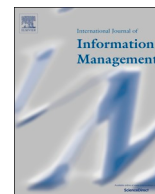




ELSEVIER

Contents lists available at ScienceDirect

International Journal of Information Management

journal homepage: www.elsevier.com/locate/ijinfomgt

Why do small and medium enterprises use social media marketing and what is the impact: Empirical insights from India



Sheshadri Chatterjee, Arpan Kumar Kar*

Department of Management Studies, Indian Institute of Technology Delhi, India

ARTICLE INFO

Keywords:

Social media marketing
 Digital marketing
 Social media impact
 Technology impact
 Small and medium enterprises

ABSTRACT

Increasingly firms are looking to use social media to connect with different stakeholders as plans on building presence on such platforms are becoming part of top-level strategy. The purpose of this study is to identify the factors that would help the Small and Medium Enterprises (SMEs) of India to adopt Social Media Marketing (SMM) mechanisms for improving their business impact. Adoption of SMM by SMEs has considerable impact on the improvement of business outcome of the SMEs. A theoretical model has been developed with the help of theory borrowed from TAM and UTAUT2 with some modifications to explore this impact through business performance, sales, connect with customers, identify customer needs and creativity of the employees. The theoretical model has been validated empirically using a survey of 310 firms and subsequent analysis have been carried out using structured equation modelling. The results highlight that perceived usefulness, perceived ease of use and compatibility positively affect impact of SMM after adoption by the SMEs. The facilitating conditions have insignificant impact whereas cost has a significant but negative impact on the use of SMM by SMEs. Since there are a few studies in this context, the study contributes to existing literature on the impact of SMM in SMEs in an emerging economy.

1. Introduction

In India, Small and Medium Enterprises SMEs are those enterprises where investments in machinery or equipment and in plant lie between INR 25 Lakhs ~USD 35000 to INR 10 Crores ~USD 1.4 million concerning to manufacturing industries. For SMEs, concerning to service sector the investments lie between INR 10 Lakhs ~USD 14000 to INR 5 Crores ~USD 0.7 million. These limits are in conformity with Micro, Small & Medium Enterprises Development Act, 2006; notified in Sept 2006. The role of these SMEs in India is vital so far as social and economic developments of India are concerned. These enterprises have effective contribution towards export activities, towards employment generation and in productive growth (Junaidah, 2007) SMEs effectively contribute to improve nation's economic health. It enriches inventions as well as innovation (Massey et al., 2004; Stieglitz, Mirbabaie, Ross, & Neuberger, 2019). SMEs have ample opportunities to employment generation at a low cost and as such SMEs in India may be considered to have emerged as a vibrant and dynamic sector of economic growth (Das, 2007; Srinivasan, Rutz, & Pauwels, 2015; Ng, Kee, & Ramayah, 2019; Adla, Gallego-Roquelaure, & Calamel, 2019).

In India, 95 % enterprises are categorized as SMEs and in manufacturing sector, they are adding 40 % value (Singh, Garg, & Deshmukh,

2010). The characteristics of SMEs are highly heterogeneous with high flexibility along with appreciable innovative entrepreneurial spirit. SMEs have variety of sizes having different technological levels with varied characteristics of services and products. As a result, it helps to spread industrialization in backward and rural areas, reducing regional imbalances. This helps to provide equitable and fair distribution of wealth and national income. Study reveals that during 2016, SMEs in India have contribution of 40 % towards total exports, 45 % on manufacturing output, contributing 8% of GDP (Srinivasan et al., 2015). Thus, improvement of the health of SMEs would bring in economic growth of the country. However, ironically, in India SMEs have low technological competence with limited resources. As such, to improve the growth of SMEs in all sectors like effectiveness, efficiency, competitive advantage; applications of modern Information and Communication Technology (ICT) are considered necessary (Consoli, 2012; Ongori & Migiro, 2010).

ICT has many and varied applications (Alam & Noor, 2009). Among these, social media is considered as one of the important ingredients of ICT that has appreciable impact on business. In this perspective, it is necessary to investigate if the use of social media can help the SMEs of India towards their overall growth. It has been ascertained that, there exists very few studies how the use of social media can improve the

* Corresponding author.

E-mail addresses: sheshadri.academic@gmail.com (S. Chatterjee), arpan_kar@yahoo.co.in (A. Kumar Kar).

overall activities of the SMEs of India (Das, 2007; Singh et al., 2010; Selvanayagam & Rehman, 2019; Alhakimi & Mahmoud, 2020). This gap in existing literature is needed to be addressed as findings from India would also be generalizable to other similar emerging economies.

However, in the global context, different studies highlighted the advantages of social media for the business growth of SMEs. Using social media platform, consumers can directly connect with new products, services and brands easily (Aral, Dellarcas, & Godes, 2013; Aswani, Kar, Ilavarasan, & Dwivedi, 2018; Sawhney & Prandelli, 2000). In this perspective, it is pertinent to investigate if use of social media can help the SMEs of India towards their overall growth. Through the help of social media, SMEs can get feedbacks from the consumers to improve their brands (Massey et al., 2004). SMEs would use social media if they perceived it to be less expensive, easy to use having compatibility. Use of social media in business activities has introduced new business models like 'social commerce'. This is often considered as a means to have facilities for the people to be involved in online activities through social media for marketing prospect, for comparing selling and buying issues to arrive at a right decision (Chatterjee & Kar, 2018b; Stephen & Toubia, 2010). Social media is claimed to have made bridge of connection between SMEs and prospective consumers (Culnan, McHugh, & Zubillaga, 2010; Hosseini, Fallon, Weerakkody, & Sivarajah, 2019; Kafai, Fields, & Burke, 2010). This strategy of enterprises to continue their business activities with the help of social media can be termed as Social Media Marketing (SMM) (Shareef, Mukerji, Dwivedi, Rana, & Islam, 2019). Investigation is essential whether use of SMM can impact on the growth in business of SMEs of India. In this scenario, this paper has taken a holistic attempt to identify the factors which might impact on SMM and to investigate if SMM can act as an effective instrument for growth of SMEs in India.

In this study, we attempt to explore the following two research questions using a combination of theoretical lens which is elaborated later:

- 1 What are the key factors that affect social media marketing in SMEs?
- 2 How does social media marketing impact these SMEs?

The rest of the article is structured as follows: we start with a review of relevant literature before moving on to the section for theory development for the proposed model. This is followed by the research methodology section and the findings from the analysis. This is followed by the section on the discussion on how we contribute to theory and the practical implications of our findings. Then we highlight the limitations of our existing study and future research directions, followed by the conclusion.

2. Literature review

SMEs are considered as a substantial source of employment generation. SMEs help as sources of livelihood for low- and middle-income countries throughout the World (Ghanem, 2013) SMEs have been considered as effective drivers of alleviation of poverty (Singh et al., 2010). Success of SMEs are instrumental for overall developments of countries nationally as well as regionally (Ahi, Baronchelli, Kuivalainen, & Piantoni, 2017; Chatterjee, Kar, & Gupta, 2018; Keskin, Sentürk, Sungur, & Kiris, 2010). Such being the scenario, it is necessary to find out effective treatments for SMEs' meaningful growth. In this context, use of ICT is considered as an effective tool for improving financial health of SMEs (Chung, Andreev, Benyoucef, Duane, & O'Reilly, 2017; Consoli, 2012). During 1980s, use of ICT in SMEs received special attention when mini and personal computer helped SMEs to effectively reduce their operational cost. ICT-based many systems help SMEs for achieving success. Among them, mobile phone and social media have emerged as effective instruments to connect between enterprises and customers; customers and customers; and enterprises and enterprises (Ashrafi & Murtaza, 2008; Chatterjee & Kar, 2018a; Ilavarasan & Levy,

2010).

