Examining the Antecedents and Consequences of Mobile Social Location Based Services Adoption in the Offline Service Encounter

1. Introduction

Information rich, social media channels have emerged as a highly relevant part of the e-word of mouth landscape for marketers. Technological advances have given rise to mobile marketing and new mobile service applications which have brought profound changes to consumer behavior, offering consumers ubiquitous access to information (Kleijnen et al, 2009; Li and Du, 2012). One such innovation is Mobile Social Location-based Services (MSLBS) delivered by online social networking sites such as Facebook, Google + and Foursquare but accessed offline via sophisticated smartphones in physical ‘real world’ service encounters. Facebook, with its 600 million monthly active mobile users world-wide (Facebook, 2012a), have enabled its users to access one form of MSLBS called ‘check-in’. When users select the Facebook check-in application via their mobile device, they can declare to their online social network the service provider they are currently visiting and post comments about the service experience. Since the launch of Facebook’s MSLBS check-in feature, users have made over 17 billion location-tagged Facebook posts and check-ins around the world (Facebook, 2012 [b]). For example, in the U.S., Los Angeles International Airport has recorded 2,947,000 check-ins to date, while Queen Elizabeth Olympic Park in London has recorded 1 573 00 check-ins via the official Facebook Page for the London 2012 Olympics. MSLBS use by consumers has also spread to a wide range of service categories including restaurants, café’s, gymnasiums and movie theatres.

The emergence of MSLBS in the services marketplace enables important eWOM diffusion opportunities considering that the average Facebook user has 190 Facebook friends with whom they can share experiences via the site (Ugander et al, 2012). Interestingly, users may also opt to select the ‘like’ button on the service provider’s Facebook brand page at the time of checking-in to willingly receive news updates from the service provider and engage in online conversations in a setting akin to an online brand community (de Vries, Gensler and Leeflang 2012; McAlexander, Schouten, and Koenig 2002). Further, service brands such as American Express and Starwood Hotels in the U.S. now incorporate mobile Facebook check-ins into their reward programs (e.g., “Check-in at the hotel and receive points”) instead of providing rewards at the point of sale. Despite the practical significance of MSLBS for service firms and its emerging use in offline service encounters in real-time, no scholarly attention has been given to investigating the drivers or ‘triggers’ in its adoption. New media in its many forms, including mobile, has been argued to be a vital tool in facilitating customer engagement interactions which influences consumer purchasing decisions (Brodie et al, 2013; Hennig-Thurau, et al, 2010; Sashi, 2012). Thus, the purpose of this study is to further our knowledge and understanding of MSLBS adoption by consumers in the context of physical service settings (i.e. using mobile services at the point of service consumption) to inform mobile social media strategy. This being the case, a structural model is developed and empirically tested, showing the antecedents and consequences in the adoption of MSLBS in real-time service encounters using actual customers exhibiting this behavior.

2. Theoretical Framework

The Theory of Reasoned Action model (TRA) is a social psychology intention model for predicting and providing explanations of behaviours, and has strong empirical support spanning numerous domains (Fishbein and Ajzen, 1975; Ajzen and Fishbein, 1980). The TRA model illustrates that the performance of a specific behaviour by an individual is driven by that individual’s behavioural intentions, which is driven by the individual’s attitude
regarding this behaviour (Davis et al, 1989). In this study, we conceptualise four factors; convenience in relationship maintenance, service encounter satisfaction, enjoyment and excitement of the service experience that influence consumer attitudes towards mobile check-in behaviour in real-time physical service encounters. This approach is consistent with other mobile marketing research (Sultan et al, 2009).

2.1 The Effect of Convenience in Relationship Maintenance
Convenience in relationship maintenance refers to a convenient means of satisfying the human need for social relationships using a focal method or technology (Baumeister and Leary, 1995; Krasnova et al, 2010). Prior studies have shown that online social networking sites involve an interpersonal interaction dimension and service the human need for social interactions and relationships. For instance, Rosenberg and Egbert (2011) describe online social networking sites as being dedicated to engaging in relational maintenance and relationship-seeking behaviours. Curran and Lennon (2011) found that the approval of others has a positive effect on attitude toward the adoption of social networking sites, with attitudes then influencing intentions to use the site. Based on this, it can be argued that users of MSLBS are more likely to share life experiences with others for the purpose of maintaining social connectivity and relationships, and the more a user perceives MSLBS as a convenient means of relationship maintenance, the more likely they are to use it to share details of their service experiences in offline service encounters for the purpose of maintaining social connections and relationships, consequently influencing attitude toward use. Thus,

\[ H1: \text{Convenience in relationship maintenance deriving from using checking-in is positively related to attitude toward check-in use} \]

