TECHNOLOGY ACCEPTANCE IN SOCIAL MEDIA: REVIEW, SYNTHESIS AND DIRECTIONS FOR FUTURE EMPIRICAL RESEARCH

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ABSTRACT

Technology acceptance of information systems has been investigated widely in both empirical and meta-studies of different contexts. Yet, in the case of technology acceptance regarding social media, there is a lack of comprehensive literature reviews of hitherto existing empirical, multivariate studies. This is surprising given social media's meaning for individuals and society, as well as the accordingly high level of user acceptance. We review empirical research using structural equation modeling or multiple regression regarding technology acceptance in social media. Since the technology acceptance model (TAM) and the related constructs Perceived Ease of Use (PEOU), Perceived Usefulness (PU) and Subjective Norm (SN) are the most predominant ones in related studies, these represent the essence of this literature review. We identify 35 studies and review the variables used with regard to their treatment as independent or dependent, as well as their relationships with other constructs in different thematic contexts of social media. We find both similarities and differences concerning the original TAM as well as TAM 2 and 3. Most strikingly, the priorities concerning PEOU, PU and SN seem to change. Overall, PEOU together with its impact on constructs like Perceived Enjoyment is of greater importance in social media acceptance than PU, whereas SN and related constructs take center stage. Some researchers, for example, also extend the quality observation parameters of DeLone and McLean [2003] in the social media context by adding a social component or quality. In addition, we identify a wealth of new variables, which both influence and are influenced by PEOU, PU and SN in the social media context.

Keywords: Meta-study; Literature review; Social media; Technology acceptance model; Structural equation modeling

1. Introduction

In light of social media's significance for individuals and society, in recent years there has been increasingly widespread discussion of the topic in academia [Khang et al. 2012]. Numerous social media-related research interests exist in various scientific disciplines. These range from politics (e.g., [Park 2013]) to public administration (e.g., [Lampe et al. 2011]), communication sciences and journalism (e.g., [McCauliff 2011]), psychology (e.g., [Leung 2013]), law (e.g., [Sánchez Abril et al. 2012]), education (e.g., [Pritchett et al. 2013]), cultural studies (e.g., [Lim & Palacios-Marques 2011]) and not least economics, business administration (cf., [Khang et al. 2012]) and electronic commerce (e.g., [Wirtz et al. 2013]).

In particular, the latter three are not surprising since social media heavily influence both the broader economy and the increasingly digitalized business world. The actors involved, in turn, can use social media for their own purposes, thus implying the practical relevance for all sorts of organizations and companies [Kaplan & Haenlein 2010]. Given this situation, it is not only important for social media providers to know what exactly drives user acceptance of the technology underlying social media, why specific platforms like Facebook, Twitter or YouTube are so successful [Papagiannidis & Bourlakis 2013] but also to know what might determine user acceptance of future social media applications.

In this connection, researchers have earlier made well-grounded scientific statements about the increasing diversity, the accordingly growing research potential and a particularly important interest in exploring user acceptance or adoption of social media (e.g., [Shin & Kim 2008; Sledgianowski & Kulviwat 2009]). The importance of this research interest must be emphasized in view of the vast development in the field, with new platforms constantly emerging, e.g. Flickr in 2004, Tumblr in 2007, 9GAG in 2008, Instagram and Pinterest in 2010, Google+ in 2011,

Pheed in 2012 and Ello in 2014. Since at times also quite vague business models accompany the latter applications, further questions about the related user acceptance are likely to arise in the future.

Therefore, this meta-study seeks to identify existing studies that observe what exactly leads to user acceptance of the technology underlying social media. Since the TAM [Davis 1986] is one of the most prominent models in information technology acceptance research [Venkatesh et al. 2003] and, according to our inquiries, so far also the prevailing theoretical approach regarding users' adoption of social media, this review focuses on studies that are based on the TAM. While especially in the realm of information systems and technology, the body of literature related to social media continues to grow (e.g., [Barelka et al. 2013; El-Haddadeh et al. 2012; Lane & Coleman 2012; Shin 2013]), surprisingly there is a lack of comprehensive literature reviews.

In the field of business administration, Khang et al. [2012], for instance, review "… social media research in advertising, communication, marketing and public relations" [p. 279] according to the respective publications' topic, theory and method as well as their "frequency, proportion, and occurrence patterns" [p. 282] in different journals. While this categorization approach is sufficient to gain a more general overview of social media business research, extensive literature reviews of empirical, multivariate studies would be desirable, which present hitherto existing and contradictory research about specific subject areas in social media in a cohesive manner.

In this regard, there are indeed several meta-studies about the TAM from more general viewpoints (e.g., [Chuttur 2009; King & He 2006; Legris & Ingham 2003; Schepers and Wetzels 2007; Turner et al. 2010; Venkatesh et al. 2003; Wu & Lederer 2009]). Yet we find hardly any reviews particularly focusing on the TAM and social media. In a literature review about social media and knowledge management, for instance, Finkbeiner [2013] applies the Theory of Planned Behavior to knowledge sharing behavior via social media channels and in this context, at least also mentions the relevance of TAM for "discussing questions of new technologies being accepted by a certain target audience" [p. 13].

However, the formerly mentioned review only includes SN. Thus, a sweeping meta-study is missing that would focus on empirical multivariate studies investigating the constructs PEOU, PU and SN separately or together in a social media context. Since the expected implications derived from such an endeavor can be beneficial for social media providers and organizations wanting to know which platforms are worth appearing on, we offer the according literature review and meta-analysis about the TAM in social media in the following.

Due to the heterogeneous use of the term 'social media' in theory and practice, we initially introduce a basic understanding by presenting currently existing applications and deriving a corresponding definition. Subsequently, we briefly present the original TAM and its further developments. Against this background, we present the concept-centric approach used to identify the relevant literature and, as the most important part of this meta-study, carve out which position the single constructs PEOU, PU and SN take up within the observed models. More clearly, we investigate whether researchers test the three constructs as independent or as dependent variables, and whether in the field of social media modifications and extensions of the original TAM are perhaps common. For both viewpoints, we observe which relationships between the particular constructs researchers explore in the reviewed studies' different thematic social media contexts. The overall goals of the literature review are to observe how one can achieve user acceptance of social media, to test if the propositions of the TAM and its enhancements can persist, if their underlying assumptions remain the same, or if one should adapt them in the social media context. At the end of the paper, we discuss our findings, present inherent limitations and future research directions, as well as provide theoretical and managerial implications within a concise conclusion.

2. Conceptual Background

Before presenting a literature review about the aforementioned constructs PEOU, PU and SN in the further course of the article, we have to establish the basis for a consistent conceptual understanding of social media and the TAM. In the following section, we initially develop a comprehensive definition of social media. Subsequently, we illustrate both origin and development of the TAM. Within the latter illustrations, we also clarify the role of PEOU, PU and SN as the most relevant TAM-related constructs in a social media context. In addition, we point out the specifics concerning SN and comparable constructs of our review.

2.1. Social media

Since research about social media is still in an early stage, people use the term quite heterogeneously in both theory and practice. Therefore, to establish a basic understanding of the term in this article, we introduce the currently existing social media applications in the following, develop a definition of social media and integrate it within a conceptual overview of the field.

For a start, it would initially be desirable to distinguish social media from similar terms and concepts, the most commonly used one being the Web 2.0. Here, one already notes that such delimitation appears difficult since one can hardly explain either concept without any overlaps. Several authors understand the Web 2.0 as a single platform

consisting of different technologies, which enable users to provide, modify and receive contents. The central points here then are the communication and interaction possibilities, which the Web 2.0 offers its users (e.g., [Little 2007; O'Reilly 2005]). Researchers consider this viewpoint also in a more detailed categorization, which regards the Web 2.0 phenomenon as including the following four broad factors: social networking, interaction orientation, personalization/customization and user-added value [Wirtz et al. 2010].

Seizing this categorization related to the social media concept, Social Networks appear to be one of the most popular social media applications. Yet numerous other applications exist and consistently develop. Accordingly, it is hard to cover every single application in this high-velocity environment. The most important ones include Blogs & RSS-feeds, Microblogs, Media & File Sharing Platforms, Wikis, Podcasts & Livestreams, Mash-Ups, Tagging & Social Bookmarking, Review & Recommendation Platforms, Instant Messaging Services, Social E-learning Platforms, Social TV Sites as well as Virtual Communities of all kinds, ranging from brand-related ones to Questions & Answers, Online Gaming and Dating. As will become clearer upon a closer look at the reviewed studies in the following, this comprehensive understanding of social media also mirrors their distribution in terms of the various observed applications.