Social Media, also called Web 2.0, act as a giant tool for the enterprises including SMEs to improve their business. Social media impacts on the business of enterprises (Kaplan & Haenlein, 2010; Walsh & Lipinski, 2009). There are different studies where contribution of social media has been discussed towards business activities of organizations (Kapoor et al., 2018). Use of social media platforms helps the SMEs in various directions. Even attempts are being taken to explore the potentiality of this platform for improving Supply Chain Management (Chae, 2015; Rathore, Ilavarasan, & Dwivedi, 2016; Shareef, Mukerji, Alryalat, Wright, & Dwivedi, 2018). Social Media includes various word of mouth and online activities like blogs, consumer-to-consumer email, moblogs and social networking websites and so on (Shi, Cao, Chen, & Chow, 2019; Mangold & Faulds, 2009; Shi, Cao, Chen, & Chow, 2019). Use of social media in the business affairs of enterprises is known as SMM. This SMM has an effective impact on the business of SMEs (Dwivedi, Kapoor, & Chen, 2015; Ware, 2018). There are many factors which might motivate the SMEs to use SMM for fetching business benefits. In other country like Saudi Arab, SMEs are adopting e-commerce with the help of social media for achieving business growth (Abed, Dwivedi, & Williams, 2015; Abed, Dwivedi, & Williams, 2016). SMEs might have multifarious characteristics like its size, expertise of IT, support from top management for implementation of SMM, conducive infrastructure that helps to easily adopt SMM mechanisms, customer relationship with the SMEs and so on (Abed, Dwivedi, & Williams, 2015; Shiau, Dwivedi, & Lai, 2018). Focussing attention on these parameters, it is essential to examine the other salient factors concerning to the characteristics of social media application mechanisms for marketing to improve business of SMEs. Social networking activities may even enhance co creation activities of SMEs (Shiau, Dwivedi, & Yang, 2017; Yoon & Cho, 2016). Studies reveal that in other countries, use of SMM by SMEs are fetching considerable benefits. However, studies do not explicitly disclose how SMEs are being benefited or even being affected by the help of SMM in the Indian context (Das, 2007; Singh et al., 2010; Selvanayagam & Rehman, 2019).

3. Theoretical background and hypotheses development

3.1. Theoretical background

Here the question arises regarding the possibilities of adoption of SMM technologies by the SMEs of India and what are the salient factors that facilitate or impede the SMEs to adopt SMM platform. Hence, the issue of adoption of a new technology (SMM) by the SMEs comes on the table of discussions. Whenever any theoretical model regarding acceptance of a new technology is considered, often the Technology Acceptance Model (TAM) introduced by Davis (1989) comes up for consideration it is often considered to be very influential and commonly acceptable model towards individuals' acceptance of technology (Lee, Kozar, & Larsen, 2003; de Graaf, Allouch, & van Dijk, 2019). The independent variables for TAM are Perceived Usefulness (PEU) and Perceived Ease of Use (PEOU). The widespread popularity of TAMs is due to three factors (Choe & Noh, 2018). It is IT-specific, parsimonious, structured to elucidate and accurately predict adoption of different types of technologies in the ambiance of a diverse population across multifarious cultural, organizational and expert levels. It stands on a strong theoretical base supported with validated inventory of various psychometric measurement scales. In addition, this model could emerge as a preeminent model towards acceptance of technology having high explanative power (Yousafzai, Foxall, & Pallister, 2007; Maartje et al., 2017). These two beliefs of TAM (PEU and PEOU) include many other causal chains of beliefs, intentions as well as attitudes. Basing on TAM, many other adoption models have been framed subsequently (Maartje et al., 2017). Apart from these two exogeneous variables proposed by TAM that cover almost all the psychological attributes, it is necessary to consider other technological and financial issues towards adoption of

SMM in SMEs. For this, we have used adoption technology adoption models such as TAM (PEU and PEOU) and UTAUT2 (FCO, Price value) (Dwivedi, Rana, Jeyaraj, Clement, & Williams, 2019; Shareef, Kumar, Kumar, & Dwivedi, 2011; Venkatesh, Morris, Davis, & Davis, 2003; Venkatesh, Thong, & Xu, 2012) wherefrom some other independent variables have been considered as important predictors of SMM (Chong & Chan, 2012; Misirlis & Vlachopoulou, 2018; Shi et al., 2019a; Turner, Kitchenham, Brereton, Charters, & Budgen, 2010).

Practically in the present context if the employees of SMEs feel that the use of SMM technology is not absolutely new to them, rather, this technology to some extent fits with their previous experience and previous practices, they will feel compatible to adopt it (Hsu, Lu, & Hsu, 2007). Thus, compatibility might be considered as another factor that would facilitate to motivate SMEs to adopt SMM for improvement of their business health (Derham, Cragg, & Morrish, 2011). Hence, compatibility may be considered as an important belief-parameter for adoption of SMM by SMEs (Venkatesh et al., 2012). Moreover, if the employees of SMEs have proper training adequately to handle this new system (SMM), that is, if the existing condition of the SMEs is otherwise conducive and facilitates to motivate the concerned employees to adopt SMM, they would proceed to adopt SMM (Venkatesh et al., 2003, 2012). Hence, this factor, facilitating conditions being one of the factors used by Venkatesh et al. (2003) in UTAUT2 model to interpret adoption behaviour, may also be useful here for the SMEs to adopt SMM. In India, being an emerging economy, the users are always aware and cautious regarding cost implications of any action (Dwivedi et al., 2017; Williams, Rana, & Dwivedi, 2015). If the use of SMM is not cheaper as compared to the cost involved in traditional practices, SMEs would hesitate to adopt SMM (Chong & Chan, 2012; Misirlis & Vlachopoulou, 2018). Using SMM, it is a fact that SMEs would be able to communicate with their valued customers comparatively incurring less cost (Kaplan & Haenlein, 2010; Shi et al., 2019a). These studies transpire that perceived usefulness, perceived ease of use, facilitating conditions, cost (lent from UTAUT2 model) and compatibility would impact on the SMEs (Positively or negatively) to adopt SMM (Venkatesh et al., 2012). Use of SMM by SMEs has positive impact on the improvement of business of SMEs (Consoli, 2012; Shi et al., 2019a).

3.2. Development of hypotheses and conceptual model

By the studies of literature, it appears that use of SMM by the SMEs would impact on the business of SMEs. It also appears that there are some salient factors that would help motivate the SMEs to adopt SMM. These salient factors are perceived usefulness, perceived ease of use, compatibility, facilitating conditions and cost as has been clear from literature review. All these factors would be discussed now separately to develop the hypotheses and to provide a conceptual model.

3.2.1. Perceived usefulness (PEU)

This belief also appears in Technology Acceptance Model (TAM) (Davis, 1989; Davis, Bagozzi, & Warshaw, 1989). Perceived usefulness is considered as an intangible measure to which a user (here a SME) has a belief that use of a technology (here the use of SMM) would help the user (here the SME) to enhance the overall performance (Davis, 1989; Davis et al., 1989). If the SME authority perceives that use of a technology (here use of SMM) would considerably enhance the productivity of the SME, that SME would not hesitate to use that technology (Park, 2009). Use of SMM would enhance the performance of SMEs (Sullivan & Koh, 2019; Fatima & Bilal, 2019). There are several studies where it is seen that PEU has significant links with the intention of the users to use the new technology, for example, in the use of new technology (Wu, Li, & Fu, 2011), it is noted that PEU has a positive relation with the ultimate use of the new technology (Kim & Chiu, 2019). Even in the case of use of social media through smartphone platform PEU possesses positive relation towards the use of smartphone technology (Park, Kim, & Kwon, 2016; Kim & Chiu, 2019).

Perceived Usefulness (PEU) contains different beliefs like performance, effectiveness, risk and trust (Aggelidis & Chatzoglou, 2009; Henderson & Divett, 2003; Turner et al., 2010). Risk factor includes sense of privacy and security also. If these are protected, use of SMM in SMEs would fetch considerable benefits (Turner et al., 2010). This variable PEU is considered, to have substantial effect on SMM. With these inputs, it is hypothesized as follows:

H1. Perceived Usefulness (PEU) has a positive impact on the SMEs to adopt SMM.

3.2.2. Perceived ease of use (PEOU)

This belief also appears in the Technological Acceptance Model (TAM) advanced by Davis (1989) and Davis et al. (1989). If it is felt that use of a technology or a system is not complex, but it can be used with ease, the user would not hesitate to use the technology or the system provided it is otherwise helpful (Kuo & Yen, 2009; Venkatesh et al., 2012). This belief is associated with a conception that it would be essential to exert some efforts of a person to use a system or a technology (Henderson & Divett, 2003; Park, 2009).

This belief includes ingredients like self-efficacy or simplicity (Yi, Liao, Huang, & Hwang, 2009). These factors are also perceived to influence the SMEs for adoption and use of social media (Kuo & Yen, 2009). It is seen that if any innovation is easier to use by the users, the users are motivated to use that technology (Ware, 2018). This confirms that PEOU has a positive relation with the use of the new technology. Thus, if SMEs of India feel that use of a technology like SMM is not associated with complexity, the SME authority would not hesitate to use and apply SMM. This leads to formulate the following hypothesis.

