Investigating Online Social Media Network Acceptance in the Tourism and Hospitality Industry in Oman

Salim Al-Hajri¹, Abdelghani Echchabi², Mohammed Mispah Said Omar¹ & Abdullah Mohammed Ayedh³

¹ A’Sharqiyah University, Oman
² Higher Colleges of Technology, United Arab Emirates
³ Islamic Science University of Malaysia, Malaysia

Correspondence: Abdelghani Echchabi, Higher Colleges of Technology, United Arab Emirates.

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Abstract
In the emerging tourism and hospitality industries such as that of Oman, companies can market their services and products using the Social Media Networks (hereafter SMNs) and engage customers to identify their requirements online. Oman recognizes the benefits of SMNs in the tourism and hospitality industry and it has made major efforts to ensure the success of this newly introduced industry like its neighboring country the United Arab Emirates (hereafter UAE). Even though, the hospitality industry is vital to the economy of Oman, the Omani hospitality industry continues employing the conventional approach while conducting transactions. Understanding the influence of accepting such an innovation in the hospitality industry in Oman raises a fruitful research question to investigate. Therefore, it is this study’s objective to examine the influence of SMNs Acceptance in the tourism and hospitality industry in Oman. For the attainment of the study’s objective, the study uses a survey questionnaire to 200 respondents that have visited Oman recently, where 182 responses were properly filled and returned. The structural equation modeling (hereafter SEM) had been utilized to analyze the collected data. The results reveal that the respondents had high degree of satisfaction with their travel experience and they intended to continue using SMNs for tourism purposes. Nonetheless, it was found that the major factors influencing their decisions are: perceived usefulness, perceived ease of use, subjective norms and reliability.

Keywords: tourism, Oman, hospitality, social media network

1. Introduction
In order to understand the SMNs acceptance in the tourism and hospitality Industry in Oman, a broader knowledge of the SMNs in the tourism and hospitality industry is required. It has become apparent that the Internet technology has radically transformed the way today’s tourists search for information and organizes their tourism travels. Predominantly, the rapid growth of the Internet has led most tourism and hospitality industries globally to implement the SMNs, and in a major way, tourists have utilized the SMNs to organize their tourism and business travels to market and position their products and services.

Nowadays, the SMNs are gaining wider popularity in the tourism and hospitality industry in the developing nations; for examples the UAE, South Korea, and Singapore. In these nations, the SMNs are booming in the tourism and business sector where tourists and business people use various forms of social media including forums such as Blogs, Facebook, Twitter, and YouTube where their travel experiences are shared online. Based on the statistics published in January 2018, the percentage of active SMNs usage penetration reached approximately 90%, 84% and 83% in the UAE, South Korea, and Singapore respectively (www.statista.com), and experts predict that by 2020, the users of the SMNs will grow to about 4.7% in the market.

In response to the SMNs and their applications development, the tourism and hospitality industry in Oman will have major global challenges to accept it as a medium to design and deliver effective social experience and entertainment for their users. Abou-Shouk and Hewedi (2016) elaborated on these challenges by highlighting that the SMNs have the potential to make global markets more interactive. For example, in January 2018, the top 10 popular SMNs were ranked by number of users (in millions) as follows:
With 2.167, 1.5, and 1.3 billion active users, Facebook, YouTube, and WhatsApp respectively were ranked first, second and third most popular SMNs in the market. Interestingly, the SMNs are becoming increasingly mobile. For example, the statistics of January 2018 show that with approximately 1.3 billion mobile monthly active users, WhatsApp was ranked by the experts, the most popular mobile messenger application globally. Furthermore, consultants predict that, by 2020 there will be over 5 billion people using SMNs globally, nearly about two-thirds of the world’s population (www.pwc.com).

2. Literature Review

The broad definition of SMNs is that, it is the way individuals interact among themselves through networks and virtual communities where there are creations, sharing, exchanges and comments.

