Why do young people tag photos on social networking sites? Explaining user intentions

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ABSTRACT

Scholars have emphasized an urgent need to investigate the determinants of user intentions to share content on social networking sites (SNS). A growing share of the content in social media is visual − including Photos − which users can share by tagging. To improve the understanding of the determinants of social media users' behavioral intention to share content, this study investigates why people tag photos on SNS. A comprehensive research model was developed based on the Unified Theory of Acceptance and Use of Technology (UTAUT2) and Social Cognitive Theory (SCT). The validity of the extended UTAUT2 model was tested on a new form of technology use which is not only timely but is much desired by the scholars engaged in information systems research. The research model investigates the role of habit, hedonic motivation, facilitating conditions, social influence, effort expectancy, performance expectancy, social presence, social status, and self-efficacy in influencing the user intentions to engage in photo-tagging. The research model was tested using a cross-sectional study of 780 adolescent Facebook users. The findings suggest that only habit and hedonic motivation have a significant direct influence on the user's intentions to tag photos. The study contributes to the theorizing of the role of habits and hedonic motivations in user behaviors in the SNS and provides new insights into these factors for the managers of social media sites.

1. Introduction

Facebook is a dominant player in the market of online social networking sites (SNS), popular among people from many cultural and geographical regions (Dhir, Kaur, Lonka & Nieminen, 2016; Dhir, Kaur, Chen, & Lonka, 2016). According to Facebook Inc., in December 2016 Facebook had approximately 1.23 billion daily active users, 1.15 billion daily active mobile users, and 1.74 billion mobile monthly active users (Facebook Newsroom, 2017). Digital photos hold a dominant position among the different types of content shared and viewed on Facebook (Dhir, 2016a). Each month, it is estimated that more than 17 billion photos are shared via Facebook Messenger alone (Facebook Statistics, 2017). Similarly, 75% of the total content posted on Facebook was composed of digital photos, and close to 87% of the total interactions on Facebook involved the sharing of digital photos (Ross, 2014). For these reasons, scholars consider Facebook the fastest-growing photo-sharing site (McLaughlin & Vitak, 2012; Rainie, Brenner, & Purcell, 2012).

Social networking sites (including Facebook) have not only enabled their users to share numerous forms of content (e.g., photos, videos, links) with others in the computer-mediated communication space, but has also provided them with newer ways to organize, manage, and discover that content (Kipp, 2007; Zigkolis, Papadopoulos, Filippou, Kompatsiaris & Vakali, 2014; Zollers, 2007). Tagging of content is a well-known way for SNS users to share, discover, and manage their content, particularly digital photos. Tagging of digital photos is a popular way to connect, communicate, develop and maintain relationships on SNS (see Besmer & Lipford, 2010; Burke & Kraut, 2014; Burke, Kraut, & Marlow, 2011; Dhir, 2016a; Dhir, Chen, & Chen, 2015; Eftekhar, Fullwood, & Morris, 2014). Scholars have emphasized that tagging of content is fundamental to the SNS (Birnholtz, Burke, & Steele, 2017) where people regularly tag and are tagged (Hampton, Sessions Goulet, Marlow, & Rainie, 2012).

Photo-tagging" is one of the popular activities on Facebook (Dhir, 2016a; Dhir, 2016b; Dhir et al., 2015). On Facebook, a "tag" (or mention) of a Facebook user can be attached to a shared digital photo or other forms of content. On associating a tag with a photo, a link to the profile of the tagged user is added and becomes visible with the

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photo. The tagged users receive a message alert once they have been tagged, their profile is linked to the tagged photo, and the photo appears on the wall of the Facebook users who are tagged and is visible to everyone on their friend lists (Damen & Zannone, 2013; Dhir et al., 2015). When a photo has been tagged, a communication link is established between the tagger, the tagged user, and the audience (friends of the tagged user as well as the tagger) where all can view the tagged photos; generating comments and conversation. Scholars therefore credit photo-tagging with facilitating direct communication between friends (Burke et al., 2011), enhancing social capital (Burke et al., 2014), enabling users to obtain feedback from others (e.g., likes and comments) (Besmer et al., 2010), enhancing visibility of the photos by widening the original audience (Besmer et al., 2010), enabling users to maintain and develop their online identities and relationships with friends and family (Eftekhar et al., 2014), and helping them to build close relationships (Burke et al., 2011).

The popularity of tagging has motivated scholars to explore why some people tag digital photos (Dhir et al., 2015) and other people untag them (Dhir, Kaur, Lonka et al., 2016; Dhir, Kaur, Chen et al., 2016; Lang & Barton, 2015). However, almost no prior research has attempted to explain the determinants of user intentions regarding photo-tagging: the factors that influence the tendency to tag others on SNS such as Facebook. It is important to fill this research gap since it expands the scope of the prior literature and theory, from understanding the user acceptance and adoption of a medium (e.g., SNS, Facebook) to a specific feature of that medium (i.e., Facebook photo-tagging). Therefore, by understanding the user intentions regarding a specific social media feature, information systems (IS) researchers and practitioners can better understand the different issues pertaining to user acceptance, adoption, and use in complex computer-mediated communication platforms such as SNS. This investigation is essential for new media research since new media offer technological features, each of which has a different level of acceptance, adoption, and use. Consequently, there is no logical reason to believe that determinants of user acceptance and adoption of SNS (or Facebook) will be identical to that of a specific feature such as tagging, sharing, commenting, or liking. Consequently, this investigation is consistent with recent new media studies that have emphasized the need for specificity and a nuanced approach to some of the open research issues pertaining to today's world of mediated communication (Dhir, 2016a; Dhir et al., 2015).

