A conceptual model for the use of social media in companies

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Abstract

Social media is currently an evolving "wave" in online business marketing. Marketers are beginning to drive the use of social media as a component in their marketing strategy and campaigns to reach out to customers and fans. Within the subdisciplines of marketing that may use social media include promotions, marketing intelligence, sentiments research, public relations, marketing communications and product and customer management. This paper will try to find a conceptual model to examine people's behavior, model based on the the Theory of Reason Action (TRA) and the Technology Acceptance Model (TAM).

Keywords: Social media, Social networks, Social influence, Technology acceptance model, perceived ease of use, perceived usefulness.

Introduction

The technology acceptance model [11, Davis, 1989] is one of the most widely used models of IT adoption. According to TAM model , IT adoption is influenced by two erceptions: usefulness and ease-of-use. acceptance. Since social network characteristics are group-level characteristics and the technology acceptance model (TAM) is grounded on an individual level, there is a need for a mediating variable that links group-level characteristics to individual-level characteristics. However, TAM focuses on the individual psychological level of technology acceptance, with less attention for the social context such as social networks that surround the user [38, Sykes et al., 2009]. As such, from an academic and practice perspective, little is known about the influence of these networks on the technology acceptance of individuals.

Prior research already indicated that social networks can influence technology acceptance [13, Eckhardt et al., 2009]. They do so, since social networks contain "a specific set of linkages among a defined set of persons, with the additional property that the characteristics of these linkages as a whole may be used to interpret the social behavior of the persons involved" [20, Laumann et al., 1978]. In essence, TAM postulate that IT adoption is affected by prior use-related beliefs. TAM identified two such beliefs: perceived usefulness (PU) and perceived ease of use (PEOU) [41, Venkatesh, 2010]. Predicting the adoption and use of information technology has been a key interest since the early days of information systems research [7, Burton-Jones, 2005].

The main goal of technology acceptance theory is, to explore the factors that influence the adoption and diffusion of new technologies throughout a social system [5, Barnes, 2003]. Over the years, several independent theories for the acceptance as well as adoption of information technology have been developed. Most of these models apply to situations, in which individuals can voluntarily choose whether to adopt an innovation or not [15, Gallivan, 2001]. Perceived usefulness, perceived ease-of-use, and social influence appear to be promising variables for explaining behavior for the adoption of social media in different organization; however, more research is necessary to explicate the possible effect of social influence on perceived usefulness and perceived ease-of-use and how these variables may co-influence the usage of social media technologies [12, Demei et al., 2006]. Another issue to be taken into account is that companies behaviors and attitudes may be influenced differently

when interacting in social media with customers, competitors, suppliers which one of them holding different roles.

Technology acceptance model

In recent years, a number of influential models investigating intentions to adopt technology have emerged. These models have their origins in the disciplines of psychology, information systems and sociology [46, Venkatesh, Morris, Davis, & Davis, 2003]. Among the best known of these is the Technology Acceptance Model (TAM) [11, Davis, Bagozzi, & Warshaw, 1989]. Based on the Theory of Reasoned Action (TRA) [14, Fishbein & Ajzen, 1975], the TAM has become well established as a robust, powerful and parsimonious model for predicting employee acceptance in the information technology domain [43,Venkatesh & Davis, 2000].

TAM suggests that when users are presented with a new technology, different variables influence the decision whether and how they will use it. Two causal linkages influence this decision: perceived usefulness (PU) and perceived ease of use (PEOU) of the relevant technology [36, Stephan et al., 2010].

Perceived usefulness explains the user's perception to the extent that the technology will improve his/her work performance and perceived ease of use relates to the user's perception of the amount of effort required to utilize the system or the extent to which a user believes that using a particular technology will be effortless [11, Davis et al., 1989]. The model provides explanations of determinants of computer technology acceptance by tracing the impact of external factors on internal beliefs, intentions and attitudes [34, Rose et al., 2006].