Specifically, the literature has identified six major benefits of the SMNs as mentioned below:

1) Collaborate and share information (Li & Wang, 2011; Thevenot, 2007).
2) Upload photos and post new blog entries (Bodnar, 2010).
3) Search, organize, share travel stories and experiences (Leung et al., 2013).
4) Online communities and social bookmarking sites (Leung et al., 2013).
5) Social knowledge sharing sites (Leung et al., 2013).
6) Managing customer relations (Wang and Fesenmaier, 2004)

On a large scale, the SMNs can potentially play a major role, where tourists organize their tourism trips, and tourism and hospitality industries respond to their needs in the market (Leung et al., 2013; Xiang and Gretzel, 2010).

Studies of the SMNs in the tourism (Cao et al., 2017; Yoon, 2015; Trusov, 2009) indicate that “social media has become a powerful source of word of mouth communication. Since social media provides sites for consumers to share their experiences and opinions with others, it can have a positive influence on consumers if there are satisfied customers or a negative influence on others if there are unsatisfied customers” (Trusov et al., 2009, as cited in Lim et al., 2012, p197).

A study done by Xiang and Gretzel (2010) aims at investigating the extensiveness of social media appearing on the results of search engines when travel-related searches are made. They focused on the information searching for the tourism planning in the USA. They contended that these SMNs help tourists and travelers in “posting and sharing their travel-related comments, opinions, and personal experiences, which then serve as information for others’. They supported the notion that search engines are very important tool for the tourism and hospitality industry to “generate upstream traffic to tourism Websites” and make marketing decisions. The authors noted that there is a lack of studies in the area of SMNs to explain online travel information search. At the end of their study, they found that search engines direct travelers to the SMNs and suggested that the SMNs could have a vital function in the tourism and hospitality industry.

Another interesting study by Lim et al. (2012) who examine the influence on destination branding by social media focuses on consumer-generated videos versus destination marketer-generated videos. From an analysis of consumer perception towards the study’s interest, i.e. destination brands created by destination-marketing organization videos.
and consumer-generated videos they found that consumer comments on the SMNs are very important. This means that SMNs are important for the tourism and hospitality industry.

Similarly, a study done by Yazdanifard and Yee (2014) examines the effect on the hospitality and tourism sector by social networking sites, with a focus on the impact of SMNs on Hospitality and Tourism Industries in Malaysia. In their study they cited that “there are many consumers who see social networking sites as the most trusted source of information due to information provided by people they know or at least have a passing acquaintance with, and are especially going to trust the people that are amongst their relatives and friends. Besides, attracting or detracting an individual, online reviews also provide information to an individual so they can picture their destination” (Manap and Adzharudin, 2013).

In Oman, Al-Badi et al. (2017) investigated the SMNs from the tourism aspect. Specifically, the study analyzes how social media is used in Oman to stimulate local tourism. From an analysis of 176 respondents, they found most respondents used SMNs for collecting travel information, plan travel trips, entertainment, share photos and comments and socializing. They concluded that privacy and culture are the two major concerns raised in their study.

As such, the extensive review of the existing related literature indicates that studies in the Omani concerned are very scarce with the exception of the above mentioned study. In addition, the study focuses on local tourists, while the current study targets international tourists with previous visits to Oman.

It is worth mentioning that recently, Oman has gained popularity in the tourism industry for its famous historical heritage, culture, castles, beaches and desert safari. In 2017, the total number of tourists visiting Oman reached 3.3 million (Times of Oman, March 4, 2018) and the number is expected to increase.

However, the implementation of SMNs to design and deliver these above promised benefits in the tourism and hospitality industry has recently been questioned (Ernst and Young, 2012). They highlighted two major challenges, which could be an obstacle for the tourism industry to implement, namely, security and trust. Other studies (Ladan, 2015; Jabee and Alam, 2016) also criticized the SMNs implementation because of the security and trust issues.