2.2 The Effect of Service Encounter Satisfaction
Service encounter satisfaction is an evaluative and emotional response of a service consumer to a service experience (Oliver, 1997; Cronin et al. 2000). Building on this perspective, Grace and O’Cass (2005) found a positive link between customer satisfaction and service brand attitude in the services context. Thus, it is argued that satisfaction felt by the customer in relation to the service experience will drive attitude toward continued use of Facebook check-in for the purpose of telling others about a positive service experience. Thus,

\[ H2: \text{Service encounter satisfaction is positively related to attitude toward check-in use} \]

2.3 The Effect of Enjoyment
Entertainment from technology use has been identified as a motive for social media adoption (Curran et al, 2011; Teichert et al, 2011). In the broader mobile technology context, fun was found to be an important driver of positive attitude toward the use of mobile devices for internet-related tasks (Chtourou and Souiden, 2010; Zhang et al, 2012). Consistent with these prior studies, we argue that when consumers perceive checking-in using MSLBS as an enjoyable activity in the service encounter, they are more likely to form favourable attitude towards check-in. Thus,

\[ H3: \text{A consumer’s level of enjoyment of MSLBS is check in is positively related to attitude toward check-in check-in use} \]

2.4 The Effect of Excitement of the Service Experience
It is well known in the literature that consumer emotional responses have a strong effect on consumer response behavior including purchasing behaviours, for example, in the context of retail, marketers control various ambient dimensions with the aim of inducing positive emotional responses that lead to desirable consumer behaviours (Wakefield and Baker, 1998). Emotions also influence consumer responses to use technology. For example, Jayawardhena and Wright (2009) found that customer excitement influences return intentions
and positive word-of-mouth activity of online shopping. Research in environmental psychology has shown that environmental stimuli have an influence on the emotional state of customers triggering approach behaviour (Jang and Numkung, 2009; Mehrabian and Russell, 1974). On this basis, we argue that an approach response occurs when a consumer checks-in using MSLBS because of the excitement arising from the service experience. Thus,

\[ H4: \text{Consumer excitement in the service experience is positively related to attitude toward check-in use} \]

2.5 Attitude toward check-in use and Affective Commitment
Affective commitment represents a state where a consumer forms a positive emotional bond with an organization (Mende and Bolton, 2011). This psychological bond acts to stabilize consumer behaviours toward a focal organisation and eliminate consumer temptation toward competing alternatives in the market (Bateman, Gray, Butler, 2011). A service customer who checks-in on Facebook and posts a positive comments regarding the service experience is becoming more involved with the service brand as they are making the actively directed effort of executing this behaviour. This is akin to a scenario where a customer posts positive comments on a brand community website, thereby enhancing their involvement and commitment toward the firm. Along these lines, Zhou et al (2012) found that when users of an online brand community were more committed to the community, this positively influences their commitment to the brand. Therefore, we argue that positive attitude toward checking-in will lead to commitment to the service brand. Thus,

\[ H5: \text{Attitude toward check-in use is positively related to commitment.} \]

2.6 Attitude toward check-in use and Social Contagion
Social contagion refers to the process by which consumers influence each other to adopt and use a product in a specific way (Langley et al, 2012), which has become an effective in generating product and service adoption and use. For example, Bell and Song (2007) found that social contagion has an influence on customer trial of online grocery retailing. Social contagion in the context of social media can be conceptualised as the influence spreading from one social media brand page fan to others, via individuals ‘liking’ and commenting on brand posts on the sites (de Vries et al, 2012). This type of activity often involves the active or passive amplification by other parties of an initial marketing action by a firm (Kietzmann et al, 2012). Firms are increasingly leveraging ‘viral’ and ‘network’ effects in their marketing strategies as it is thought that word-of-mouth ‘buzz’ and social contagion effects can significantly influence the adoption of products (Aral and Walker, 2011). Aral and Walker (2011) found that Facebook’s viral capabilities have a significant effect on social contagion and peer influence in the context of product diffusion on the site. Drawing on these findings, we argue that the stronger a user’s attitude toward checking-in, the more they expect their online contacts to ‘like’ their check-in activity, leading to social contagion effects. Thus,

\[ H6: \text{Attitude toward check-in use is positively related to social contagion effects.} \]