Summarizing, we define social media as innovative applications, platforms or portals in the internet, including a high potential for diverse designs in which the active configuration of contents through the cooperative participation between user and provider, but more importantly, among users, plays a major role in establishing and maintaining their permanent interconnectedness and sharing as the main goals (cf., [Wirtz et al. 2010]). In the following, to illustrate how social media and the TAM are related, we introduce the latter's origin, its enhancements and its most relevant constructs in the social media context.

2.2. The Technology Acceptance Model

Although the TAM is well-known among academics in the field, a brief introduction of both its origin and enhancements over time at this point clarifies the background and sets the foundation for this review. In his dissertation, Davis [1986] establishes the original TAM including the two variables PEOU and PU, which we also include in this literature review. Building on this work, Venkatesh & Davis [2000], as well as Venkatesh & Bala [2008], enhance Davis' [1986] approach by arranging both constructs within broader frameworks in which further independent variables are added to the picture, in particular SN with several effect relationships (cf., [Venkatesh & Bala 2008; Venkatesh & Davis 2000]).

Modelled after Sun and Zhang's [2006] similar presentation in comparable research, for a better overview, Figure 1 portrays a generic model, which integrates and connects the TAM's major constructs PEOU, PU and SN with the main usage-related variables pertaining to technology acceptance regarding information systems.

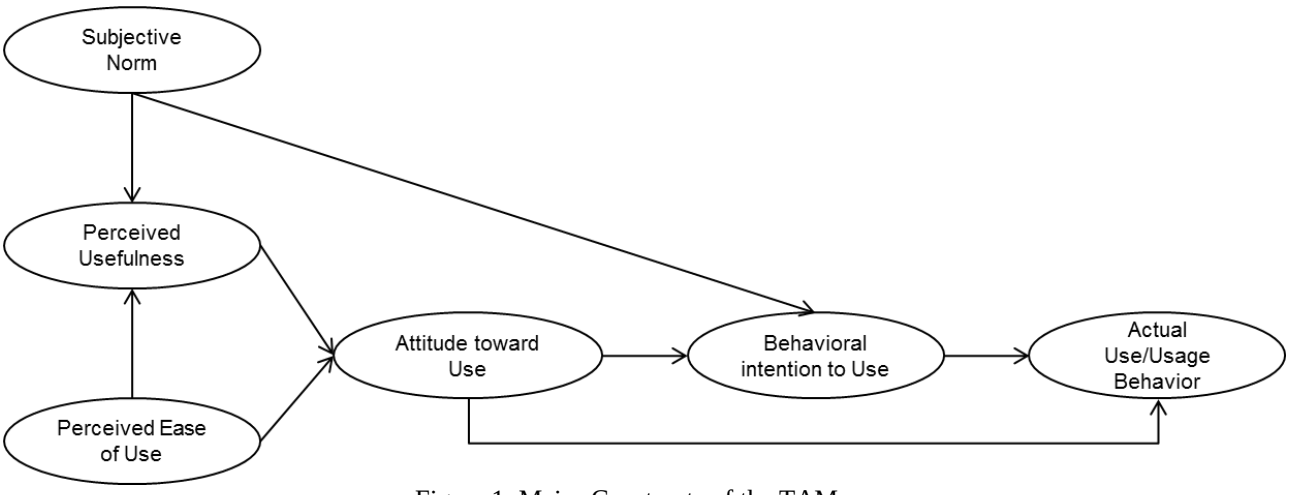

Figure 1: Major Constructs of the TAM

Since the three mentioned constructs – PEOU, PU and SN – are also the ones occurring consistently in the social media literature identified for this review, they constitute the focus of our following observation. However, in the reviewed studies' social media context, researchers also consider several similar or at least related constructs regarding SN. Thus, we also include "normative pressure" [Sledgianowski & Kulviwat 2009, p. 76] and "critical mass" [ibid.], "social influence" [Curran & Lennon 2011, p. 23; cf., Glass & Li 2013; Qin et al. 2011], "interpersonal influence"

(Kim 2011, p. 203), "Introduction by acquaintances" [Barelka et al. 2013, p. 62] and "social component" [Junglas et al. 2013, p. 585].

3. Literature Review and Meta-Analysis

In the following review and analysis, the investigated articles predominantly consist of publications in the discipline of information systems and technology. However, as recommended in the literature on good conduct in writing reviews [Webster & Watson 2002], we also do not neglect other research fields like marketing, management, organizational behavior, psychology and education. Further, as apparent from Table 1, not only are the 32 reviewed articles non-restrictive as regards research disciplines and diversity, but there is a broad distribution of publications in the different journals in the respective fields. Accordingly, we can exclude a bias concerning a too narrow focus on single journals. In addition, we review certain conference proceedings [Glass & Li 2013; Moqbel 2012; Wirth et al. 2015].

Table 1: Literature Distribution by Research Discipline and Journal

Research Disciplines & Journals	Number of Articles
Information Systems & Technology	**16**
Internet Research	1
Journal of Enterprise Information Management	1
Online Information Review	1
Industrial Management & Data Systems	1
Journal of Computer Information Systems	2
International Journal of Human-Computer Interaction	1
Journal of Technology Research	1
Behaviour & Information Technology	2
Journal of Management Information Systems	2
Information Technology & People	1
Communications of the Association for Information Systems	2
Journal of the Association for Information Systems	1
Marketing	**6**
Journal of Interactive Marketing	1
International Journal of Marketing Studies	1
Journal of Management and Marketing Research	1
Academy of Marketing Studies Journal	1
Journal of Research in Interactive Marketing	1
International Journal of Mobile Marketing	1
Management & Organizational Behavior	**3**
Total Quality Management & Business Excellence	1
International Journal of Organizational Innovation	1
Journal of Indian Business Research	1
Psychology	**4**
CyberPsychology & Behavior	3
Cyberpsychology, Behavior, and Social Networking	1
Education	**3**
Communication Education	1
The Quarterly Review of Distance Education	1
Journal of Research on Technology in Education	1
Total	**32**

We conduct the main part of our research regarding relevant articles for this review via Ebsco Host and, more specifically, the databases Academic Search Complete, Business Source Complete, EconLit with Full Text, as well as Communication and Mass Media Complete. Since the background of observing the TAM in general suggests an empirical, quantitative and multivariate method, we focus on reviewing related scientific work about social media, which applies these methods. Accordingly, the search via Ebsco Host has been restricted with regard to method.

Further, as 'social media' and related terms are used in many articles only as add-ons in the text, this research considers only those peer-reviewed articles which employ such terms in relation to the TAM or connected concepts either in their abstract or title. In this way, we can assume a satisfactory coverage of all relevant articles and guarantee that the concepts of social media and TAM play a leading role in the respective studies. Thus, in contrast to an author-centric procedure, the resulting combination shows the concept-centric approach of this literature review (cf., [Webster & Watson 2002]).

Furthermore, we have complemented our research by scanning the reference lists of the so far identified articles for other relevant, not yet covered ones and checking via Google Scholar if the hitherto found work has already been cited by further publications under consideration, e.g. working papers, conference proceedings etc.

Following the introduced approach, we identify 35 studies including the aforementioned components of the original TAM and its further developments – PEOU, PU and SN – in their empirical, multivariate work on social media, either together or separately. According to our research, these studies account for approximately 18% of all existing empirical, multivariate studies related to social media and thus represent one of the field's dominant research foci.

Thus, since a notable number of empirical multivariate studies cutting across multiple disciplines have investigated the central TAM-related constructs of this literature review PEOU, PU and SN in the social media context, it is interesting to look at the different, observed construct relationships within the models and thematic contexts of the respective studies. In the review at hand, we do so by first presenting meta-models for the three constructs PEOU, PU and SN, in which we illustrate which other variables have been included in the studies reviewed for this article (Figures 2, 3, 4).