The tourism and hospitality industry of Oman is still lagging far behind its neighboring countries such as the UAE and Saudi Arabia. This raises an interesting question of what are the factors that might influence the online SMNs acceptance in the tourism and hospitality industry in Oman. Hence, it is the objective of this study to answer the above raised question and contribute to the literature by:

1) Providing solution to the said issue, namely, the lack of online SMNs acceptance in the Omani tourism industry;
2) Expanding body of knowledge in the area of online SMNs in the Omani tourism industry.
3) Expanding Diffusion of Innovation Theory and Technology Acceptance Model in the Omani tourism SMNs context.

The organization of this study is as the followings: the next section will provide a discussion on the research framework. Section three explains in details of the methodology used in assessing the impact of SMNs acceptance on the tourism and hospitality industry in Oman. Section four presents the results obtained from this study. Section five discusses the conclusions and recommendations for future research are highlighted.

3. Theoretical Framework

The studies on technology and innovative products acceptance and adoption have been widely conducted in various settings and using different models. These models mainly include the Theory of Reasoned Action (TRA), Theory of Planned Behaviour (TPB), Technology Acceptance Model (TAM), and Diffusion of Innovation Theory (DIT).

The Theory of Reasoned Action (TRA) was advanced by Fishbein and Ajzenin (1975). Afterwards, in 1980, to support the validity and reliability of their theory to refine their model, they applied empirical evidence. They further demonstrated that Behaviour Intention (BI) of a person is influenced by their attitude and subjective norm.

Ajzen (1991) subsequently noted some issues with the TRA. He speculates that a person’s behaviour is restrained by the person himself. Building on this assumption he changed the previous model and named it Theory of Planned Behaviour (TPB). He then included another dimension called Perceived Behavioural Control (PBC); and the definition is that, it is the "presence or absence of requisite resources and opportunities" (Ajzen and Madden, 1986, p. 457).

Later on, Davis (1989) developed another theory namely, Technology Acceptance Model (TAM) to evaluate the significance of system characteristics on users’ computer technology acceptance. In this model he presupposes that behavioural intention (BI) to accept a computer technology is influenced by two main determinants called, perceived usefulness, and perceived ease of use.
Likewise, the Diffusion of Innovation Theory (DIT) has been formulated by Rogers (1995). The author defines his model as "the process by which an innovation is communicated through certain channels over time among the members of social systems" (p. 5). The author then speculates that the adoption of an innovation is determined by the five perceived innovation attributes; namely observability, compatibility, trialability, relative advantage, and complexity.

Accordingly, this research had selected four constructs from past studies relating to the SMNs acceptance and usage; and those are perceived ease of use (PEOU) and perceived usefulness (PU) (Davies, 1989; Igbaria, 1997), reliability (Rogers, 1995), and subjective norms (Ajzen, 1991). Therefore, these four dimensions were examined from the viewpoint of Oman visitors whom are the target of the study.

Figure 2. Theoretical model

H1: Perceived usefulness has a positive influence on the tourists’ intention to use social networks for tourism purposes.

H2: Perceived ease of use has a positive influence on the tourists’ intention to use social networks for tourism purposes.

H3: Subjective norms have a positive influence on the tourists’ intention to use social networks for tourism purposes.

H4: Reliability has a positive influence on the tourists’ intention to use social networks for tourism purposes.

H5: The respondents are indifferent in using social networks for tourism purposes.

In summary, these dimensions will be jointly examined in answering the query: what are the factors that have a significant influence on the SMNs acceptance in the Omani tourism and hospitality industry.

4. Research Methodology

It is the study’s objective to examine the above identified key factors which have the potential to influence the online SMNs acceptance in the tourism and hospitality industry in Oman. It covers a sample of 200 respondents and applies SEM approach to analyse the data.

The current study focuses on individuals who have visited Oman in the recent years. The study used snowball and convenient sampling, where the questionnaire is distributed by tourism management authorities to tourists who have recently visited Oman, and they are gently requested to resend the questionnaire to their friends that meet the same criteria. This study had targeted 200 respondents, but only 182 questionnaires had been appropriately responded and received by this study. Hence, this study’s response rate is 91 percent.