H2. Perceived Ease of Use (PEOU) has a positive impact on the SMEs to adopt SMM.

3.2.3. Compatibility (COM)

Compatibility is associated with the conception concerning to the extent to which the innovative technology (here use of SMM mechanism) fits appropriately with the earlier practices and current needs along with the existing values of the SMEs (Rogers, 1983). Studies have revealed that the degree of compatibility prevailing between the existing and the new technology products is considered as an effective and significant evaluation ingredient of the users towards that service (Yoon & Cho, 2016). COM is concerned as an essential ingredient for adoption of innovative technology like SMM (Wang, Wang, & Yang, 2010). If, a SME feels that the adoption of the technology, that is, here adoption of SMM mechanisms, is compatible with the system of work application, the SME usually considers to adopt that technology (Brown & Russell, 2007; Hsu et al., 2007).

Embedding SMM in SMEs is considered to be a best-fit concept since it would be able to reach the potential consumers appropriately and it would help to improve the business health of the organizations (Derham et al., 2011). In this context, some degree of alignment of processes and tasks within organization is required so that their employees can use SMM without feeling any constraint due to having pre gained knowledge of this technology. In terms of the discussions above, the following hypothesis is proposed.

H3. Compatibility (COM) has a positive impact on the SMEs to use SMM.

3.2.4. Facilitating conditions (FCO)

Facilitating Conditions (FCO) is defined as the extent to which a person has a belief that appropriate technical infrastructure and top management support exist to use a new system (Venkatesh et al., 2003). Earlier studies in this context reveal that facilitating conditions significantly influence on the adoption behaviour of an innovative technology. Besides, cultural issues should also match with such use of SMM (Hofsted, 1997).

The SMEs will not hesitate to adopt SMM (Hung & Lai, 2015) if the employees are properly trained to use social media, if the enterprise has

Internet facility with low cost, if there is no resistance from any end to change the system for the use of social media. The SMEs will not hesitate to adopt SMM if the environment is considered otherwise conducive.

Judged from this above discussion, the following hypothesis is provided.

H4. Facilitating Conditions (FCO) has a positive impact on the SMEs to use SMM.

3.2.5. Cost (COS)

A trade-off between benefits and sacrifice is considered to assess the cost (Wang et al., 2010). Earlier study reveals that there is importance of cost in the issue of utilising a technology by enterprise for its growth (Ernst and Young (2001)). Earlier research also highlights that there is a casual relationship, between cost and adoption of technology (Acquity Group, 2014; Alam & Noor, 2009; Kim & Shin, 2015). In the scenario of adoption of a technology by an enterprise, cost plays a vital role (Chong & Chan, 2012; Premkumar & Roberts, 1999). Low barrier of participation, low cost and low level of requirement of IT skills motivate SMEs to use SMM (Derham et al., 2011).

The Indian SMEs would not adopt SMM mechanism if the initial set-up expenditure becomes high (Dixon, Thompson, & McAllister, 2002). Besides, it is a common experience that Indians are very sensitive in the issues of expenditure and cost (Alam & Noor, 2009). Social media is otherwise comparatively a cost-effective technology. It gives scope to the SMEs to communicate with their consumers incurring low cost (Kaplan & Haenlein, 2010; Zhang, Fan, Yao, Hu, & Mostafavi, 2019). As such, it is most likely that an enterprise would use SMM, if involved cost is otherwise reasonable. In terms of the above discussion, the following hypothesis is postulated.

H5. Cost (COS) has a negative impact on the SMEs to use SMM.

3.2.6. Social Media Marketing (SMM)

Social Media may be defined as 'a secured generation of web development and design, that aims to facilitate communication, sources information sharing, interoperability and collaboration on the World Wide Web' (Paris, Lee, & Seery, 2010; p.531; Elbanna, Bunker, Levine, & Sleight, 2019). On average, consumers are used to have spent more than 330 min/day with participation in social media platform. These platforms have already become easy instruments for the creation of online communication between the consumers and enterprises, or between consumer and consumer around the World at any moment, especially for Indian SMEs. This is because of their limited resources (fund, technical know-how and so on) (Harris, Rae, & Grewal, 2008; Rana, Barnard, Baabdullah, Rees, & Roderick, 2019).

Through social media, an enterprise may build its brand easily for improvement of its business activities (Walsh & Lipinski, 2009). It will help to improve the business activities of SMEs (Harris et al., 2008). Thus, SMM helps the SMEs in India to induce them to invest more in digital marketing. With all these inputs, we can formulate the following hypothesis.

H6. Social Media Marketing (SMM) has a positive effect on the Impact on Business (IOB), so far as SMEs of India are concerned.

With all these discussions, the conceptual model is shown in Fig. 1.

4. Research methodology

It appears from the conceptual model (Fig. 1) that the number of independent variables is greater than that of dependent variables. As such, for validation of the conceptual model and for hypotheses-testing, help of Partial Least Square (PLS) – Structural Equation Modelling (SEM) analysis is required to be applied (Wold, Sjostrom, & Eriksson, 2001; Abdi, 2010). For meeting this objective, survey based empirical validation is preferred. Feedbacks against appropriate questionnaire are to be taken from the useable respondents. The responses are to be quantified and coded appropriately.

4.1. Research instrument

Attention on item-wording is essential to prepare the questionnaire. This has been done through analysing the literature (Broom, 2006; DeVellis, 2012). With small sample, the feedbacks of the so-prepared questionnaire may be obtained, and it would help to eliminate some un-productive questions and it would help to add some viable questions. This is pre-test. Through the help of opinion of experts, complex wordings of the questionnaire can be simplified, leading and biased questions can be eliminated (Worthington & Whittaker, 2006). A pilot-test is considered as a rehearsal before actual survey. Here, the sample size should be from 50 to 100 (Carpenter, Grant, & Hoag, 2016, 2018; Algharabata, Rana, Dwivedi, Alalwan, & Qasem, 2018). From this rehearsal, all the flaws in the questionnaire are eliminated (Ruel, Wagner, & Gillespie, 2016) and final draft questionnaire is prepared. The total number of items is 32. It is shown in Table A1 in Appendix A. It is to mention here that number of experts consulted was 7. Out of these 7 experts 5 experts were considered from industries. They used to have worked in Research and Development (R&D) wing of the industries having more than 10 years' experience each in product development for SMEs. They were working in analysing contribution of social media in industrial development. The remaining 2 experts were considered from academic areas each having PhD degree, and both have more than 9 years research experience in the areas of our studies. The questionnaire contains close-ended question in the form of statements concerning to 5-point Likert Scale (Strongly disagree = 1, Disagree = 2, Slightly agree = 3, Agree = 4 and Strongly agree = 5). This was used to collect relevant responses for analysis after appropriate quantification of feedbacks.

4.2. Data collection strategy

We have proceeded to validate the hypothesis and the conceptual model with the help of PLS-SEM analysis technique. In this context, researchers opine that inadequate sample size would result in decreased generalizability (Kline, 2013). Generally, it is observed that many researchers recommend that sample size of at least 300 is good (Henson & Roberts, 2006; Pett, Lackey, & Sullivan, 2003). Besides, it is also recommended by researchers that item: responses should lie between 1: 4 to 1: 10 (Deb & David, 2014; Hinkin, 1996). Our item number is 32 and hence it is better that responses should lie between 128–320. With all these available inputs, we have considered 310 entrepreneurs concerning to SMEs and for this, we selected two cities of India, Ahmadabad and Mumbai. The selection of 310 entrepreneurs was made at random from these two cities. Survey works were conducted for 2 months during middle of 2018. The demographic profile of the entrepreneurs is shown in Table 2 and the sector wise distribution of the entrepreneurs is shown in Table 1 that includes investment details also.

The distribution as per these tables shows that we have been able to consider 89.6 % male entrepreneurs, 70.6 % from social science/humanities sector mostly having intermediate education level (64.3 %). We have been able to select entrepreneurs to the tune of 40.2 % from trading sector. We have been able to select entrepreneurs investing below 2.5 million to the tune of 59.9 %.

