliability (CR), Average-Variance-Extracted (AVE), Maximum-Shared-Squared-Variance (MSV), and Average-Shared-Squared-Variance (ASV) of all factors as well as the factor correlations with the square root of the AVE on the diagonal; Bollen-Stine corrected p-value, Relative-Chi-Square (CMIN/DF), Goodness-of-Fit-Index (GFI), Adjusted-Goodness-of-Fit-Index (AGFI), Comparative-Fit-Index (CFI), Root-Mean-Square-Error-of-Approximation (RMSEA), and Standardized-Root-Mean-Square-Residual (SRMR) were .050, 1.858, .961, .940, .989, .046, and .026, respectively. Hence, our measurement model is well-specified since it meets all desirable reliability, convergent/discriminant validity, and model fit thresholds (Hair et al., 2009).

	CR	AVE	MSV	ASV	PE	PU	PEOU	BI
Perceived Enjoyment (PE)	.93	.82	.51	.36	.91			
Perceived Usefulness (PU)	.92	.75	.51	.37	.71	.86		
Perceived Ease of Use (PEOU)	.83	.62	.17	.13	.42	.31	.79	
Behavioral Intention to Use (BI)	.96	.88	.50	.33	.62	.71	.33	.94

Table 4. Reliability and validity of the measurement model.

To test our research model, we conducted a structural equation modeling approach using AMOS 21.0.0.0. Parameters were estimated using maximum likelihood; significance was assessed by using a bias-corrected bootstrapping approach with 2000 replications (Byrne, 2001; Krasnova et al., 2010). Fit measures indicate a good model fit (Bollen-Stine corrected p-value = .052, CMIN/DF = 1.858, GFI = .961, AGFI = .940, CFI = .989, RMSEA = .046, SRMR = .026). Figure 3 presents the standardized regression weights regarding the previously hypothesized relationships as well as the  $R^2$ s of each endogenous variable (\*\* =  $p < .01$ , \* =  $p < .05$ , ns = non-significant).

*Perceived Usefulness* ( $\beta = .541$ ,  $p < .001$ ) and *Perceived Enjoyment* ( $\beta = .203$ ,  $p < .019$ ) have been found to have positive influences on the *Behavioral Intention to Use* SNSs, confirming hypotheses 1 and 2; *Perceived Enjoyment* has been found to have a positive influence on *Perceived Usefulness* ( $\beta = .706$ ,  $p < .001$ ), confirming hypothesis 3. Combined, these empirical results support our argumentation that SNSs are dual information technologies that are determined by both hedonic and utilitarian motivations. *Perceived Ease of Use* has been found to have a positive influence on *Perceived Enjoyment* ( $\beta = .417$ ,  $p < .001$ ), confirming hypothesis 6. The explanatory power of our structural model is good since it explains 53.2% of the variance of *Behavioral Intention to Use*.

In contrast, hypotheses 4 and 5 were not supported since *Perceived Ease of Use* had no significant influence on *Behavioral Intention to Use* ( $\beta = .073$ ,  $p < .267$ ) and *Perceived Usefulness* ( $\beta = .015$ ,

$p < .750$ ). Whereas the rejection of hypothesis 4 is consistent with the findings of Alarcón-del-Amo et al. (2012) and several other TAM studies (e.g., Karahanna et al., 1999), the rejection of hypothesis 5 stands in contrast to Alarcón-del-Amo et al. (2012) and Hu et al. (2011), who confirm this relationship in a SNS context. One possible explanation for the insignificance of both relationships in our study might be the general simplicity of SNSs. More specifically, anyone familiar with the Internet is able to operate them (Alarcón-del-Amo et al., 2012). Since today's students are used to the Internet and the way it works (87.4 percent of our respondents indicated that they use SNSs at least once a day), *ease of use* might not be seen as an important quality but rather be taken for granted, making SNSs' *Perceived Ease of Use* a non-determinant for their *Perceived Usefulness* and the *Behavioral Intention to Use* them.

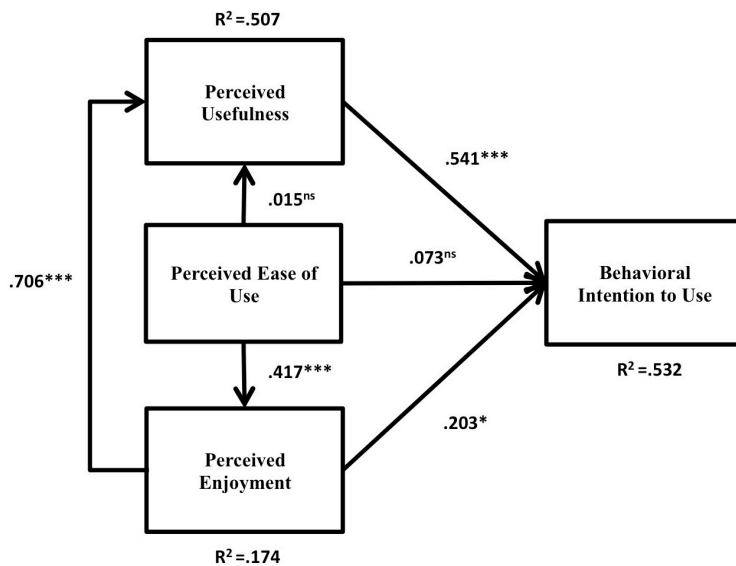


Figure 3. Findings.

## 7 Conclusions

Our article is motivated by the inconsistent findings of comparable studies with regards to the influence of *Perceived Usefulness* on SNS adoption. Ascribing the inconsistency to the use of differing *Perceived Usefulness* measurements across studies, we seek to answer whether SNS adoption is determined by hedonic motivations, utilitarian motivations, or both, by using an appropriate *Perceived Usefulness* scale and combining the currently used theoretical foundations.

In our *Perceived Usefulness* scale, we use four generic, overarching items referring to SNSs as a whole instead of referring to specific external benefits, because users apply the plethora of existing functionalities available in SNSs to their differing individual needs (Raacke and Bonds-Raacke, 2008; Subrahmanyam et al., 2008; Bonds-Raacke and Raacke, 2010). In contrast to current studies that see SNSs as either hedonic or utilitarian information technologies, we believe them to be a blend of the two – dual information technologies. More specifically, we build on both the hedonic and utilitarian foundations of the Technology Acceptance Model and hypothesize that both *Perceived Enjoyment* and *Perceived Usefulness* affect SNS adoption. After surveying 415 students and applying a structural equation modeling approach, we confirm both to be critical determinants of the *Behavioral Intention to Use* SNSs.

Our study has some limitations. Our sample was limited to German students attending an *Introduction to computer science* course with an average age of 21.17 years. Hence, the results might not hold true for people from other countries with different educational backgrounds or from

a different age group. For example, it is possible that, in contrast to our findings, the influences of *Perceived Ease of Use* on *Behavioral Intention to Use* and *Perceived Usefulness* are significant for older people that are not experienced with the Internet, or for new users of SNSs. Hence, future studies should test the influences of *Perceived Enjoyment*, *Perceived Usefulness*, and *Perceived Ease of Use* using different sample structures in order to improve our understanding of the determinants of SNS adoption within different demographic groups.

Despite these limitations, our empirical study supports our argumentation that SNSs are dual information technologies determined both by hedonic and utilitarian motivations. Hence, future studies should consider both the hedonic and utilitarian aspects of SNSs.

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