2.7 Attitude toward check-in use and Offline Word-of-Mouth Behaviours
Customers can spread information in relation to a business, which other customers and prospects can access, and use, which influences the reputation of the business (van Doorn et al, 2010). This word-of-mouth activity (in online and offline channels) assists firms in attracting and retaining customers over time (Wangenheim and Bayon, 2007; van Doorn et al, 2010). This activity is of strategic importance as van Doorn et al (2010) argue that WOM behaviours and actions aimed at generating and disseminating information (e.g. blogging) affect purchase behaviour of customers as well as other potential customers, which consequently improves customer equity. It has been well established in the marketing literature that offline word-of-mouth communication plays a significant role in influencing
customers’ buying decisions because the message and its sender is seen by consumers as more trustworthy and unbiased than firm driven communication (Richins and Root-Shaffer, 1988; Hennig-Thurau et al, 2004). Based on the above discussion, we propose that,

\( H7: \) Attitude toward check-in use is positively related to offline word-of-mouth activity

### 2.8 Attitude toward check-in use and Continued Use Intentions

The attitudes to intention link has been well established in the technology adoption literature across various contexts including mobile commerce (Zhang, Zhu and Liu, 2012). This result has also been found in the context of social networking site research (e.g. Pinho and Soares, 2011, Lorenzo-Romero et al, 2011). Leaning on these findings, we argue that since positive attitude toward use of a particular technology is a major determinant of use by a consumer whilst negative attitude toward a use of a technology will lead to rejection by a consumer (Davis, 1993; Lee and Chang, 2011), that this link will apply in the context of the MSLBS user checking-in again next time they visit the service provider. Thus,

\( H8: \) Attitude toward check-in use is positively related to continued use intentions

### 3. Method, Analysis and Results

A questionnaire was administered to a convenience sample of students (yielding 192 responses) who have recent usage experience of Facebook check-in within service encounters and posted a positive comment in the past 6 months from a large Australian University. Consistent with Cheung, Chui and Lee, (2011), students were deliberately selected as this group is representative of the wider group of MSLBS users in terms of demographic, socio-economic and technology use profile. Items to measure each construct were drawn from the extant literature. Analysis was conducted Partial Least Squares (PLS) employing SmartPLS V2 (Ringle, Wende, and Will 2005) which is highly suitable for explaining complex relations between multiple manifest and latent variables, especially when the emphasis of a study is the development of theory (Hair et al, 2012). To test the inner model, an examination of regression weights, and bootstrap critical ratios was undertaken. As shown in Table 1, the significance of individual paths for each variable showed that all paths were greater than the .015 (1.5%) recommended cut-off, with bootstrap critical ratios greater than 1.65 (p <.05), while H4 was not. The results indicate acceptable magnitudes for the inner-structural model at .17, which is greater than the recommended cut-off of .10 (Falk and Miller 1992).

### Table 1: PLS Hypotheses Results

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Predictor Variables</th>
<th>Predicted Variables</th>
<th>( \beta )</th>
<th>( R^2 )</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Convenience of Relationship maintenance</td>
<td>Attitude</td>
<td>0.22</td>
<td></td>
<td>2.66**</td>
</tr>
<tr>
<td>H2</td>
<td>Service Encounter Satisfaction</td>
<td>Attitude</td>
<td>0.18</td>
<td></td>
<td>2.19**</td>
</tr>
<tr>
<td>H3</td>
<td>Excitement</td>
<td>Attitude</td>
<td>0.13</td>
<td></td>
<td>1.67*</td>
</tr>
<tr>
<td>H4</td>
<td>Enjoyment</td>
<td>Attitude</td>
<td>0.15</td>
<td>0.23</td>
<td>1.51^</td>
</tr>
<tr>
<td>H5</td>
<td>Attitude</td>
<td>Affective Com.</td>
<td>0.38</td>
<td>0.14</td>
<td>5.35**</td>
</tr>
<tr>
<td>H6</td>
<td>Attitude</td>
<td>Social Contagion</td>
<td>0.22</td>
<td>0.05</td>
<td>2.80**</td>
</tr>
<tr>
<td>H7</td>
<td>Attitude</td>
<td>Offline WoM Behaviour</td>
<td>0.35</td>
<td>0.12</td>
<td>4.43**</td>
</tr>
<tr>
<td>H8</td>
<td>Attitude</td>
<td>Continued use intentions</td>
<td>0.54</td>
<td>0.29</td>
<td>8.54**</td>
</tr>
</tbody>
</table>