5. Data analysis and results

5.1. Data analysis for validity and reliability

From the conceptual model it is seen that we have been able to identify 7 constructs. In this study, lower limit of value of Cronbach's alpha is considered as 0.6 (Hair, Black, Babin, & Anderson, 2010). We have estimated the value of Cronbach's alpha of each construct shown in Table 3. It appears that lowest value of Cronbach's alpha so estimated is greater than 0.6. Hence it is inferred that all the constructs which have been used in this study are reliable and consistent (Fornell & Larcker, 1981).

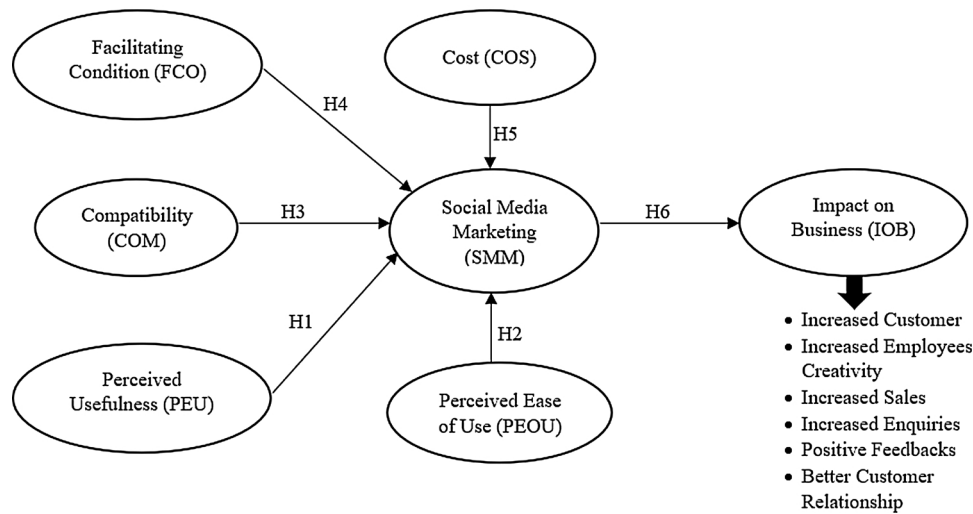


Fig. 1. Conceptual model.

High correlation among constructs inhibits the process of PLS-SEM analysis. This defect is known as multicollinearity. To examine whether our identified constructs suffer from the defect of multicollinearity, Variance Inflation Factor (VIF) of each construct is to be determined (James, Witten, Hastie, & Tibshirani, 2017). The allowable range of values of VIF is 3.3–5 (Kock & Lynn, 2012). The VIF of each construct has been estimated. From the result, it appears that the values of VIF of the constructs are within acceptable range. Hence, it is concluded that the usage of these constructs does not suffer from the limitations of multicollinearity.

We have prepared 32 items against 7 constructs. Now, it is required to be confirmed if the identification of items (questionnaire) is reliable. For this, Loading Factor (LF) of each item with reference to its own construct is to be estimated (Fornell & Larcker, 1981). If it is found that the value of each loading factor in this context is greater than its acceptable lowest value 0.707 (Borroso, Carrion, & Roldan, 2010), it is confirmed that the identification of items is reliable. To ascertain validity and constituency of each construct, Composite Reliability (CR), Average Variance Extracted (AVE) and Maximum Shared Variance (MSV) of each construct are to be estimated (Fornell & Larcker, 1981). Now, these parameters have been estimated and are shown in Table 3. Since the results show that the lowest values of CR and AVE of each construct are greater than their lowest acceptable values which are 0.6 for CR (Urbach and Ahlemann, 2010) and 0.5 for AVE (Gefen & Straub, 2005; Hair et al., 2010), it is confirmed that the identification of constructs is valid. It is also conformed as it is found that each value of MSV is greater than the corresponding value of AVE (Fornell and Larcker, 1981). The entire results are shown in Table 3.

5.2. Discriminant validity test

When we find that the items concerning to the own construct can explain that construct strongly but can weakly interpret other constructs, it is said that discriminant validity has been confirmed. (Fornell

Table 1 Sector and investment wise distribution.

Sector	No.	Percentage	Investment	No.	Percentage
Manufacturing	73	23.7	Below INR 2.5 million (< 35,000 USD)	186	59.9
			Between INR 2.5–50 million (35,000–70,000 USD)	123	39.7
Service	112	36.1	Between INR 50–100 million (70,000–140,000 USD)	1	0.4
Trading	125	40.2			

Table 2 Demographic profile of entrepreneurs.

Category		Number	Percentage
Gender	Male	178	89.6
	Female	32	10.4
Discipline	Management	16	5.3
	Science/Engineering	75	24.1
	Social Science/Humanities	219	70.6
Education	Intermediate	199	64.3
	Graduate	109	35.2
	Postgraduate	02	0.5

& Larcker, 1981; Natemeyer, Bearden, & Sharma, 2003). It is confirmed if it is found that Average Variance (AV), being square root of the concerned AVE, is greater than the corresponding correlation coefficients of that construct with other constructs. We have estimated AVs of all the constructs and, we have estimated the corresponding correlation coefficients. These are shown in Table 4. Results show that AV of a construct is greater than all the values of concerned correlation coefficients. This confirms discriminant validity.

The values of AVs are shown in diagonal positions and the correlation coefficients are shown in off-diagonal positions in the Table 4. The numbers in the bold fonts signify AVs. There is another way to confirm discriminant validity. If it is seen that loadings are all greater than cross-loadings, it is said that discriminant validity has been confirmed (Gefen & Straub, 2005). We have estimated the cross-loadings and found that loadings are greater than the corresponding cross-loadings. It establishes discriminant validity. The results are shown in Table A2 in Appendix A.

5.3. PLS-SEM analysis

To ascertain if the conceptual model is in order or not, different fit indices like GFI, AGFI, CFI, TLI and RMSE are required to be estimated. All these have been estimated and shown in Table 5. It is found that all

Table 3
Results of measurement model.

Construct/Item	Loading	Cronbach's alpha (α)	CR	AVE	VIF	MSV
Perceived Usefulness (PEU)		0.892	0.81	0.74	3.7	0.20
PEU1	0.84					
PEU2	0.85					
PEU3	0.85					
PEU4	0.86					
PEU5	0.89					
Perceived Ease Of Use (PEOU)		0.911	0.84	0.77	3.9	0.19
PEOU1	0.90					
PEOU2	0.91					
PEOU3	0.92					
PEOU4	0.78					
PEOU5	0.87					
Compatibility (COM)		0.906	0.79	0.71	4.6	0.23
COM1	0.89					
COM2	0.89					
COM3	0.81					
COM4	0.77					
Facilitating Conditions (FCO)		0.899	0.86	0.82	4.3	0.18
FCO1	0.88					
FCO2	0.90					
FCO3	0.89					
FCO4	0.94					
FCO5	0.92					
FCO6	0.91					
Cost (COS)		0.912	0.81	0.74	4.2	0.17
COS1	0.86					
COS2	0.89					
COS3	0.87					
COS4	0.83					
Social Media Marketing (SMM)		0.900	0.80	0.72	4.6	0.18
SMM1	0.91					
SMM2	0.75					
SMM3	0.88					
Impact on Business (IOB)		0.921	0.81	0.74	4.7	0.19
IOB1	0.85					
IOB2	0.85					
IOB3	0.84					
IOB4	0.89					
IOB5	0.86					

Table 4
Discriminant Validity Test.

	PEU	PEOU	COM	FCO	COS	SMM	IOB	AVE
PEU	0.86							0.74
PEOU	0.44	0.88						0.77
COM	0.41	0.36	0.84					0.71
FCO	0.45	0.37	0.48	0.91				0.82
COS	0.42	0.43	0.44	0.42	0.86			0.74
SMM	0.41	0.44	0.41	0.37	0.41	0.85		0.72
IOB	0.40	0.42	0.44	0.39	0.37	0.42	0.86	0.74

the parameters are within acceptable range. This confirms that the model is in order. For our estimation from data analysis, we have used AMOS 22 software.

After empirical study, the model containing β values, level of significance and coefficients of determinant is shown in Fig. 2 and the detailed results are shown in Table 6.

It is mentioned here that the detailed results mentioning the hypotheses, effect of exogenous variables on endogenous variable with remarks are shown in Table A3 in Appendix A. The statements of hypotheses are shown in Table A4 in Appendix A. The detail model mentioning the loadings of item-linkages is shown in Fig. A1 in Appendix A.