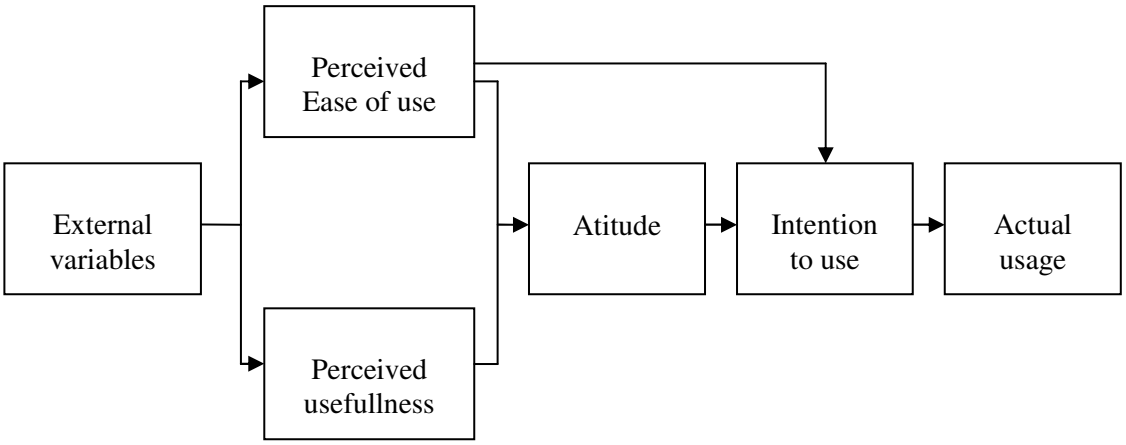

Fig. 2. Original Technology Acceptance Model

The parsimony of TAM combined with its predictive power make it easy to apply to different situations[41,Venkatesh, 2010]. However, while parsimony is TAM's strength, it is also the model's key limitation. TAM is predictive but its generality does not provide sufficient understanding from the standpoint of providing system designers with the information necessary to create user acceptance for new systems [28, Mathieson, 1991]. Specifically, it is important to emphasize that although perceived ease of use has been employed extensively in user acceptance research in general and TAM research in particular, very little has been done to understand the determinants of perceived ease of use [41, Venkatesh, 2010].

Davis' more recent work acknowledges this potential limitation: "While being very powerful in helping us predictaccept ance, one of the limitations of TAM is that it does not

help understand and explain acceptance in ways that guide development beyond suggesting that system characteristics impact ease of use. This places a damper on our ability to meaningfully design interventions to foster acceptance. In order to be able to explain user acceptance and use, it is important to understand the antecedents of the key TAM constructs, perceived ease of use and usefulness" [44, Venkatesh and Davis, 1996]

The Technology Acceptance Model has been tested by numerous authors, including [1, Adams et al.,1992], [18, Hendrickson et al.,1993], [19, Igbaria et al.1997], [32, Riemenschneider et al.,2003], [37, Subramanian, 1994] [39, Szajna, 1994], [40, Taylor and Todd, 1995] or [9, Chin and Todd 1995]. In most of these studies, the TAM model was able to explain a reasonable amount of variance in the actual use of the technology [3, Alshare, 2004]. An up-to-date review of existing TAM studies and meta analyses can be found in [24, Ma and Liu, 2004] or [22, Legris et al., 2003]. Based on these studies, the original TAM model was extended by various authors to incorporate additional variables [33, Röcker, 2010], that may account for more variance in technology usage [3, Alshare et al., 2004].

The additional variables included perceived system performance [24, Ma and Liu, 2004], perceived user resources [27, Mathieson et al., 2001], prior experiences with similar technologies [2, Agarwal and Prasad, 1999][40, Taylor and Todd, 1995], age and education [2, Agarwal and Prasad, 1999] as well as personal innovativeness [2, Agarwal, and Prasad, 1998]. Further extensions of the Technology Acceptance Model were done by [9, Chin and Todd, 1995], [35, Segars and Grover 1993], [42, Venkatesh, 2000], [43, Venkatesh and Davis , 2000], [45, Venkatesh and Morris, 2000] as well as [16, Gefen and Straub, 1997].

Perceived ease of use

According to the definitions of [11, Davis et al., 1989], PEOU refers to "the degree, to which the [...] user expects the target system to be free of effort", Understanding the determinants of perceived ease of use is further underscored by the two mechanisms by which it influences intention: (1) perceived ease of use has a direct effect on intention, and an indirect effect on intention via perceived usefulness, and (2) it is an initial hurdle that users have to overcome for acceptance, adoption, and usage of a system.

Perceived usefulness

PU describes the individual's "subjective probability, that using a specific application system, will increase his or her jobperformance within an organizational context"[11, Davis, 1989]. Researchers have used the constructs of perceived usefulness, perceived ease-of-use, to explain technology usage/acceptance for a variety of information systems. [29, Miller et all., 2003] conducted a study in an online class delivered by interactive modules, which was developed using Authorware [...].They reported that perceived ease-of-use and perceived usefulness both have a significant and positive relationship with the amount of time students spent in the course[12, Demei et al., 2006].