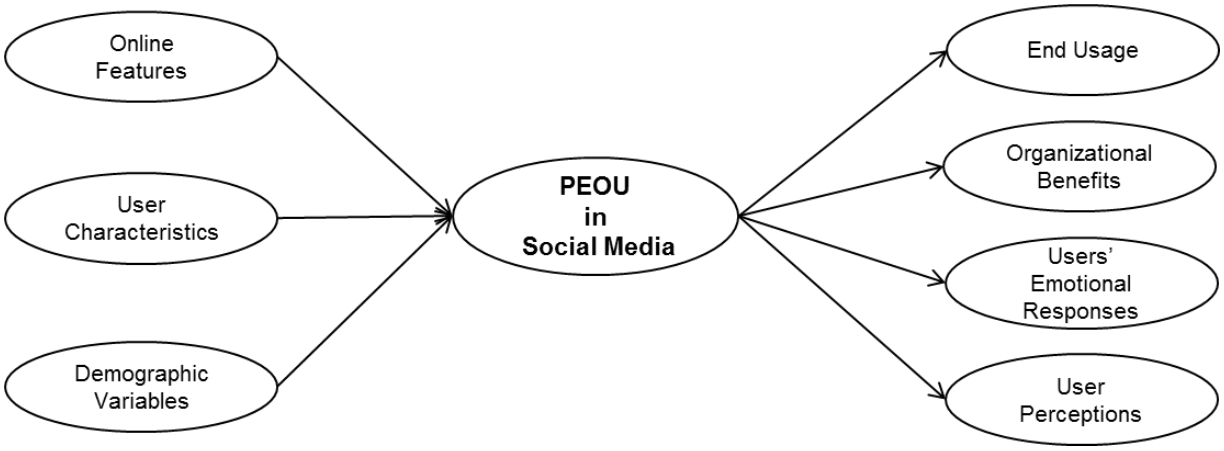

Figure 2: Relationships between PEOU and other Variables:
Antecedents → PEOU → Outcomes

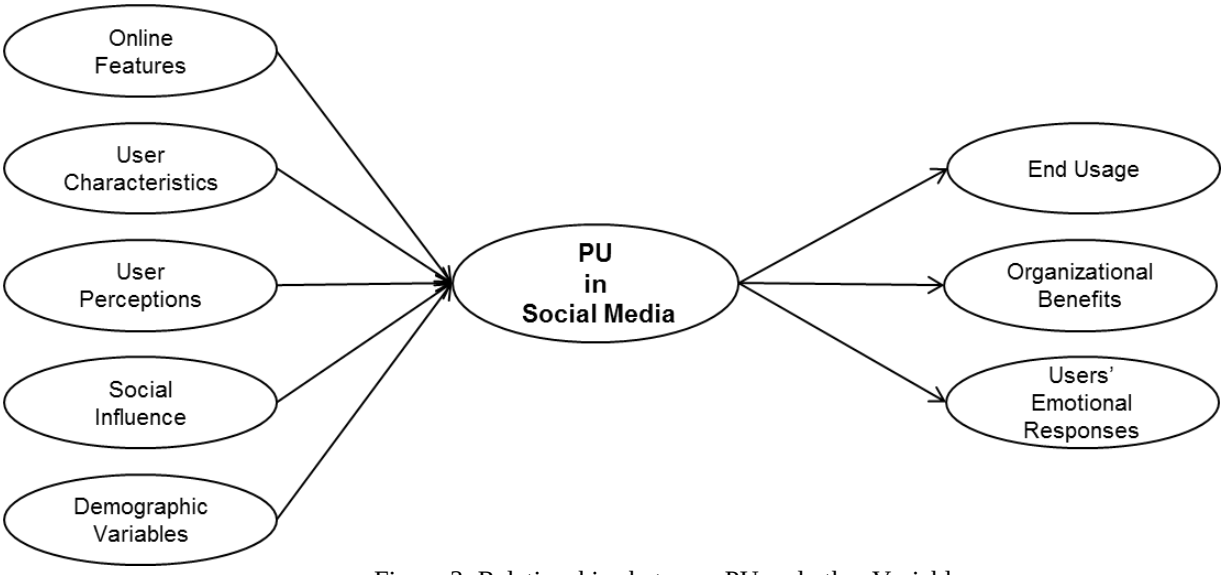

Figure 3: Relationships between PU and other Variables:
Antecedents → PU → Outcomes

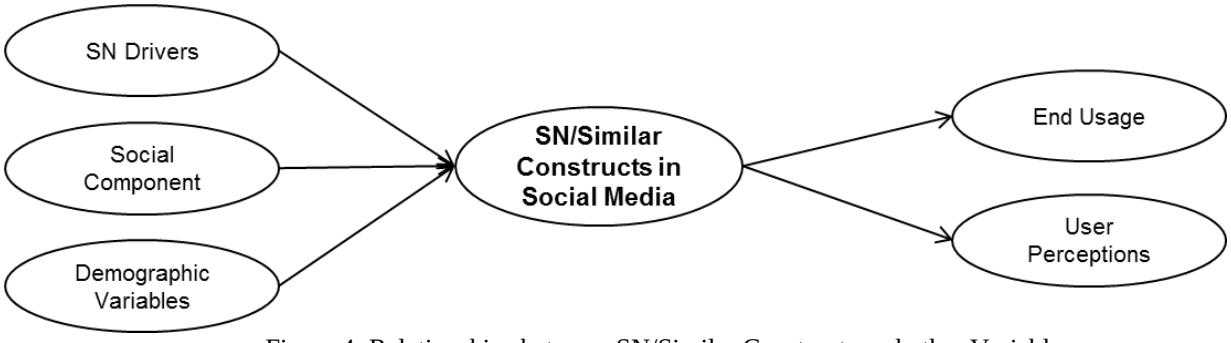

Figure 4: Relationships between SN/Similar Constructs and other Variables:
Antecedents → SN/Similar Constructs → Outcomes

In these models, first, one can see how in the reviewed studies researchers have tested PEOU, PU and SN as dependent variables with which other different variables affect them (see the models' left-hand side). Secondly, as independent variables, the models show the observed effects of PEOU, PU and SN on other variables of the reviewed studies (see the models' right-hand side). This procedure is based on the antecedents-outcomes approach by Smith et al. [2011], who review and present privacy concerns in information systems in a similar manner.

In the following sections, we more clearly illustrate the formerly depicted meta-models as well as the inherent respective construct relationships through exemplary illustrations, since going into each of the reviewed studies in detail would exceed the scope of this article.

3.1. PEOU, PU and SN as Dependent Variables

As PEOU, PU and SN according to the TAM generally are said to be influential in technology acceptance regarding information systems, it is initially interesting to consider what, in turn, may influence these constructs in the first place. Therefore, we start with the reviewed articles' observation of PEOU, PU and SN as dependent variables.

Regarding PEOU in Figure 2, first, certain factors which researchers have regarded as potentially influential can be grouped into "online features" [Lin 2007, p. 120], comprising information quality, system quality and service quality [Lin 2007; cf. DeLone & McLean 2003). Secondly, researchers propose particular "characteristics" [Park & Lee 2009, p. 332] of consumers or users to influence PEOU, which we also adopt in this review within the grouping of User Characteristics. The latter comprise users' "cognitive absorption" [Lin 2009, p. 421], "self-efficacy" [Liu 2010, p. 52], "online posting anxiety" [ibid.], "autonomy" [Lane & Coleman 2012, p. 4], "curiosity" [Rouibah 2008, p. 48] and "trust" [Lorenzo-Romero et al. 2011, p. 175]. Thirdly, further studies consider the impact of "demographic variables" [Lennon et al. 2012, p. 1] on PEOU, including "[…] gender, age, marital status and parenthood" [ibid.], which we, therefore, also adopt as a grouping.

Moreover, the reviewed studies' treatment of PU as a dependent variable in Figure 3 likewise includes the aforementioned "online features" [Lin 2007, p. 120] and "demographic variables" [Lennon et al. 2011, p. 1], but adds "Consumer susceptibility" [Park & Lee 2009, p. 335] and "internet shopping experience" [ibid.] instead of autonomy and curiosity to the above-classified User Characteristics. Further, particular studies test other "User perceptions" [Shiau & Chau 2012, p. 668; cf. Benlian et al. 2012], which we accordingly also adopt as a grouping of PU's antecedents. This grouping includes PEOU [Junglas et al. 2013], "perceived synchronicity" [Shin & Kim 2008, p. 380], "perceived affective quality" [Benlian et al. 2012, p. 237] and "Confirmation" [Shiau & Chau 2012, p. 674]. Lastly, "Social Influence" [Qin et al. 2011, p. 890] – consisting of "Subjective Norm" [ibid.] and "Critical Mass" [ibid.] – represents the last grouping extracted from the reviewed studies.