5.4. Common method Bias

We have tested whether the sample used in this study is involved in the defect of common method bias (Alalwan, Rana, Dwivedi, & Algharabat, 2017; Algharabata et al., 2018). To alleviate this, single factor test of Harman (Harman, 1976) has been conducted. We have considered all the 32 items of 7 constructs for analysis (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). With the help of unrotated factor solution with SPSS, it has been found that the factor that emerged has been able to explain 42.6 % of the variance. This percentage is less than the cut-off value of 50 % that has been recommended by Podsakoff et al. (2003). Hence, the sample is not involved in the defect of common method bias.

5.5. Results from analysis

We could identify 7 constructs and 32 questions in the form of statements (item). From the study of literature, we provided a conceptual model developing 6 hypotheses. The conceptual model has been validated by the help of PLS-SEM analysis. After validation, it appears that out of 6 hypotheses so conceptually developed, one hypothesis (H4) has not been supported, that is, impact of Facilitating Conditions (FCO) on Social Media Marketing (SMM) has not been supported. The estimation of coefficients of determinant (R²) reveals that Perceived Usefulness (PEU), Perceived Ease of Use (PEOU), Compatibility (COM) Facilitating Conditions (FCO) and Cost (COS) can explain and interpret Social Media Marketing (SMM) to the tune of 52 % since the concerned coefficient of determinant is 0.52 (R²). Out of all these independent variables (PEU, PEOU, COM, FCO and COS), the impact of COS on SMM (H5) is the highest since the magnitude of concerned path coefficient is 0.641 with level of significance *** (P < 0.001). The influence of FCO on SMM (H4) is the lowest as the concerned path coefficient is 0.023 with significance level ns (p > 0.05). This hypothesis (H4), as such, has not been found significant and the concerned hypothesis has not been supported. Again, Social Media Marketing (SMM) can explain and interpret Impact on Business (IOB) (H6) to the extent of 76 % since the concerned coefficient of determinant (R²) is 0.76. The explanative power of the model is 76 %. The effect of Facilitating Conditions (FCO) on Social Media Marketing (SMM) is low. It contradicts earlier studies (Hung & Lai, 2015). Presumably for the employees of SMEs in India, the training to handle social media platform for Customer Relationship Management (CRM) is poor. Untrained or half-trained employees can hardly use an innovative technology (social media) with their full potentialities. Practitioners are to focus on this issue.

6. Discussions and key findings

The hypotheses formulated from the conception of TAM (Davis, 1989; Davis et al., 1989) are PEU→SMM (H1) and PEOU→SMM (H2). These two hypotheses are found to have been supported through empirical study. These two linkages appear to have received support from earlier research studies (Turner et al., 2010; Venkatesh et al., 2012). Besides, impact of PEU on SMM (H1) signifies that it includes impacts of performance, effectiveness, risks and trust on SMM simultaneously (Henderson & Divett, 2003; Aggelidis & Chatzoglou, 2009) because PEU includes these important beliefs. Moreover, another exogenous variable PEOU includes ingredients like simplicity of technology as well as of self-efficacy (Yi et al., 2009). Hence, impact of PEOU on SMM (H2) includes impacts of these two beliefs on SMM. Consideration of these two beliefs (PEU and PEOU) has covered many other ingredients implicitly. It has been noted that COM has positive and significant impact on SMM (H3). This linkage has been validated through statistical analysis and it has also received support from earlier studies (Derham et al., 2011). As already stated, SMEs of India function with limited resources. Naturally, SMEs of India will be cautious regarding cost involved in using SMM and that is why the hypothesis H5 (COS→SMM) is found to have been supported after statistical validation in

Table 5
Model Fit Summary Relating to the Research Model.

Fit Index	Recommended value	Value in the model
Chi-Square (χ^2)/Degree of Freedom (<i>df</i>)	≤ 3.000 (Chin & Todd, 1995; Gefen, 2000; Kline, 2005)	2.021
Goodness of Fit Index (GFI)	≥ 0.900 (Hoyle, 1995)	0.930
Adjusted Goodness of Fit Index (AGFI)	≥ 0.800 (Segars & Grover, 1993)	0.862
Comparative Fit Index (CFI)	≥ 0.930 (Hair, Black, Babin, Anderson, & Tatham, 2006)	0.939
Tucker Lewis index (TLI)	≥ 0.950 (Hu & Bentler, 1999; Sharma, Mukherjee, Kumar, & Dillon, 2005)	0.961
Root Mean Square Error (RMSE)	≤ 0.070 (Steiger, 2007)	0.041

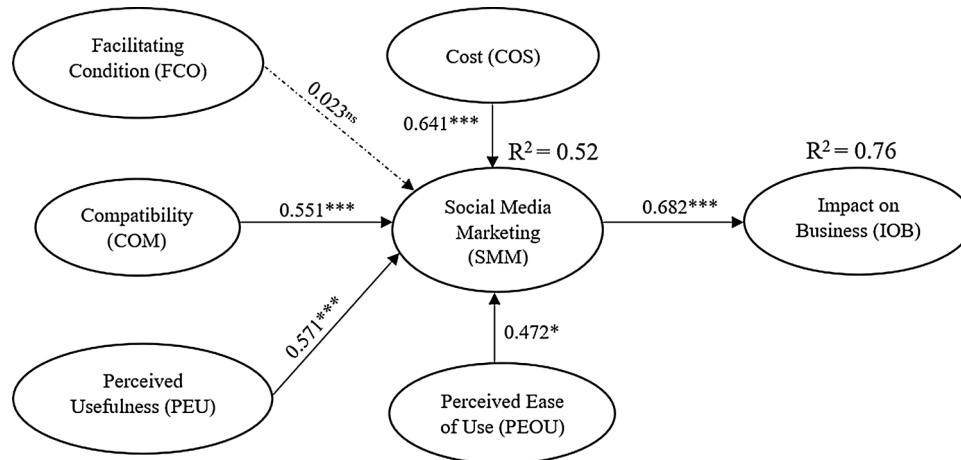


Fig. 2. Structural Model with path weight and significance level.

Table 6
Results of Hypothesis Testing.

Path	Hypothesis	Path Coefficient	p-value	Remarks
PEU→SMM	H1	0.571	*** (p < 0.001)	Supported
PEOU→SMM	H2	0.472	* (p < 0.05)	Supported
COM→SMM	H3	0.551	*** (p < 0.001)	Not Supported
FCO→SMM	H4	0.023	ns (p > 0.05)	Supported
COS→SMM	H5	-0.641	*** (p < 0.001)	Supported
SMM→IOB	H6	0.682	*** (p < 0.001)	Supported

this study. Also, this linkage (H5) has been supported by earlier studies (Kim & Shin, 2015). The use of SMM by the SMEs has been proved to be effective and fruitful towards improvement of business of SMEs. That is why the hypothesis H6 has been supported after validation. Not only that, earlier studies (Walsh & Lipinski, 2009) also supported this hypothesis although in a slightly different context. We have also hypothesized that FCO has positive and significant impact on SMM (H4) though the empirical study did not support this hypothesis, contradicting earlier studies (Hung & Lai, 2015). It is presumably due to lack of expected top management support for use of SMM in the business activities of SMEs in India, the employees are not adequately encouraged to use SMM. Internet facilities and low band width may also cause constraints as some of these SMEs often operate from semi-urbanised locations with low telecommunications connectivity. Perhaps, the existing employees are mostly found resistant and reluctant to switch over their activities from legacy system to ERP system. There may be other reasons for not supporting the hypothesis H4. Unless these issues are improved to a considerable extent, effect on FCO on SMM (H4) may not be appreciable.

Here it can be inferred that currently in India, social media is being used a lot by the normal citizens across socio-economic classes. Through social media, these users might develop networks to impact the activities around them globally especially when it comes to sharing their collective voices for sharing concerns and feedback with relevant stakeholders. SMM provides a mechanism for promoting a service, brand or a business by connecting with such potential customers to

improve the business health (Kar, 2015). Use of this platform is cost effective and has larger benefits of network externalities as their user bases start following them across social media platforms. This has thus become a lucrative tool for the SME as they cannot incur huge expenditure for advertisement with the help of other existing traditional channels like large enterprises. The SMEs thus will get a scope to substantially develop their new products and service offerings befitting with the needs of the customers basing on the analysis of the feedbacks by the customers available in social sites. In a journey of digital transformation, the role of such usage of SMM by SMEs can become vital (Kar, Ilavarasan, Gupta, Janssen, & Kothari, 2019). The validated results in this study would give much food for reflection to the practitioners and policy makers to provide effective inputs to the SMEs as to how they can use SMM in the best way to get best business results.