The questionnaire had been designed for the collection of data on tourist perception towards the characteristics of social media networks in the area of tourism. The data were also collected to gauge the tourists’ intention in adopting and/or continuing utilizing social media networks for tourism purposes in the future. To measure the above highlighted issues, Likert scale had been employed; (1 = strongly disagree and 5 = strongly agree). 31 items had been identified, and majority of the items had been assimilated from past studies done in other nations. The items were also adopted from the tourism and SMNs literature with necessary alterations made to suit the Omani context.
questionnaire’s second section is related to respondents’ profile, e.g. gender, age, education level, extent of usage of social media networks, etc. English language questionnaire had been used in the data collection.

The collected data were then examined through the SEM and one sample $t$-test. The techniques were chosen based on Hair et al. (2010) and other related research. This study’s analysis was carried out using AMOS 18 and SPSS 18.

5. Results

5.1 Respondents’ Profile

Table 1 which depicts the respondents’ demographic data indicates that the male respondents are 66 percent, while female respondents are 34 percent. Most of the respondents aged between 20 and 30 years old (46.1%), between 31 and 40 years old (30.3 percent), and between 41 and 50 years old (11 percent).

As for education level, bachelor’s degree holders (55.2%), Master’s degree (22%), Ph.D holders (13.8%) and secondary school certificate holders (12%).

With regard to social media networks memberships, 90.7 per cent belong to some social media networks, while 9.3 per cent are not members of any social media network. It is noteworthy that 62.9 per cent are members of social media networks for more than one year, 24.2 per cent were members of SMNs for 1 to 6 months, 8.7 per cent of the respondents for less than 1 month, and 4.2 per cent of the respondents between 7 months to one year.

Table 1. Profile analysis

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Categories</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>34</td>
</tr>
<tr>
<td>Age</td>
<td>Less than 20 years</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>20 to 30 years</td>
<td>46.1</td>
</tr>
<tr>
<td></td>
<td>31 to 40 years</td>
<td>30.3</td>
</tr>
<tr>
<td></td>
<td>41 to 50 years</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>More than 50 years</td>
<td>8.2</td>
</tr>
<tr>
<td>Education level</td>
<td>Secondary School</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Bachelor’s degree</td>
<td>52.2</td>
</tr>
<tr>
<td></td>
<td>Master’s degree</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Ph. D</td>
<td>13.8</td>
</tr>
<tr>
<td>Membership of social media</td>
<td>Yes</td>
<td>90.7</td>
</tr>
<tr>
<td>networks</td>
<td>No</td>
<td>9.3</td>
</tr>
<tr>
<td>Period using social media</td>
<td>Less than 1 month</td>
<td>8.7</td>
</tr>
<tr>
<td>networks</td>
<td>1 to 6 months</td>
<td>24.2</td>
</tr>
<tr>
<td></td>
<td>7 months to 1 year</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>More than 1 year</td>
<td>62.9</td>
</tr>
<tr>
<td>Daily usage of social media</td>
<td>Less than 1 hour</td>
<td>13.7</td>
</tr>
<tr>
<td>networks</td>
<td>1 to 2 hours</td>
<td>24.2</td>
</tr>
<tr>
<td></td>
<td>3 to 4 hours</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>5 to 6 hours</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>More than 6 hours</td>
<td>7.1</td>
</tr>
</tbody>
</table>
5.2 Reliability and Validity Measures

Before we estimate the study’s structural model through the SEM, we analysed the validity of the model based on the four major elements, namely, convergent validity, discriminant validity, face validity, and nomological validity.

Hair et al., (2010) highlighted that convergent validity measures the extent of the correlation of a construct’s two measures. He suggested that there are handful of techniques to examine convergent validity, among these are factor loadings, average variance extracted (AVE), and reliability measures (Cronbach Alpha for this study). Subsequently, he advised that a Cronbach Alpha is acceptable if it is 0.6 or more. Likewise, for the AVE, it is 0.5 or more.