The earlier mentioned findings about PEOU and PU as dependent variables in a social media context are initially interesting when thinking of the original TAM, in which first PEOU and PU are subject to external variables or design features similar to the aforementioned Online Features, and secondly, PEOU influences PU [Davis 1986]. Further, as already depicted above for the reviewed studies, also in TAM 2 and TAM 3 PU is additionally influenced by SN [Venkatesh & Davis 2000; Venkatesh & Bala 2008; cf. Figure 1], comparable to the mentioned social influence.

Given these existing matches with the social media context, when finally relating to SN (or the like) as dependent variables in the reviewed studies in Figure 4, one must note that in TAM 2 and TAM 3, SN has only been regarded as an independent variable (cf., [Venkatesh & Davis 2000; Venkatesh & Bala 2008]). Albeit, in the social media context the impact of "demographic variables" [Lennon et al. 2012, p. 1] on SN is assumed, just as in the cases of PEOU and PU. Additionally, researchers consider the influence of several factors forming a "social component" [Junglas et al. 2013, p. 585] (activity, context, representation and insight support), as well as "influential factors" [Sadaf et al. 2012, p. 172] or drivers of SN, namely student, peer, parental and superior influences [Capo & Oranella 2011; Sadaf et al. 2012]. Thus, we also adopt the respective groupings Drivers, Social Component and Demographic Variables for our review and analysis of SN as a dependent variable (Figure 4).

3.2. Thematic Contexts and Construct Relationships

Initially, regarding the social media-related thematic contexts in which the aforementioned studies treat PEOU, PU or SN as dependent variables, we can identify studies that either comprehend several social media applications or regard the constructs in a more general context of social media and the Web 2.0, meaning they use the latter concepts as umbrella terms. Moreover, there are studies that have a clearer focus on single social media applications like Social Networks, Blogs, Microblogs, Virtual Communities, Wikis, and Review & Recommendation Portals as well Instant Messaging. As an overview, we present the different thematic contexts and thus the reviewed studies' research foci in Table 2. For the sake of simplicity, there is no additional differentiation between the studies' focus on PEOU, PU, or SN, and their focus on these constructs together.

Table 2: Thematic Contexts of PEOU, PU and SN in Social Media

Applications	*PEOU*, *PU* and *SN* as Dependent Variables	*PEOU*, *PU* and *SN* as Independent Variables
Social Media/Web 2.0 as Umbrella Terms	• Social Component of Information Systems [Junglas et al. 2013] • Web 2.0 User Adoption [Lim & Palacios-Marques 2011] • Web 2.0 for Teaching/Classroom Instruction [Capo & Orellana 2011, Sadaf et al. 2012] • User Acceptance of Travel 2.0 Websites [Muñoz-Leiva et al. 2012]	• Mobile Social Media Use (Facebook, Twitter) [Lee & Cho 2011] • Payment for Web 2.0 Subscriptions [Horng 2012] • Intrinsic Motivations of User Acceptance [Wang & Scheepers 2012] • Social Commerce [Shin 2013] • Moderating Effect of *PU* on the Relationship between *PEOU*, Attitude & Actual Use [Lin et al. 2013] • Moderating Effect of *SN* on Cloud Computing Users [Chi et al. 2012] • Web 2.0 for Teaching/Classroom Instruction [Capo & Orellana 2011, Sadaf et al. 2012] • User Acceptance of Travel 2.0 Websites [Muñoz-Leiva et al. 2012]
Social Networks	• Technology Ease of Use in Social Networks [Lane & Coleman 2012] • Consumer Adoption of Social Networks [Lorenzo-Romero et al. 2011] • Antecedents of Continuance Intention in Social Networks [Kim 2011] • Demographic Variables & Social Network Usage [Lennon et al. 2012] • Hedonic vs. Utilitarian Social Networks [Pillai & Mukherjee 2011] • Effects of Social Influence on User Acceptance of Social Networks [Qin et al. 2011] • Non-adopters of Social Networks [Hu et al. 2011]	• Mobile Social Media Use (Facebook, Twitter) [Lee & Cho 2011] • Social Network Adoption in Corporate Communication [El-Haddadeh et al. 2012] • Playfulness, Critical Mass & Trust in Social Networks [Sledgianowski & Kulviwat 2009] • Continuance, Recommendation & Intention to Join further Social Networks [Curran & Lennon 2011] • User Acceptance of Social Networks from the Employee Perspective [Moqbel 2012] • Hedonic vs. Utilitarian Social Networks [Pillai & Mukherjee 2011] • Effects of Social Influence on User Acceptance of Social Networks [Qin et al. 2011] • Non-adopters of Social Networks [Hu et al. 2011]
Blogs	• Blog Continuance [Shiau & Chau 2012]	• Blog Continuance [Shiau & Chau 2012]
Microblogs		• Mobile Social Media Use (Facebook, Twitter) [Lee & Cho 2011]
Virtual Communities	• Behavioral Intention to Participate in Virtual Communities [Lin 2006] • Antecedents of Virtual Community Satisfaction & Loyalty [Lin 2008] • Online & Offline Features in Sustaining Virtual Communities [Lin 2007] • Cognitive Absorption's Influence on Intention to Use Virtual Communities [Lin 2009]	• Behavioral Intention to Participate in Virtual Communities [Lin 2006] • Antecedents of Virtual Community Satisfaction & Loyalty [Lin 2008]
Wikis	• TAM-Extension Related to Educational Wikis [Liu 2010]	• Effects of Owner Engagement on Member Engagement in Corporate Wikis [Arazy & Gellatly 2013]
Review & Recommendation Portals	• Effects of Provider Recommendations & Consumer Reviews [Benlian et al. 2012] • Antecedents of Online Reviews' Usage & Purchase Influence [Park & Lee 2009]	• Effects of Provider Recommendations & Consumer Reviews [Benlian et al. 2012]
Instant Messaging	• Social Usage of Instant Messengers Outside the Workplace [Rouibah 2008]	• Social Usage of Instant Messengers Outside the Workplace [Rouibah 2008]

3.2.1 Extended Online Features' influence in Virtual Communities

First, starting with studies that observe Online Features' impact on PEOU and PU in the social media context (Figures 2 and 3), several observations yield significant results concerning the influences of information quality, system quality and service quality on PEOU or PU, e.g. with specific reference to virtual communities [Lin 2007; Lin 2008].

Related to this, concerning the Virtual Community Second Life, Junglas et al. [2013] likewise observe the influence of the "System Component" [p. 596] – meaning users' satisfaction with the respective system's quality – on PEOU and find a significant path result. In addition, a positive impact of the "Information Component" [ibid.] –

consisting of users' satisfaction with information quality – on PU can be confirmed. Yet, interestingly, Junglas et al. [2013] add the construct "Sociability" [p. 585], which is positively affected by a "Social Component" [p. 585] – consisting of several sociability antecedents or support factors. Junglas et al. [2013] find significant path coefficients for the respective impacts of "activity support, context support, representation support and insight support" [p. 600], which represent shared activities, shared context, shared representation and a shared understanding of the users [Junglas et al. 2013].

Thus, the importance of a social component or, more specifically, other members in using virtual communities shows and accordingly extends the consideration of online features in this social media-related thematic context. Sociability in terms of "a human's desire to socialize with others that can be met through the use of technology" [Junglas et al. 2013, p. 586] appears to be influential for the usage of at least certain social media via "perceived enjoyment" [p. 600]. Thus, this finding also yields another user perception as an interesting construct to consider analogous to PEOU and PU as dependent variables.

3.2.2 Internal and External User Characteristics' influence in Review Platforms, Social Networks, Instant Messaging, Virtual Communities and Wikis

Secondly, regarding particular antecedents of PU, Park & Lee [2009] initially differentiate between internal and external user characteristics, meaning that internal ones are by nature idiosyncratic of the user, whereas users acquire external characteristics over time. More specifically, while internet-shopping experience represents an external user characteristic and consumer susceptibility to interpersonal influence covers the internal perspective, which again interestingly relates to SN; both are tested and deemed significant antecedents of PU in the context of consumers' contributions on Review Platforms [Park & Lee 2009].