Social influence

Social influence is defined as the perceived external pressure that individuals feel in the process of being informed about an innovation and decide to use it, and the degree in which an individual perceives that important others believe he or she should use the new system [14, Fishbein and Ajzen, 1975]. People tend to adjust their beliefs according to the group they are in. Individuals are also influenced by the majority: when a large portion of an individual's referent social group holds a particular attitude, it is likely that the individual will adopt it as well [4, Asch, 1951].

Previous studies have looked at the relationship between social ties and technology in areas such as exploitation of inter-organizational computer-mediated communication infrastructure [31, Pickering and King, 1995]; usefulness of electronic ties through broadcast

messages [10, Constant et al., 1996]; and electronic media usage for information exchange [17, Haythornthwaite and Wellman, 1998]. However, so far a limited number of studies have been conducted on social influence and technology acceptance [21, Lee et al., 2003].

In the end I propose an conceptual model with the variables discused above as a result of the revised theory and findigs:

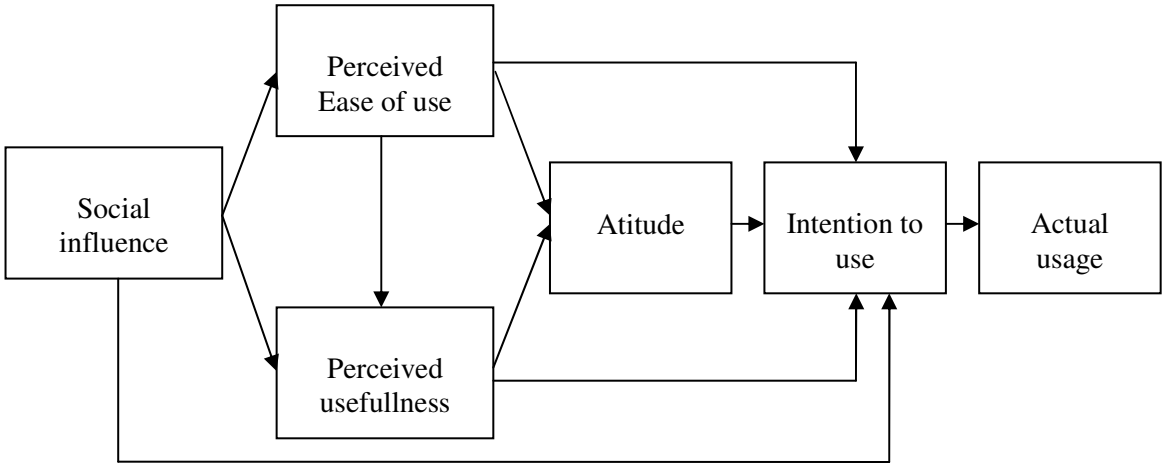

Fig.3 Proposed conceptual model

Conclusions.

In this research-in-progress study, I propose a conceptual model to examine the factors affecting attidude , intention to use and continuance intention of social media services from companies perspectives. Organizations should consider putting in place general computer training programs that target increasing computer awareness, enhancing computer self-efficacy, and reducing computer anxiety among employees that interact with customers in online. One of the areas that has not been exploited in practice is the potential for intrinsic motivation to enhance companies acceptance and usage. Much prior research [11, Davis et al., 1992], [25, Malone, 1981], [48, Webster and Martocchio, 1992], [47, Venkatesh and Speier, 1999] has found intrinsic motivation to be an important factor influencing acceptance and learning from individuals user perspective .

Posible limitations

Since the proposed model includes the fundamentals of the TAM, it is worthwhile to address some opinions about the model as well. There has been a streamlet that focused on its limitations and their arguments can be valid for this model as well [6, Benbasat and Barki, 2007]. [23, Lucas and Spitler, 2000] argue that the model is not applicable on the whole range of technology possibilities. They concluded that TAM might not work in the case of a complex technology.

Another important aspect is the cultural dimension. Cultural background of individuals influence the decision-making process and therefore, also the process of adoption and use of information systems [30, Myers and Tan, 2002]. [16, Gefen and Straub, 1997] investigated the gender differences and concluded that it affects the IT adoption process as well. Beside this, the conceptual model needs to to be empirical tested both on individuals and organizations especially here on comunity managers or comunity cordinators engaged in social media technologies.

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