In this respect, as presented in Table 2, the values of Cronbach Alpha are from 0.734 to 0.865. Moreover, the AVE values range between 0.51 and 0.62. Since each factor loading exceeds 0.5, therefore we may consider that all convergent validity requirements are met. Hence, the model has attained convergent validity.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Cronbach Alpha</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived usefulness</td>
<td>0.734</td>
<td>0.51</td>
</tr>
<tr>
<td>Perceived ease of use</td>
<td>0.858</td>
<td>0.54</td>
</tr>
<tr>
<td>Reliability</td>
<td>0.826</td>
<td>0.61</td>
</tr>
<tr>
<td>Subjective norms</td>
<td>0.865</td>
<td>0.57</td>
</tr>
<tr>
<td>Behavioural intention</td>
<td>0.851</td>
<td>0.62</td>
</tr>
</tbody>
</table>

In addition, Hair et al., (2010) noted that discriminant validity is the assessment on the measures of construct being different from each other. The assessment of discriminant validity can be done through various approaches. In this study, the constructs’ correlations are set at 1. A comparison on the fit indices for the restricted models and baseline is then conducted. Should there is significant difference in the fit indices of the two models, discriminant validity has been attained. Table 3 shows that for the baseline model, the Chi square value is 985.758 with 421 degrees of freedom. Meanwhile for the restricted model, the Chi square value is 1,314.233 with 431 degrees of freedom. Through the comparison in the difference of Chi square with the tabulated Chi square value that corresponds to degree of freedom 10, and confidence margin 0.05, i.e. 18.31; the study concludes that there is significant difference in the fit indices between the restricted model and baseline. As such, this model has attained discriminant validity. In addition to the two measures of validity, researchers are also analysing nomological validity and face validity.

<table>
<thead>
<tr>
<th>Elements</th>
<th>Chi square</th>
<th>DF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline model</td>
<td>985.758</td>
<td>421</td>
</tr>
<tr>
<td>Restricted model</td>
<td>1,314.233</td>
<td>431</td>
</tr>
<tr>
<td>Change</td>
<td>328.475</td>
<td>10</td>
</tr>
</tbody>
</table>

Finally, the Comparative Fit Index (FIT) of the model is 0.829, while the RMSEA is 0.082. As such, the overall model has been validated as both values are acceptable (Broyles et al., 2010; Singh et al., 2011; Kim and Forsythe, 2010).

5.3 Hypotheses Testing

For the purpose of hypothesis testing, the path analysis was applied using SEM for the first four hypotheses, and the fifth hypothesis was tested using the t-test. In relation to this, Table 4 shows that the t-value of each item, and the behavioural intention construct have significant probability values. On that account, hypothesis 5 is supported. This shows that there is satisfaction among the respondents in regard to the using of SMNs for the planning of their tourism activities. Additionally, there are also enthusiasm and intention for continued usage of SMNs among the respondents.
Table 4. Descriptive analysis and t-test

<table>
<thead>
<tr>
<th></th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT1</td>
<td>11.543</td>
<td>181</td>
<td>.000</td>
<td>.698</td>
<td>.58, .82</td>
</tr>
<tr>
<td>INT2</td>
<td>13.229</td>
<td>181</td>
<td>.000</td>
<td>.797</td>
<td>.68, .92</td>
</tr>
<tr>
<td>INT3</td>
<td>12.326</td>
<td>181</td>
<td>.000</td>
<td>.769</td>
<td>.65, .89</td>
</tr>
<tr>
<td>INT4</td>
<td>14.121</td>
<td>181</td>
<td>.000</td>
<td>.830</td>
<td>.71, .95</td>
</tr>
<tr>
<td>INT5</td>
<td>11.516</td>
<td>181</td>
<td>.000</td>
<td>.780</td>
<td>.65, .91</td>
</tr>
<tr>
<td>INTENT</td>
<td>15.792</td>
<td>181</td>
<td>.000</td>
<td>.77473</td>
<td>.6779, .8715</td>
</tr>
</tbody>
</table>