N.B. ^ Not significant; * Significant 1.65, p < 0.01; ** Significant 1.96

### 5. Discussion and Implications

The empirical results of this study provide first insights into how service firms, and practitioners, can facilitate eWOM diffusion via MSLBS in real-time service encounters.
Seven of the eight hypothesised paths were supported showing convenience in relationship maintenance having the largest effect on attitude ($\beta=.22$), followed by service encounter satisfaction ($\beta=.18$) and excitement ($\beta=.13$). However, H4 (Enjoyment to Attitude) was not supported ($t < 1.65$). The findings show that an important consideration is the social nature of MSLBS used in real-time service encounters where consumers use mobile services to communicate with their social network about their service experiences, as this variable had the largest effect on attitudes toward check-in use. Further, the results also show that service encounter satisfaction followed by emotion influence attitudes towards check-in use. Importantly, the results show that attitude toward check-in use leads to continued use intention ($\beta=.54$), affective commitment ($\beta=.38$), offline WoM ($\beta=.35$) and social contagion ($\beta=.22$), demonstrating the important outcomes that service marketers can achieve by fostering positive attitude toward check-in use.

Unlike the passive consumer of the past, the consumer now performs the role of brand message co-creator, advocator and multiplier, eWOM, viral online message diffusion and online brand communities (Jahn and Kunz, 2012). This technology-enabled behaviour exhibited by the consumer is now playing an increasingly important role in real time service encounters with the emergence of mobile services. It has particular relevance for service industries where WoM plays an important role in influencing consumer preference and behavior due to the intangible nature of services (Bansal and Voyer, 2000). From a theoretical perspective, the results of the study highlight, as supporting the conference theme, the ‘relevance’ and opportunity for service marketers to embrace MSLBS as a tool to encourage customer engagement behaviours to achieve favourable outcomes. Service marketers should understand the role of MSLBS in their customer’s lives as a tool for convenience in relationship maintenance and aiming to appeal to their customer's social motives for checking-in in encouraging check-in activity and positive eWoM diffusion. From a practitioner perspective, the findings highlight the importance of firm-controlled service performances to activating mobile check-in behaviour including the provision of high quality service delivery and servicescape activities which have been shown in the services marketing literature to drive the variables measured in this study, service satisfaction and emotion outcomes. Thus, focus on delivering high quality service experiences to yield customer service encounter satisfaction and encourage excitement in the service experience is expected to form a basis for encouraging check-in activity and positive eWoM diffusion by consumers.

### 6. Limitations and Future Research Directions

It is acknowledged here that the selected antecedent drivers are by any means exhaustive. Future research should incorporate a qualitative phase, allowing researchers to gather data of necessary richness and depth to develop a more comprehensive framework. Future research should further develop this area of research examining broader samples (e.g. demographic, personality and cultural groups) and consider difference between usage behaviour types (e.g. habitual vs occasional users) along with differences in the drivers of check-in behavior between different service categories. Studies may also investigate additional conditions and triggers which act as drivers of check-in behavior including motives to help the service brand, service quality and personal characteristics such as opinion leadership traits. Furthermore, an interesting avenue to investigate would be to determine if the customer ‘liked’ the service provider’s Facebook brand page, which has important brand advocacy implications, relationship marketing opportunities and possibilities for co-creation with customers via the interactive nature of a brands social networking website platform.
References


Bateman, P.J., Gray, P.H. & Butler, B.S. 2011. The Impact of Community Commitment on Participation in Online Communities. Information Systems Research. 22(4), 841-854