6.1. Contribution to theory

This research study has been able to theorize five factors PEU, PEOU, COM, FCO and COS which influence the SMEs to use SMM. This use of SMM would derive net benefit to the SMEs. This Net Benefit is otherwise termed here as Impact on Business (IOB) which is the goal of this study. This study has been able to explore the necessity of use of SMM by the SMEs of India to improve their business health. By the inclusion of Perceived Usefulness, we have taken into account many factors like performance (of SMM), trust (on SMM), risk perception (to use SMM), effectiveness (in using SMM) and productivity because Perceived Usefulness includes all these factors (Aggelidis & Chatzoglou, 2009; Henderson & Divett, 2003; Park, 2009; Turner et al., 2010). Perceived Ease of Use (PEOU) also includes simplicity and self-efficacy (Yi et al., 2009). Hence, using these two beliefs (PEU and PEOU), we have included many important factors which could motivate SMEs to use SMM. This may be considered as an important theoretical contribution of our study. The construct facilitating conditions (FCO) has been borrowed from Model Acceptance with Peer Support (MAPS) (Sykes, Venkatesh, & Gosain, 2009) and from UTAUT2 (Venkatesh et al., 2012; Williams et al., 2015), the

construct cost (COS) has been lent also from UTAUT2 (Venkatesh et al., 2012). The construct cost (COS) has been used lending conception of 'price value' used in UTAUT2 (Dwivedi et al., 2019; Shareef et al., 2011). From studies of different adoption models and theories, we have included 'compatibility' as an independent variable. Thus, from consideration of some standard model and by considering another factor (compatibility), we have proposed the theoretical model and it is claimed that our consideration of factors seems to be correct. Therefore, we could achieve 76 % explanative power. We have been able to achieve better result because we have not blindly followed any standard adoption model or standard theory but, we have considered some better suited factors to theoretically improve the model befitting with the context. The explanative power of this model is 76 %, which indicates that this theoretical model could explain IOB to the tune of 76 %. This indicates that non-consideration of some moderators in terms of UTAUT model hardly could affect the efficiency of the theoretical model (Dwivedi et al., 2017). Besides, inclusion of the moderators could have made the model complex. This simple but effective model is considered to stand proximal to completely explain how SMEs in India might be aligned to use SMM that would impact on Improvement of Business (IOB). The contextual-centric consideration is the secret of success of this study. It has been able to explain the goal. This theoretical model would help other industries intending to use SMM. This may be considered as a special theoretical contribution of this model. Further we believe that the findings of our study would also be generalizable across other economies like India, due to the parsimony of the model which has been used to capture the impact of SMM.

6.2. Practical implications

This research study focuses on the fact how different factors can motivate the SMEs and create conducive and favourable atmosphere to adopt Social Media Marketing mechanism to improve the business. The outcome of this study is expected to provide effective and meaningful inputs to the practitioners and policy makers for refreshing and modifying their policy with the help of apposite reconciliation. The validated result transpires that Facilitating Conditions (FCO) has insignificant impact on the SMEs to adopt SMM (H4). That is why hypothesis H4 has not been supported. This is presumably owing to non-availability of favourable environment for the users at the operational level. The practitioners and policy makers are needed to focus on this issue surrounding access. Facilitating conditions include effective and helpful situation and infrastructure that might impact significantly on the SMEs to adopt SMM for business benefits. Facilitating conditions include the conception of having proper training of the employees for being motivated to use SMM. There must be sincere and effective support of the top management towards adoption of SMM by the SMEs. The SMEs intending to use SMM must have adequate internet facilities with low internet cost since budget of SMEs is often limited. There must not be any untoward resistance from any corner towards adoption of SMM by SMEs. These are the salient points to be nurtured by the policy makers and practitioners. If these issues are improved, the SMEs would proceed more and more to adopt SMM. This, in turn, would improve the business health of SMEs. The validated result highlights that Cost (COS) has an effective and significant influence on the SMEs to adopt SMM for benefits of businesses of SMEs. The policy makers and practitioners must be vigilant to see that cost of use of SMM must be less than the cost of traditional marketing expenses. If the cost of using SMM is high, no SMEs would be motivated to adopt SMM. Since PEU and PEOU have significant and positive impacts on the use of SMM, the policy makers should see that the employees of SMEs contemplating to use SMM must feel that business through SMM mechanism would be useful and the use must not be complex but easy on the other hand. This will motivate the employees and hence, the SMEs to use SMM. The compatibility (COM) positively affects the SMEs to use SMM (H3). Hence, the policy makers and practitioners should see that the situation for use of SMM by SMEs must be favourable and conducive. Additionally, the practitioners and policy makers should be always honest and sincere to make the top management of SMEs of India motivated and

aware regarding benefits of the use of SMM by the SMEs. This would enhance the use of SMM by SMEs which in turn ensure benefits to the SMEs. This would result in total economic growth of India (Junaidah, 2007).

6.3. Limitations and Directions for future research

We have developed our model systematically focussing appropriate attention on the background study. We have provided a conceptual model that was duly validated through PLS-SEM analysis. However, it cannot be said that this research study is without any limitation. In our survey essential for PLS-SEM analysis, we have selected some entrepreneurs of Ahmedabad and Mumbai. India is a vast country. There are other metropolitan cities in India. We did not consider the inputs of SMEs from other cities but only considered two metropolitan cities. Consideration of inputs from SMEs of other metropolitan cities in India might have yielded different results. In that context, this result cannot be considered as a generic result. Future researchers may take up this issue to nurture the defects to make the result more generic.

In our survey works, we have considered 310 usable responses and conducted our survey works for 2 months during middle of 2018. Since India is a vast country, consideration of 310 entrepreneurs should not be considered to project a general representation of SMEs of India. Besides, the survey works were conducted for a shorter period leaving chance of committing mistakes. For generalization and for ensuring flawless results, more entrepreneurs ought to have been considered, with a study for more longitudinal period. This flaw is left to be nurtured by the future researchers.

We have been able to provide the model with 76 % explanative power. Consideration of other boundary conditions might have enriched the result. This is left for future researchers to explore. Though non-consideration of effective moderators did not adversely affect the result as the explanative power of the model is as high as 76 %, but it would be interesting to explore other factors which could be predictors, moderators or mediators which can improve this outcome. This is left for the future researchers to consider. India is a vast country. It has different cultural dispositions in different places. Effect of cultural dispositions on the entrepreneurs of different places towards their adoption behaviour has not been explored in this study. It is not known to what extent such consideration would affect the result. It is left for the future researchers to take up this issue. In this study, we have considered seven experts to scrutinize the readabilities of the questions so prepared. But it was felt that opinion of more experts could bring in more factors relevant in this context, especially to explore the nature of impact. However, it has not been done in the current study. This may be taken up by the future researchers to extend existing findings.

Moreover, it is a fact that in India there has not been complete adoption of SMM by the SMEs. Hence, the feedbacks obtained during survey works are construed as feedbacks of non-adopters. In view of this, proper caution is to be given when this result would be applied to the adopters. In this context, consideration of other boundary conditions might be necessary. Future researchers may focus on this point.

7. Conclusion

This research study has been able to establish that SMEs may derive business benefits using Social Media. However, in India there are some SMEs where there does not exist technical competence and appropriate infrastructure for optimally use social media for business purposes. Consequently, for want of such facilitating conditions, some SMEs are not utilizing the social media platform for their business. This in-depth study has given them some effective inputs so that they can improve their growth and can give an effective competitive edge against large enterprises by ameliorating their management mechanisms rendering the situation conducive to adopt SMM.

This study has highlighted that recently use of SMM by the SMEs has been increased to a great extent. SMM is contributing for business growth

of SMEs in India. Use of social media both by the SMEs as well as by the potential customers has brought in opportunities to both the SMEs and the potential customers. SMEs are being able to improve their business and the potential customers are being able to come closer for their respective benefits using SMM. SMEs are being able to know more about the products and services. This has enhanced the relationship between SMM and growth of business. This has also updated the ways Customer Relationship Management (CRM) based activities are undertaken in SMEs. This is why, the new technology 'Social-CRM' is increasingly gaining prominence to capture the ways the firms can interact with the stakeholders over social media to create value (Harrigan, Soutar, Choudhury, & Lowe, 2015; Kar, 2015; Rathore, Kar, & Ilavarasan, 2017). Less complexity, less cost and effectiveness to use social media have motivated the SMEs to use SMM. The SMEs have an opportunity to appreciably improve and develop their services as well as products which are effective to meet the needs of consumers. This is being done easily by the SMEs based on the customers' feedbacks with suggestions available in social media websites. This is helping to co create the business activities of the SMEs. This would even-

tually bring in improvement of the overall economic health of the SMEs.