Table 5 and Figure 2 summarise the path analysis. The findings signify that perceived usefulness significantly and positively affects the intention to use SMNs for tourism and hospitality industry purposes. Hence, hypothesis 1 is supported. This is in line with Davies (1989). This finding reveals that the usefulness of SMNs in the tourism compared to the traditional means of organising and planning travel arrangements, is highly perceived by the tourists in Oman, and also plays a significant role in influencing their decision in using SMNs for planning travels to Oman. The usefulness of SMNs in this context is illustrated in terms of improving the travel experience by providing continuous updates of the best available offers regarding hotels and airlines tickets, providing information of the major attractions in different locations, which helps in significantly reducing the overall travel cost. In addition, using SMNs for travel purposes helped the tourists to communicate with individuals with similar interests worldwide.

On the other hand, the perceived ease of use is also found to have a significant positive influence on the intention to use SMNs for tourism and hospitality industry purposes. Hence, hypothesis 2 is supported. These findings are in agreement with the results previously published by Davies (1989). This implies that the ease of using and understanding SMNs significantly impact the decision of Oman visitors to use these SMNs. It is noteworthy that most of the respondents perceive SMNs to be easy to use, and that they can easily achieve their travel objectives using SMNs.

Similarly, subjective norm significantly and positively affects the intention to use SMNs for tourism and hospitality industry purposes. Accordingly, hypothesis 3 is supported. As such, this is consistent with the findings of Rogers (1995). This signifies that the opinion of relatives, friends and peers significantly influence the decision of Oman visitors to use SMNs to plan their trips.

Moreover, the findings also reveal that reliability significantly and positively affects the intention to use SMNs for tourism and hospitality industry purposes. Hence, hypothesis 4 is supported. These findings are in agreement with the results previously found by Rogers (1995). This result indicates that the tourists not only perceive the SMNs to be a reliable source of accurate and correct information, but also believe that the underlying systems and mechanisms used by these SMNs are robust, and are unlikely to default.

In summary, each of the initial four variables mentioned in the model had been discovered to have a significant impact on the intention of the Oman visitors to use SMNs to plan their trips instead of the traditional travel planning methods.

Table 5. Standardised total effects

<table>
<thead>
<tr>
<th></th>
<th>Perceived Usefulness</th>
<th>Perceived Ease of Use</th>
<th>Subjective Norms</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioural Intention</td>
<td>.229</td>
<td>.456</td>
<td>.517</td>
<td>.276</td>
</tr>
</tbody>
</table>
6. Discussions and Conclusions

There are two objectives to this study, i.e. to explore the intention of Oman visitors to use the SMNs for tourism purposes, and to identify the variables that may impact their decisions. In general, it was found that there is satisfaction among the respondents in regard to their experience, and they intend to continue using these networks for tourism purposes. Nonetheless, it was also discovered that the key factors influencing the respondents’ decisions are perceived usefulness, perceived ease of use, subjective norms and reliability.

The study results provide significant implications to the industry stakeholders, regulators and policy makers. In particular, this research analyses the model of diffusion of innovation theory (Rogers, 1995) and technology acceptance (Davis, 1989) in a different environment, and research area that is scarcely studied. As such, this current research has proven that this theory is applicable to this new setting. Additionally, this research gives an insight into the vital aspects to be emphasised upon to improve the SMNs usage to organise trip to Oman and similar settings by the policymakers and stakeholders. Specifically, the ease of access and use of SMNs, their significant usefulness, and most importantly their reliability. In this regard, it has been remarkably noted that travel information is not always easily accessible, and easy to compare, whether air flights, hotel rooms rates, or even travel packages, even though some innovative solutions have been developed by some providers, it is still causing a significant proportion of tourists to resort to classic booking services. It is noteworthy that these areas were not particularly emphasised in the previous studies of the Omani setting (e.g. Al-Badi et al., 2017).

There are several limitations in the current research where future studies could consider. Firstly, the study’s sample is quite small, hence the findings are not generalizable to all Oman visitors. As such, it is advised that future studies to conduct their analyses with a greater number of respondents so that the results could be apply to the population. It is also suggested that future research of this area of study to employ other models, and in different context.

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