The present study investigates and examines those factors that influence user intentions in Facebook photo-tagging. A measurement model was built based on the prior SNS literature (e.g., Cheung, Chiu, & Lee, 2011; Sledgianowski & Kulviwat, 2009) and two well-established theoretical frameworks in the field of IS: the Unified Theory of Acceptance and Use of Technology Version 2 (UTAUT2) (Venkatesh, Thong, & Xu, 2012) and Social cognitive theory (SCT) (Bandura, 1977). Both of these theoretical frameworks have been extensively utilized to study technology use and adoption, for example, mobile payments, online banking, consumer products, e-government, and SNS (Chong & Ngai, 2013; Krishnaraju, Mathew, & Sugumaran, 2013; Shao & Siponen, 2011; Slade, Williams, & Dwivedi, 2013). The comprehensive model was built by using an extensive number of measures based on UTAUT2 and SCT: habit, hedonic motivation, facilitating conditions, social influence, effort expectancy, performance expectancy, social presence, social status, and self-efficacy. This investigation paints a holistic picture of what factors influence the user intentions to use the new media feature of photo-tagging. It gets to the heart of what drives people to tag others in their photos, and what drives their intentions to do so. In other words, the present investigation provides a glimpse into why photo-tagging is popular. The proposed study and its findings are especially relevant for service companies with a presence on social media, administrators and managers of social media, and IT developers and designers.

2. Background literature

2.1. Photo-tagging and adolescents

Photo-tagging is an important aspect of the online possessions and enables Facebook users to manage, personalize, share, and organize their digital photos (Hampton et al., 2012). It also increases the visibility of the shared photos and offers possibilities for additional sharing of digital content (Besmer et al., 2010). Facebook photo-tagging is quite popular among adolescents (Dhir, 2016a) who tend to tag photographs to create self-identity and for self-presentation (Dhir, 2016a; Dhir et al., 2015; Malik, Dhir, & Nieminen, 2016). Prior psychological literature has suggested that online self-presentation is important for adolescents (Dhir, Pallesen, Torshiem, & Andreassen, 2016; Dhir & Torsheim, 2016; Young & Quan-Haase, 2013) since it helps them to achieve different cycles of psychological development (Arnett, 2000; Erikson, 1959). However, despite this importance, prior literature on photo-tagging has focused on young adults and adults (see Dhir, 2016a; Dhir, 2016b; Lang & Barton, 2015). To fill this gap, the present study has chosen adolescent photo-taggers as the target population.

Over the past few years, scholars have begun exploring the motives and reasons behind the rising popularity of photo-tagging. To begin with, Ames and Naaman (2007) found the easy retrieval, easy searchability, easy recall (e.g., event, person, situation, or place), and contribution to the online community as the main motivations behind collaborative photo-tagging. Dhir et al. (2015) identified nine gratifications behind the use of Facebook photo-tagging: likes and comments, social influence, peer pressure, gaining popularity, entertainment, feeling good, social sharing, affection, and convenience. Apart from these studies, we found only one other that has used the technology acceptance model (TAM) in examining the influence of perceived enjoyment, perceived ease-of-use, content generation, retrieving information, and information re-findability in influencing users' attitudes and intentions in social tagging systems (Allam, Blustein, Bliemel, & Spiteri, 2012). However, in comparison, as far as the authors are aware, the user intentions specifically related to Facebook photo-tagging have not previously been studied. The present study fills this research gap.

2.2. Technology adoption models: UTAUT2 and SCT

Prior literature on different theoretical frameworks was extensively reviewed, and two theoretical models − UTAUT2 and SCT − were selected for understanding the user intentions to photo-tag. UTAUT is a refined model that has considered the evolution of the determinants of user intentions over time (Riffai, Grant, & Edgar, 2012). UTAUT unifies previous theoretical models and its empirical findings were capable of justifying up to 70% of the variance in user intentions to use technology (Venkatesh et al., 2003). UTAUT has been criticized mainly for its complexity, as the model contains 41 independent variables for predicting user intentions (Bagozzi, 2007). To address the critics and limitations posed by UTAUT, Venkatesh et al. (2012) reframed a new model, naming it UTAUT2, consisting of seven constructs; four are from UTAUT (performance expectancy, effort expectancy, social influence, and facilitating conditions), while three new constructs (hedonic motivation, price value and habit) were added. Considering that the majority of the consumer behaviors are voluntary, UTAUT2 dropped the "voluntary measure."

In this study, UTAUT2 is considered for understanding the user intentions in the context of photo-tagging for the following reasons. First, UTAUT2 provides a well-established theoretical framework for studying consumer technology adoption, and it has been successfully adapted and validated in the context of different consumer-based technologies (Chong & Ngai, 2013; Krishnaraju et al., 2013; Slade et al., 2013). Second, UTAUT2 is the result of several theoretical frameworks that have been used in the past for understanding the use and