Further referring then to internal user characteristics, in two studies about Social Networks [Lane & Coleman 2012] and Instant Messaging [Rouibah 2008] it is confirmed that users' autonomy [Lane & Coleman 2012] and curiosity [Rouibah 2008] respectively impact PEOU. Also, regarding the relationships between User Characteristics and PEOU, as well as PU (Figure 2 and 3) in relation to virtual communities, Lin [2009], for instance, deems significant cognitive absorption's influence on both constructs. Lin [2009] defines cognitive absorption in that study as "… a state of deep involvement with the virtual community" [Lin 2009, p. 421], and further understands it as an intrinsic motivation, comparable to internal characteristics. This shows how strongly PEOU and PU in certain contexts of social media depend on how much users' "… behavior is performed for itself, to experience the inherent pleasure and satisfaction" [p. 422].

Also, as an affirmation of the importance of external user characteristics, researchers find significant results for the effect of users' trust concerning Social Networks – which one can see as something to be developed externally – on both PEOU and PU [Lorenzo-Romero et al. 2011]. In addition, self-efficacy in using social media seems to play a role in influencing PEOU, when, for example, regarding Liu's [2010] study of educational Wikis, since here the author can confirm a positive effect between these two constructs. However, as regards the observation of self-efficacy's positive effect on PU – just as with the proposed negative influence of online posting anxiety on PEOU and PU – Liu [2010] does not find sufficient path coefficients. Nevertheless, one should further consider self-efficacy as possibly influencing PEOU and PU of social media in the future, since it does show a "significant indirect impact" [Liu 2010, p. 62] on Wiki Use Intention via PEOU and PU [Liu 2010]. In general, one should not neglect either internal or external user characteristics of technology acceptance in social media.

3.2.3 Additional User Perceptions' influence in Social Networks, Review Platforms and Blogs

Thirdly, User Perceptions under which, again, we subsume PEOU but also perceived synchronicity, perceived affective quality and confirmation, represent a further category of PU's antecedents in the reviewed studies. Initially, we have already mentioned the proposed effect of PEOU on PU within TAM in this article. Furthermore, researchers have confirmed it in many studies about technology acceptance of information systems. In addition, this connection seems evident in the social media context of virtual communities or blogs, for instance, when referring to the study by Junglas et al. [2013] and by Shiau & Chau (2012).

Yet, in addition, there are further user perceptions in the reviewed social media studies, which researchers regard as anteceding PU. To be more specific, researchers have tested perceived synchronicity in relation to the specific Social Network Cyworld and affirmed it as positively influencing PU [Shin & Kim 2008]. In addition, the same goes for users' perceived affective quality of provider recommendations and consumer reviews and their respective impact on PU [Benlian et al. 2012]. Moreover, confirmation in terms of "User perceptions of the congruence between expectations for blog use and its actual performance" [Shiau & Chau 2012, p. 668] – that is if users get what they expect in the thematic context of blog continuance – is determined to be influential for PU by Shiau & Chau [2012]. In the same vein, regarding social networking continuance, Kim [2011] has earlier proved that the same construct of confirmation influences PU. Thus, a wider range of additional user perceptions seems to matter as antecedents of PU in the various social media contexts.

3.2.4 Social Influence, Drivers and Demographic Variables in Social Networks and E-learning

Fourthly, under the umbrella term Social Influence, Qin et al. [2011], for instance, confirm that SN together with Critical Mass affects PU of Social Networks. In addition, interestingly, Lennon et al. [2012] find significant results for the relationships between demographic variables and SN, as well as PEOU and PU in the context of Social Networks. Here, regarding gender as one factor, males are found to be more likely than females to engage in social networking because of social influences (SN), whereas concerning age, users under 30 are more likely to consider Social Networks as easy to use (PEOU) and useful (PU) than people over 30 years. In addition, as regards marital status and parenthood, singles as well as users without children are more inclined to find Social Networks easy to use (PEOU) and useful (PU). Besides, Lennon et al. [2012] find childless users to be more likely to engage in Social Networks due to social influences (SN).

Also in other social media-related thematic contexts in which, for instance, teachers' SN regarding the use of Web 2.0 technologies in education is demonstrably driven by superiors, peers, students or parents [Capo & Orellana 2011; Sadaf et al. 2012], demographics play an important role in influencing SN or the meaning of social influence in general. In particular, age as a specific demographic factor seems to be influential. For example, in Capo & Orellana's [2011] study about applying the Web 2.0 for classroom instruction, in which SN only plays a minor role, 84.7% of the teachers were born before 1980. Thus, the respondents are considerably older than those in studies involving more general social media users, like in Lee & Cho's [2011] sample, in which the average age is only "20.22" [p. 80]. These findings at least suggest that SN may play a bigger role for younger users' technology acceptance regarding social media than for older users. Further studies should observe, confirm or disprove the importance of age and, generally, demographics in relation to SN and social influence.

Before subsequently continuing with the review of PEOU, PU and SN as independent variables in the social media context, Table 3 summarizes how the construct groupings illustrated in the above sections have emerged from the reviewed social media literature.

Table 3: Construct Groupings influencing PEOU, PU and SN

Grouping	*PEOU* as Dependent Variable of:	*PU* as Dependent Variable of:	*SN*/Similar Construct as Dependent Variable of:
Online Features	• System Quality, Service Quality [Lin 2007] • System Component [Junglas et al. 2013]	• Information Quality, System Quality [Lin 2008] • Information Component [Junglas et al. 2013]	
Social Component			• Activity Support, Context Support, Representation Support, Insight Support [Junglas et al. 2013]
User Characteristics	• Curiosity [Rouibah 2008] • Autonomy [Lane & Coleman 2012] • Cognitive Absorption [Lin 2009] • Trust [Lorenzo-Romero et al. 2011] • Self-Efficacy [Liu 2010]	• Consumer Susceptibility to Interpersonal Influence, Internet Shopping Experience [Park & Lee 2009] • Cognitive Absorption [Lin 2009]	
User Perceptions		• *PEOU* [Junglas et al. 2013; Shiau & Chau 2012] • Perceived Synchronicity [Shin & Kim 2008] • Perceived Affective Quality [Benlian et al. 2012] • Confirmation [Kim 2011; Shiau & Chau 2012]	
Social Influence		• *SN*, Critical Mass [Qin et al. 2011]	
Demographic Variables	• Age, Marital Status, Parenthood [Lennon et al. 2012]	• Age, Marital Status, Parenthood [Lennon et al. 2012]	• Gender, Parenthood [Lennon et al. 2012] • Age [Capo & Orellana 2011]
***SN* Drivers**			• Student Influence, Peer Influence, Superior Influence, Parent Influence, [Capo & Orellana 2011] • Student Influence, Peer Influence, Superior Influence [Sadaf et al. 2012]

3.3. PEOU, PU and SN as Independent Variables

For the review of PEOU, PU and SN as independent variables in the social media context, we again refer to the original TAM [Davis 1986] as well as to TAM 2 and 3 [Venkatesh & Davis 2000; Venkatesh & Bala 2008]. In these models, one understands PEOU, PU and SN as variables influencing people's attitude toward using or their usage intention regarding information systems. Concerning the TAM in the context of social media, a notable number of studies consider the influence of the three constructs on a broad range of dependent variables.