This helps to improve financial positions of SMEs. In this light, role of SMM for the SMEs of India is vital. The results show that if cost of use of social media by the SMEs is low compared to traditional ways of business by SMEs, the SMEs would take advantage of SMM. Proper training to the employees of SMEs, effective motivation and honest willingness of the top managements of SMEs with other available conducive conditions would motivate the SMEs to adopt SMM that would bring in better business result. In this context, appropriate initiatives and incentivization of the Government to the SMEs might ameliorate the situation that would eventually bring in economic growth to the country (Singh et al., 2010; Srinivasan et al., 2015). The study also highlights that FCOs do not impact on SMM (H4). This has been revealed after completion of the statistical validation process. To improve the situation, the financial, infrastructural, cultural and overall organizational developments are needed to be ensured so that congenial and conducive environment exists. If this is ensured, the use of SMM by the SMEs will not be impeded owing to the lack of existence of facilitating conditions.

Appendix A

Table A1
Summary of Questionnaire.

Items	Source	Statements	Response[SD][D][N][A][SA]
PEU1	Abed et al., 2015a, 2015b, 2016;	Social media is useful for business	[1][2][3][4][5]
PEU2	Alalwan et al., 2017	Social media is a valuable tool for marketing	[1][2][3][4][5]
PEU3	Aral et al., 2013; Chung et al., 2017	Social media enhances the productivity of the business	[1][2][3][4][5]
PEU4	Culnan et al., 2010; Chung et al., 2017	Social media helps better query management	[1][2][3][4][5]
PEU5	Dwivedi et al., 2015; Elbanna et al., 2019;	Social media helps more customer satisfaction	[1][2][3][4][5]
PEOU1	Park, 2009; Ware, 2018	Overall, it is easy to learn social media marketing	[1][2][3][4][5]
PEOU2	Kuo & Yen, 2009; Venkatesh et al., 2012	It is easy to identify new customers using social media	[1][2][3][4][5]
PEOU3	Alam & Noor, 2009; Hung & Lai, 2015;	It is easy to identify customer demand using social media	[1][2][3][4][5]
PEOU4	Harris et al., 2008; Rana et al., 2019	Information retrieval about a customer is easy using social media	[1][2][3][4][5]
PEOU5	Aral et al., 2013; Chung et al., 2017	Advertising products and services on social media platforms are easy	[1][2][3][4][5]
COM1	Derham et al., 2011; Yoon & Cho, 2016;	Our enterprise is compatible for using social media for different purposes	[1][2][3][4][5]
COM2	Dwivedi et al., 2015	I use social media regularly for business purposes	[1][2][3][4][5]
COM3	Mangold & Faulds, 2009; Misirlis & Vlachopoulou, 2018	My organization provides me support for getting training on social media	[1][2][3][4][5]
COM4	Wang et al., 2010; Derham et al., 2011	Our business is compatible using social media for marketing purpose	[1][2][3][4][5]
FCO1	Hung & Lai, 2015; Ng et al., 2019	We have adequate infrastructure for using social media	[1][2][3][4][5]
FCO2	Harris et al., 2008; Rana et al., 2019; Alhakimi & Mahmoud, 2020	Our enterprise promotes social media for business	[1][2][3][4][5]
FCO3	Sykes et al., 2009; Venkatesh et al., 2012	Our organization invest adequately for social media marketing	[1][2][3][4][5]
FCO4	Hung & Lai, 2015; Aral et al., 2013	We have enough trained manpower dealing with social media marketing	[1][2][3][4][5]
FCO5	Venkatesh et al., 2003; Hung & Lai, 2015	All our employees are provided training to use social media marketing	[1][2][3][4][5]
FCO6	Venkatesh et al., 2003; Zhang et al., 2019;	We have inhouse training facility to learn about different aspects of social media	[1][2][3][4][5]
COS1	Kaplan & Haenlein, 2010; Dwivedi et al., 2015	My cost of dealing with customer enquiries has been reduced using SMM	[1][2][3][4][5]
COS2	Zhang et al., 2019; Acquity Group, 2014	Cost of identifying new customer has been reduced through use of SMM	[1][2][3][4][5]
COS3	Kaplan & Haenlein, 2010; Kim & Shin, 2015;	Customer awareness and training cost have been diminished by use of SMM	[1][2][3][4][5]
COS4	Acquity Group, 2014; Chung et al., 2017	The overall advertising and promotion cost have gone down using SMM	[1][2][3][4][5]
SMM1	Dwivedi et al., 2015; Shareef et al., 2019	For advertising my products and services social media marketing is helpful	[1][2][3][4][5]
SMM2	Aral et al., 2013; Abed et al., 2015a, 2015b	Because my competitors are using social media for marketing, I should use it	[1][2][3][4][5]
SMM3	Culnan et al., 2010; Shareef et al., 2019	Usage of social media marketing technique is good for my business	[1][2][3][4][5]
IOB1	Sullivan & Koh, 2019; Fatima & Bilal, 2019	My business performance has been increased using social media platform	[1][2][3][4][5]
IOB2	Aral et al., 2013; Chung et al., 2017	My sales are above average compared to others using social media platform	[1][2][3][4][5]
IOB3	Aral et al., 2013; Elbanna et al., 2019	My customers feel more connected with my business after using social media	[1][2][3][4][5]
IOB4	Dwivedi et al., 2017; Abed et al., 2015a, 2015b	My efficiency to identify the customers' need has been increased using SMM	[1][2][3][4][5]
IOB5	Chung et al., 2017; Shareef et al., 2019	Creativity of my employees has been enhanced through use of SMM	[1][2][3][4][5]

SD = Strongly Disagree; D = Disagree; N = Neither agree nor disagree; A = Agree; SA = Strongly Agree.

Table A2
Loadings and Cross loadings.

	PEU	PEOU	COM	FCO	COS	SMM	IOB
PEU1	0.84	0.44	0.46	0.44	0.32	0.33	0.32
PEU2	0.85	0.37	0.47	0.46	0.37	0.34	0.40
PEU3	0.85	0.39	0.41	0.47	0.38	0.35	0.43
PEU4	0.86	0.41	0.44	0.43	0.44	0.44	0.45
PEU5	0.89	0.46	0.42	0.31	0.46	0.47	0.49
PEOU1	0.43	0.90	0.33	0.38	0.34	0.44	0.41
PEOU2	0.41	0.91	0.38	0.37	0.37	0.37	0.36
PEOU3	0.37	0.92	0.36	0.32	0.38	0.38	0.38
PEOU4	0.39	0.78	0.44	0.49	0.41	0.40	0.42
PEOU5	0.41	0.87	0.31	0.41	0.40	0.40	0.42
COM1	0.44	0.43	0.89	0.44	0.42	0.37	0.40
COM2	0.46	0.37	0.89	0.43	0.42	0.38	0.42
COM3	0.36	0.39	0.81	0.49	0.41	0.41	0.37
COM4	0.42	0.31	0.77	0.41	0.39	0.41	0.32
FCO1	0.41	0.44	0.45	0.88	0.41	0.47	0.36
FCO2	0.47	0.49	0.47	0.90	0.31	0.48	0.32
FCO3	0.39	0.31	0.41	0.89	0.32	0.33	0.37
FCO4	0.37	0.36	0.37	0.94	0.48	0.32	0.44
FCO5	0.44	0.43	0.39	0.92	0.41	0.44	0.49
FCO6	0.40	0.41	0.44	0.91	0.34	0.40	0.41
COS1	0.42	0.44	0.38	0.36	0.86	0.42	0.36
COS2	0.41	0.34	0.37	0.36	0.89	0.44	0.33
COS3	0.47	0.38	0.36	0.42	0.87	0.51	0.41
COS4	0.48	0.37	0.34	0.44	0.83	0.39	0.48
SMM1	0.41	0.31	0.41	0.44	0.33	0.91	0.37
SMM2	0.37	0.32	0.44	0.42	0.33	0.75	0.39
SMM3	0.39	0.37	0.43	0.47	0.39	0.88	0.45
IOB1	0.37	0.40	0.47	0.31	0.37	0.39	0.85
IOB2	0.38	0.41	0.48	0.32	0.38	0.32	0.85
IOB3	0.49	0.43	0.41	0.36	0.46	0.36	0.84
IOB4	0.44	0.47	0.33	0.39	0.41	0.46	0.89
IOB5	0.47	0.49	0.37	0.44	0.44	0.44	0.86

Table A3
Path Weights with Estimation of R².