The variables dependent on PEOU in the reviewed studies, we can for the most part categorize into constructs, which directly refer to usage-related reactions of the "end user" [Wang & Scheepers, p. 256]. These include "attitude" (e.g., [Lee & Cho 2011, p. 71]) toward usage, "intention to use" (e.g., [Sledgianowski & Kulviwat 2009, p. 77]), "Adoption" (e.g., [Barelka et al. 2013, p. 56]), "actual use" (e.g., [Lee & Cho 2011, p. 71]), "continuance intention" (e.g., [Kim 2011, p. 200]) and "willingness to pay for subscriptions" [Horng 2012, p. 891], which we accordingly subsume under the grouping End Usage. Moreover, based on El-Haddadeh et al.'s [2012] notion of the "benefits" [p. 563] of information and communication technology and particularly social media's PEOU for organizations, we form the further grouping Organizational Benefits. The latter represents the specific dependent variables "Corporate communication" [El-Haddadeh et al. 2012, p. 564], "Organisations Advertising Strategy" [ibid.], "Trust of organisation" [ibid.] and "Loyalty in product/service" [ibid.], illustrating how the actual social media adoption of end users through PEOU can contribute to organizational social media measures and their outcomes. Also, "Emotional responses" [Wang & Scheepers 2012, p. 258] of users are tested as dependent on PEOU, which we also adopt as a grouping for the identified single variables "Pleasure, Arousal and Dominance" [Wang & Scheepers 2012, p. 255], but also "satisfaction" [Lin 2008, p. 138], "trust and loyalty" [El-Haddadeh et al. 2012, p. 559], as well as "sense of belonging" [Lin 2007, p. 122]. Lastly, Users' Perceptions again also play a role in the literature, hereby particularly regarding the specific constructs PU, "Perceived playfulness" [Pillai & Mukherjee 2011, p. 184] and "perceived enjoyment" (e.g., [Junglas et al. 2013, p. 588] as dependent variables of PEOU.

For PU's influence on other variables in the reviewed studies, we likewise, compose the categories End Usage extended by the variables "Purchase Influence" [Park & Lee 2009, p. 333], Organizational Benefits [El-Haddadeh et al. 2012] and Users' Emotional Responses [El-Haddadeh et al. 2012; Lin 2007, 2008] – however, without the variables pleasure, arousal and dominance of Wang and Scheepers [2012].

Regarding the effects of SN or comparable constructs on other variables, in terms of End Usage we identify "attitudes toward using" [Curran & Lennon, p. 21], "intention to use" [Sledgianowski & Kulviwat 2009, p. 76], "trial" [Barelka et al. 2013, p. 56], "adoption" [Glass & Li 2013, p. 1078], "actual use" [Lee & Cho 2011, p. 71] and "continuance intention" (Kim 2011, p. 201). Only PU [Park & Lee 2009] and "perceived enjoyment" [Rouibah 2008, p. 47] are covered regarding User Perceptions.

Summarizing, compared to the original TAM as well as TAM 2 and 3, in which researchers only include the effects of PEOU, PU and SN on attitude toward use, intention to use or behavioral intention [Davis 1986; Venkatesh & Davis 2000; Venkatesh & Bala 2008; cf. Figure 1], researchers considerably extend the spectrum of tested relationships in the specific realm of social media. To go into more detail, we present in the following the specific impacts of the three observed constructs on other variables in the thematic, social media-related contexts of the mentioned studies.

3.4. Thematic Contexts and Construct Relationships

Initially, regarding the studies that treat PEOU, PU and SN as independent variables, we can again differentiate between studies using social media and Web 2.0 as umbrella terms, which include multiple social media applications, and studies that have a clearer focus on single applications. We present the according thematic contexts and specific research foci again in Table 2. However, there are also overlaps with the presentation of the constructs as dependent variables since several of the reviewed studies cover both influences on and influences of PEOU, PU and SN.

3.4.1 Heterogeneous Influences on End Usage in Different Thematic Contexts

First, regarding the more comprehensive observations about the impact of the constructs on the earlier classified End Usage, Lee & Cho [2011], for instance, investigate determinants of Twitter and Facebook use, i.e., the use of Microblogs and Social Networks via the respective flagship of the social media application. Thereby, all three constructs PEOU, PU and SN are included as independent variables. Lee & Cho [2011] observe the former two in their impact on attitude toward Twitter (Facebook) use, which again influences actual Twitter and Facebook use. Additionally, the mentioned researchers presume SN to have a direct effect on actual Twitter and Facebook use [Lee & Cho 2011]. As stated earlier in this review (see section 3.2.1), this differentiation and particularly the confirmation of SN's direct effect on both Twitter and Facebook Use [Lee & Cho 2011], again, show the important role that social influence, and more simply the behavior and influence of other people, play in the adoption and use of social media. Yet in the same study, PEOU and PU together only show significant results in forming attitude towards using Twitter, whereas the researchers have to remove PEOU from the initial model regarding Facebook use [Lee & Cho 2011].

In this connection, Lee & Cho's [2011] results, however, are in contrast to Capo & Orellana's [2011] study in which teachers' intention to use Web 2.0 technologies is confirmed as strongly being determined by teacher's attitude – decomposed into PU, PEOU and compatibility – yet only slightly by SN. Thus, the mentioned findings show the differences in the effects of the constructs according to thematic context in general, particularly, application or area of application.

Thus, it is further interesting to consider how the effects differ accordingly in relation to the other observed dependent variables subsumed under End Usage. In one study in which the construct convenience acts as a substitute for PU, Horng [2012] confirms that together with PEOU it affects users' willingness to pay for subscriptions to Web 2.0 services, yet does not even consider SN [Horng 2012].

Nevertheless, researchers confirm also well-tried relationships between PU, SN and attitude toward use or intention to use in the thematic contexts of social media, e.g., also regarding the new phenomenon of social commerce. Here, in turn, Shin's [2013] study stresses SN's higher path coefficient compared to that of PU, and accordingly the role of SN as a key antecedent of use in social media. Likewise, further studies prove the significance of rather conventional relationships, for instance, between PEOU, PU and intention to use [Sledgianowski & Kulviwat 2009] or adoption of Social Networks [Glass & Li 2013]. However, in these studies, researchers also adopt and extend the observation of SN or Normative Pressure by including another related variable, namely critical mass, and confirming the respective significant effects on intention to use or social networking adoption [Glass & Li 2013; Sledgianowski & Kulviwat 2009].

In sum, supporting the hitherto identified importance of SN or generally social influence in social media adoption, there are even studies about Social Networks in which, for example, both PEOU and PU show non-significant relationships to attitude toward social networks, and only social influence significantly affects the latter [Curran & Lennon 2011]. Nevertheless, based on the introduced studies, we can state heterogeneous influences of PEOU, PU and SN on End Usage in different thematic social media contexts, which thus necessitates further validation.

3.4.2 Predominant Influences on Organizational Benefits in Social Networks

Secondly, in the particular context of adopting social networking services regarding corporate communication, El-Haddadeh et al. [2012] test if and how users' PEOU and PU in social networks positively affect their communication with the respective organizations. Here only the relationship of PEOU proves to be significant. Yet both PEOU and PU significantly influence consumers' trust in the organizations, as well as their loyalty in the respective products and services.

In addition, a significant positive effect of consumers' PEOU in Social Networks on the organizations' advertising strategy is stated which among other things can be explained by the fact that it facilitates a desirable "… two-way interaction between brand and consumers" [El-Haddadeh et al. 2012, p. 564]. To sum up, El-Haddadeh et al.'s [2012] study proves beneficial influences of PEOU on organizational social media measures, and the involved relationships to organization, products or services benefit from both PEOU and PU.

3.4.3 Influences on User Perceptions and Emotional Responses as Mediators in Social Networks, Instant Messaging, Virtual Communities and Social Gaming

Thirdly, there are observations about Social Networks generating significant results for PEOU on intention to use, yet additionally also via perceived enjoyment (e.g., [Moqbel 2012]). Hu et al.'s [2011] study about social networks also supports the latter indirect relationship. Further, Rouibah [2008] significantly applies it to actual usage of Instant Messaging. In Rouibah's [2008] study, additionally, perceived enjoyment acts as a mediator in the relationship between SN and actual usage. In addition, together with PU and interpersonal influence (SN), Kim [2011] confirms that perceived enjoyment has a significant positive relationship with social networking services continuance intention [Kim 2011].

Further stressing the importance of users' "enjoyment and fun" [Pillai & Mukherjee 2011, p. 183] in Social Networks, the just cited authors find that perceived playfulness serves as a significant mediator for the relation between PEOU and intention to use hedonic Social Networks, thus also being the equivalent of PU for the same significant relationship regarding utilitarian ones. Similar positive outcomes of PEOU and PU can also be found in studies about virtual communities in which both constructs significantly influence users' sense of belonging to [Lin 2007] or satisfaction [Lin 2008] with communities, thus again contributing to their respective acceptance.

Further, Wang & Scheepers' [2012] study about users' motivations of accepting hedonic information systems like social gaming platforms only involves PEOU, but in turn both its impact on attitude toward use and users' emotional responses such as pleasure, arousal and dominance. In addition to the already expected significant influence of PEOU on attitude toward use, at least there are also positive effects on pleasure and dominance. This result shows that in the social media context it definitely makes sense to consider relationships of the reviewed constructs with new dependent variables, which again may additionally have significant effects on familiar constructs like attitude toward use, just as in the earlier introduced study, for instance, users' pleasure [Wang & Scheepers 2012].

Yet again, researchers also confirm traditional mediations in the social media context, just like Benlian et al. [2012] who, related to a certain subcategory of virtual communities, prove PU of consumer reviews as a mediator in the relationship between PEOU and the intention to reuse such reviews and purchase based on them. Closing then with this rather functional application of social media in which the actual platform mainly exists to provide helpful information for users' future shopping through other users, PU seems to pass at least in this social media context as a directly influential factor.

Altogether, Table 4 presents a summary of the earlier illustrated construct groupings emerging from the reviewed social media literature.

Table 4: Construct Groupings influenced by PEOU, PU and SN

Grouping	*PEOU* as Independent Variable of:	*PU* as Independent Variable of:	*SN*/Similar Construct as Independent Variable of:
End Usage	• Attitude toward Use [Capo & Orellana 2011; Lee & Cho 2011; Wang & Scheepers 2012] • Willingness to Pay for Subscriptions [Horng 2012] • Intention to Use [Hu et al. 2011; Moqbel 2012; Pillai & Mukherjee 2011; Sledgianowski & Kulviwat 2009] • Adoption [Glass & Li 2013] • Actual Usage [Rouibah 2008]	• Attitude toward Use [Capo & Orellana 2011; Lee & Cho 2011; Shin 2013] • Intention to Use [Shin 2013; Sledgianowski & Kulviwat 2009] • Adoption [Glass & Li 2013] • Continuance Intention [Kim 2011]	• Actual Usage [Lee & Cho 2011; Rouibah 2008] • Intention to Use [Capo & Orellana 2011; Shin 2013; Sledgianowski & Kulviwat 2009] • Adoption [Glass & Li 2013] • Attitude toward Use [Curran & Lennon 2011] • Continuance Intention [Kim 2011]
Organizational Benefits	• Corporate Communication, Advertising Strategy,Trust, Loyalty [El-Haddadeh et al. 2012]	• Trust, Loyalty [El-Haddadeh et al. 2012]	
User Perceptions	• Perceived Enjoyment [Hu et al. 2011; Moqbel 2012; Rouibah 2008] • *PU*, Perceived Playfulness [Pillai & Mukherjee 2011] • *PU* [Benlian et al. 2012]		• Perceived Enjoyment [Rouibah 2008]
Users' Emotional Responses	• *PU*, Sense of Belonging [Lin 2007] • *PU*, Satisfaction [Lin 2008] • Pleasure, Dominance [Wang & Scheepers 2012]	• Sense of Belonging [Lin 2007] • Satisfaction [Lin 2008]	

4. Discussion

4.1. Limitations and Directions for Future Research

In this meta-study, we make an effort to enhance the understanding of technology acceptance in social media via a literature review of the TAM and its constructs PEOU, PU and SN in related empirical, quantitative multivariate studies. We discuss our findings as well as future research avenues in the following, but consider certain limitations of this article first. In this regard, the generalizability of the results is limited inasmuch as the reviewed studies cover very diffuse research foci, thematic contexts and various objects of observation or social media applications. More specifically, not always are the same construct relationships in the reviewed studies observed in relation to the same specific thematic contexts and thus applications. This, in turn, accounts for the reported quite heterogeneous and even contradictory results in the different reviewed studies, especially regarding varying social media applications, which make it hard to draw distinct and unambiguous conclusions.

Yet in consolidating these results, we have made the effort to present an objective viewpoint about which of the reviewed constructs' significance seems to prevail in social media, namely PEOU, PU or SN. Nevertheless, in the future it would make sense to conduct repeated or even perennial empirical research regarding the respective findings of this literature review in order to confirm the stated relationships of PEOU, PU and SN among each other as well as with other variables in the numerous differing contexts of social media.

Furthermore, while our review and analysis has focused on what leads to technology acceptance, and thus usage and the constructs' positive relationships with antecedents and outcomes, reviewing empirical studies including negative relationships may be promising as well. To this effect, Wirth et al. [2015] give a good example of what may

hinder acceptance and usage by examining "Dissatisfaction" [p. 3] and related "Discontinuance intention" [ibid.] regarding social networking services according to former "Frustration" [ibid.] which, in turn, is suggested to be lowered by, higher PEOU and PU, among others. While Wirth et al. [2015] in the mentioned study indeed cannot confirm significant relationships, reviews of comparable future studies could still lead to interesting insights regarding similar negative connections. Also, since Wirth et al. [2015] confirm that higher "Perceived enjoyment" [p. 8] lowers frustration, which is again interestingly related to our review's results yielding the construct as favoring acceptance or usage, perceived enjoyment may also be included in the suggested future reviews.

Moreover, since our review only focuses on users' technology acceptance through the TAM as one prominent approach in information systems and the most frequently applied model in studies about social media, other theoretical approaches to technology acceptance in social media should also be considered for future empirical research. Further, also literature reviews of conceptual and descriptive articles as well as qualitative research about technology acceptance in social media could enhance the findings of the meta-study at hand. Lastly, since our review and analysis is limited to a qualitative method, a mixed methods approach including quantitative work would be constructive for future research.

4.2. Findings

Despite the mentioned limitations and future research to be done, we have achieved the main aim of this meta-study. By reviewing the constructs PEOU, PU and SN in related multivariate studies, we have identified what researchers confirm to positively influence users' technology acceptance in social media and, thus, if one can maintain the propositions of the original TAM and its enhancements, or if one should rather adjust them in light of the various thematic contexts of social media. To do so, we have reviewed the constructs PEOU, PU and SN according to their use as dependent and independent variables in the relevant literature.

First of all, there are studies applying social media or the Web 2.0 as umbrella terms as well as studies focusing on specific types of social media applications, or even on one particular application. The observation of these different applications again renders a wealth of construct relationships involving PEOU, PU and SN in different social media-related, thematic contexts, which, on the one hand, show similarities but also significant differences compared to the original TAM as well as TAM 2 and 3.

Regarding the similarities, comparable to the original TAM's consideration of design features (Davis 1986) researchers confirm the dependence of PEOU and PU on online features like information quality, system quality and service quality in several of the reviewed social media-related studies. Yet researchers also extend the quality observation parameters of DeLone & McLean [2003] in the social media context and additionally confirm a social component or quality to be influential [Junglas et al. 2013]. Thus, in terms of what exactly leads to users' acceptance of the technology underlying social media, we conclude that – compared to the general TAM context of information systems – in the social media context one must add a further influential technical quality component to the picture, one that is related to sociability in terms of "a human's desire to socialize with others that can be met through the use of technology" [Junglas et al. 2013, p. 586].

Moreover, just like in the original TAM [Davis 1986], researchers confirm the positive effect of PEOU on PU in studies about social media. Further, as also in TAM 2 and TAM 3, SN additionally influences PU in several of the reviewed studies. Yet as a substantial difference, while admittedly in TAM 2 and 3 researchers add experience and voluntariness as moderating variables of the relationships between SN and PU as well as intention to use [Venkatesh & Davis 2000; Venkatesh & Bala 2008], researchers confirm SN, in turn, to be dependent on further variables in several studies about social media. Therefore, compared to the original TAM regarding information systems in general, one of the main differences of the studies in a social media context is that many more single factors influencing PEOU and PU, but also SN and the like, come into play, covering a considerably wider range of themes. While one can at least find some of these factors in TAM 2 and TAM 3, researchers also specifically add others for the social media context. Table 5 provides an overview of these newly confirmed constructs in the social media context.

Table 5: Newly confirmed constructs influencing PEOU, PU and SN in Social Media

Construct Grouping	Newly Confirmed Constructs in the Social Media Context
Social Component	• Activity Support, Context Support, Representation Support, Insight Support [Junglas et al. 2013]
User Characteristics	• Cognitive Absorption [Lin 2009] • Autonomy [Lane & Coleman 2012] • Curiosity [Rouibah 2008] • Trust [Lorenzo-Romero et al. 2011] • Consumer Susceptibility to Interpersonal Influence [Park & Lee 2009] • Internet Shopping Experience [Park & Lee 2009]
User Perceptions	• Perceived Synchronicity [Shin & Kim 2008] • Confirmation [Kim 2011; Shiau & Chau 2012]
Social Influence	• Critical Mass [Qin et al. 2011]
***SN* Drivers**	• Student, Peer, Parental and Superior Influence [Capo & Orellana 2011; Sadaf et al. 2012]
Demographic Variables	• Age, Gender, Marital Status, Parenthood [Capo & Orellana 2011; Lennon et al. 2012]

Based on the respective confirmed significant results, all of these constructs seem to have their share in the answer to what exactly leads to users' acceptance of the technology underlying social media. Hereby, we can exemplarily mention the observation of cognitive absorption. It shows how strongly users' PEOU and PU in certain contexts of social media also depend on users' intrinsic motivations as compared to extrinsic ones. In the same vein, a differentiation between internal and external user characteristics, as well as an emphasis on the latter, seems important for future research in the social media context of PEOU and PU. This is the case since out of the characteristics on the composed meta-models' left side (Figure 2 and 3) only internet shopping experience and trust can be seen as externally developed characteristics.

Furthermore, as another important result of the review, demographics and particularly age seem to be influential in the constitution of SN regarding the use of social media. Since this finding has not yet been verified by repeated studies, further research should observe, confirm or disprove the importance of age and generally demographics in relation to SN and social influence in social media.

In addition, through the conducted literature review we also identify some new variables depending on PEOU, PU and SN, which at times also serve as mediators or variables in between the three constructs' relationships with intention to use etc. For instance, several studies have confirmed that PEOU has an effect on perceived enjoyment, which according to our review's results again plays a major role in users' adoption and thus also their acceptance of social media, especially Social Networks. Moreover, perceived playfulness serves as a significant mediator for the relation between PEOU and users' acceptance of hedonic Social Networks.

The resulting importance of users' enjoyment and fun in accepting social media also at least partly explains why PEOU comparably seems to be of greater significance than PU in the respective reviewed studies, especially regarding hedonic social media. Nevertheless, in rather utilitarian social media, there are still studies confirming well-tried relationships between PU and attitude toward use or intention to use in the context of new social media-related phenomena such as social commerce, thus likewise explaining related technology acceptance (cf. sections 3.3 and 3.4).

To summarize, it is again important to stress that the above-mentioned findings strongly alternate dependent on their specific social media-related thematic contexts, that is on the observed application or area of application. Further, it is also important to regard which relationships researchers have observed involving all three constructs PEOU, PU and SN. In this regard, we have already depicted the relations among the three variables before in this review. However, Demographic Variables constitute the only set of variables influencing PEOU, PU as well as SN (cf. section 3.1). Further, the dependent variables commonly influenced by PEOU, PU and SN are limited to attitude toward use, intention to use, adoption, actual use and continuance intention, for this review subsumed under End Usage (cf. section 3.3). Thus, the bottom line is that all three constructs PEOU, PU and SN just like in the original TAM and its enhancements can simultaneously be influential in determining users' acceptance of the technology underlying social

media, yet with the restriction that this acceptance may vary according to demographics like, most notably in this review, age.

Finally, we again emphasize the consistently occurring importance of SN as well as similar and related constructs in this review. There are numerous modifications, in which researchers, for example, test SN together with critical mass under the umbrella term social influence or also confirm it to have a direct effect on actual use (cf. sections 3.3 and 3.4). This simply shows the relevance of the social aspect, component or more comprehensively the behavior of others in using social media, in addition to PEOU and PU.

5. Conclusion

Our literature review and meta-analysis show that one can successfully apply PEOU, PU, SN and thus the TAM to technology acceptance in the realm of social media. However, the priorities concerning the three constructs seem to change. Further, a notable range of both additional antecedents and outcomes become relevant, at times also as mediating variables. Thus, our research about the TAM in social media holds both theoretical and managerial implications, which means that our findings offer an added value for scientists eager to conduct future related research as well as for social media providers and managers of organizations wanting to know what drives users' technology acceptance in social media.

5.1. Theoretical Implications

First, this investigation generally contributes to the literature about technology acceptance in social media. Secondly, it confirms the applicability of the TAM and, particularly, its major constructs PEOU, PU and SN in the social media context. The composed meta-models (Figures 2-4) together with the according illustrations in the text offer a comprehensive overview and combination of new and well-tried groupings of independent and dependent variables maintaining significant relationships with PEOU, PU and SN in social media.

Against this background, our more differentiated analysis yields that while the aspect of PU does not seem to play the major role in every social media application, PEOU and its antecedents as well as, for example, its impact on mediating variables like perceived enjoyment etc. are more important for users' acceptance, especially regarding hedonic Social Networks like Facebook. Additionally, we stress the increasingly growing role of SN and related concepts of social influence when regarding the TAM in the field of social media. These insights may assist researchers of the field in comprehensively understanding influential factors in technology acceptance of social media as well as in designing further studies which either aim to verify or refute this article's results. Moreover, the latter obviously pave the way for testing other or even competing theoretical models in the context of technology acceptance in social media in comparison to the TAM's presented explanatory power. In this regard, based on the stimulus–organism–response (S–O–R) model, Gu et al. [2016] have already conducted a comparable study about social networking sites, amongst other antecedents, also confirming a highly significant effect of social influence on user loyalty as the dependent variable of their research model. Lastly, researchers should further verify the observed variables and their relationships in diverse research streams about user acceptance of information systems other than social media. To this effect, concerning a comparison between e-commerce and m-commerce, Okazaki [2005] for example has earlier raised the question "[…] whether there are any significant differences in their usage and consumer acceptance" [p. 162].

5.2. Managerial Implications

Our findings also offer adjusting screws for diverse areas of application in social media practice and the respective actors involved. For our purpose, we focus on the areas of information technology and business, thus social media providers themselves as well as organizations or companies active in social media.

First, social media representatives and their efforts to ensure technology acceptance can benefit from our findings when, initially, taking intensified care of their particular platforms' ease of use (PEOU). In addition, ensuring that particular social media applications as, for example, Review Platforms generate the expected usefulness and thus an added value for the user should not be neglected (PU). However, one has to perfect this added value, based on the particular social media platforms' value proposition, which varies from application to application. Moreover, social media representatives should cautiously consider how, in their pursuit for users' technology acceptance, they could increasingly benefit from social influence (SN). More specifically, in terms of an operational suggestion, Facebook offers a practical example by providing a button through which users can invite other users to like certain elements of the Social Network. Altogether, besides this technical installation of a social component, there may be multiple further ways to benefit from the importance of the behavior of 'others' in technology acceptance of social media.

Yet one should not consider the investigated constructs as individual measures but rather as a whole. More clearly, both generating PEOU and PU as well as exploiting social influence (SN), together with considering the antecedents reviewed in this study will lead to positive outcomes. For example, orienting the social media platform toward the right target group in terms of the reviewed users' characteristics, demographics and SN drivers seems to be crucial to

generating the desired technology acceptance in terms of users' favorable emotional responses, perceptions and the resulting end usage.

This end usage, in turn, also leads to organizational benefits, that is, to benefits for the organizations or companies present in social media. Accordingly, benefits for organizations' corporate communication, advertising etc. also depend on PEOU, PU, SN and their respective antecedents and should therefore also be considered and influenced by managers. We recommend focusing on those platforms, which generate the highest related technology acceptance and thus usage. Typically, within the broad range of existing social media applications, so far social networks have emerged as one of the most popular platforms for users and thus also for companies and their communication, advertising or even recruiting activities. Yet given the dynamic nature of the social media field, this circumstance eventually may be subject to change. Hence, companies should be aware of the fact that their social media strategy is something that they have to critically reconsider and adapt over time. In addition, organizations may try to influence social media providers regarding the achievement or improvement of the reviewed constructs PEOU and PU within their performance-connected negotiations to foster end users' technology acceptance and thus the related benefits for the organizations themselves.

Overall, these contributions of the meta-study at hand seem crucial, since especially for the field of business, the need to completely grasp and exhaust the potential of the social media concept is important for staying competitive as organizations and will only accrue in meaningfulness in the near future.

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