Effect	Path Coefficient	Hypothesis	p-value	R ²	Remarks
Effect on SMM				0.52	
by PEU	0.571	H1	*** (p < 0.001)		Supported
by PEOU	0.472	H2	* (p < 0.05)		Supported
by COM	0.551	H3	*** (p < 0.001)		Supported
by FCO	0.023	H4	ns (p > 0.05)		Not Supported
by COS	-0.641	H5	*** (p < 0.001)		Supported
Effect on IOB				0.76	
by SMM	0.682	H6	*** (p < 0.001)		Supported

Table A4
Statement of hypothesis with remarks.

Hypothesis	Statement	Remarks
H1	Perceived Usefulness (PEU) has a significant and positive impact on the SMEs to adopt SMM.	Supported
H2	Perceived Ease of Use (PEOU) has a significant and positive impact on the SMEs to adopt SMM.	Supported
H3	Compatibility (COM) has a significant and positive impact on the SMEs to use SMM	Supported
H4	Facilitating Conditions (FCO) has significant and positive impact on the SMEs to use SMM.	Not Supported
H5	Cost (COS) has a significant and negative impact on the SMEs to use SMM.	Supported
H6	Social Media Marketing (SMM) has a significant and positive effect on the Impact on Business (IOB), so far as SMEs of India are concerned.	Supported

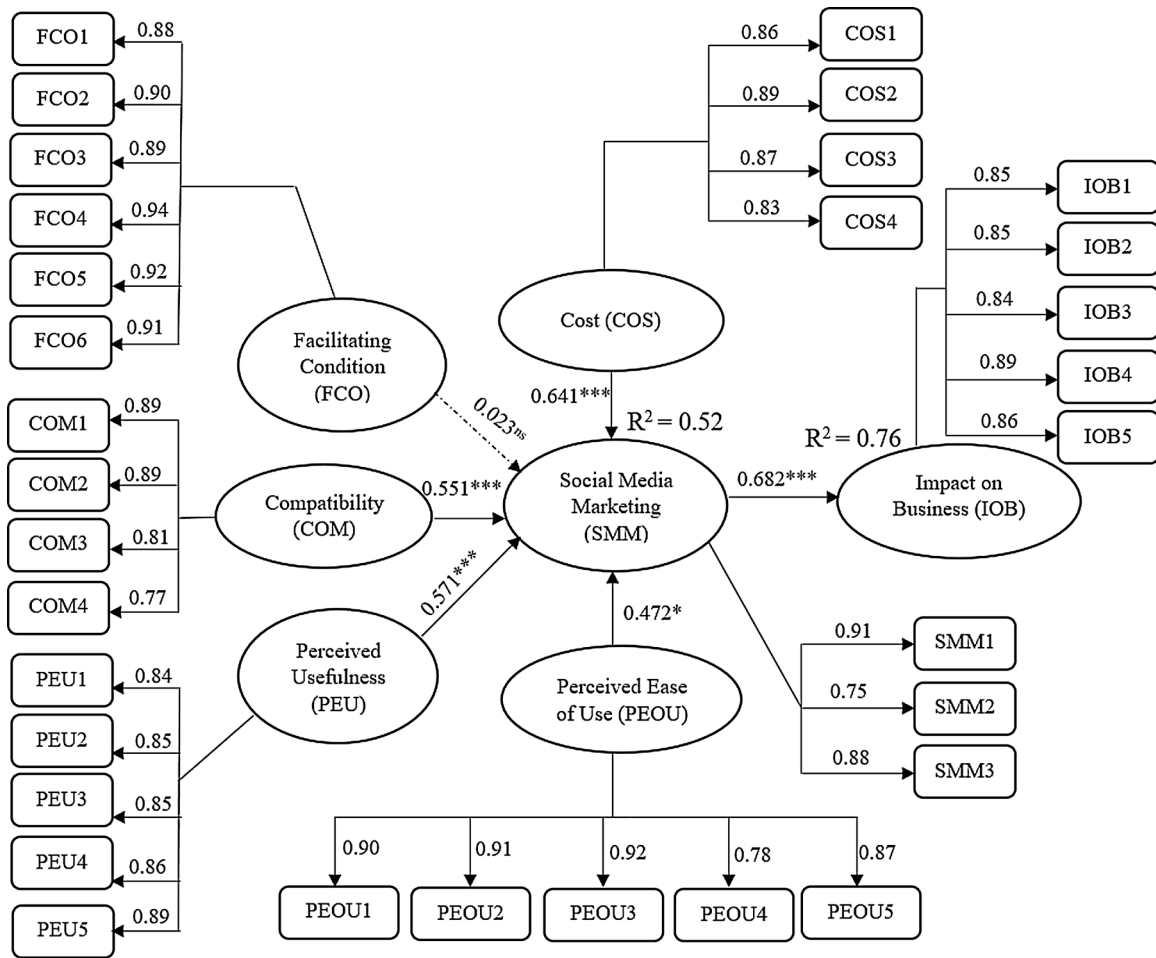


Fig. A1. Detailed figure with load distribution.

Appendix B. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:<https://doi.org/10.1016/j.ijinfomgt.2020.102103>.

References

Abdi, H. (2010). Partial least squares regression and projection on latent structure regression (PLSRegression). *Wires Computational Statistics*, 2(1), 97–106. <https://doi.org/10.1002/wics.51>.

Abed, S. S., Dwivedi, Y. K., & Williams, M. D. (2016). Social commerce as a business tool in Saudi Arabia's SMEs. *International Journal of Indian Culture and Business Management*, 13(1), 1–19. <https://doi.org/10.1504/IJICBM.2016.077634>.

Abed, S. S., Dwivedi, Y. K., & Williams, M. D. (2015a). SMEs' adoption of e-commerce using social media in a Saudi Arabian context: A systematic literature review. *International Journal of Business Information Systems*, 19(2), 159–179. <https://doi.org/10.1504/IJBIS.2015.069429>.

Abed, S. S., Dwivedi, Y. K., & Williams, M. D. (2015b). Social media as a bridge to e-commerce adoption in SMEs: A systematic literature review. *The Marketing Review*, 15(1), 39–57. <https://doi.org/10.1362/146934715X14267608178686>.

Acquity Group (2014). *The internet of things: The continuation of the internet, 8-9*. https://www.accenture.com/t20150624t211456_w_us-en/acnmedia/accenture/conversion-assets/dotcom/documents/global/pdf/technology_9/accenture-internet-things.pdf.

Adla, L., Gallego-Roquelaure, V., & Calamel, L. (2019). Human resource management and innovation in SMEs. *Personnel Review*. <https://doi.org/10.1108/PR-09-2018-0328> In Press.

Aggelidis, V., & Chatzoglou, P. (2009). Using a modified technology acceptance model in hospitals. *International Journal of Medical Informatics*, 7(8), 115–126. <https://doi.org/10.1016/j.ijmedinf.2008.06.006>.

Ahi, A., Baronchelli, G., Kuivalainen, O., & Piantoni, M. (2017). International market entry: How do small and medium-sized enterprises make decisions? *Journal of International Marketing*, 25(1), 1–21. <https://doi.org/10.1509/jim.15.0130>.

Alalwan, A. A., Rana, N. P., Dwivedi, Y. K., & Algharabat, R. S. (2017). Social media in marketing: A review and analysis of the existing literature. *Telematics and Informatics*,

34(7), 1177–1190. <https://doi.org/10.1016/j.tele.2017.05.008>.

Alam, S. S., & Noor, M. K. M. (2009). ICT adoption in small and medium enterprises: An empirical evidence of service sectors in Malaysia. *International Journal of Business and Management*, 4(2), 112–125. <https://doi.org/10.5539/ijbm.v4n2p112>.

Algharabata, R., Rana, N. P., Dwivedi, Y. K., Alalwan, A. A., & Qasem, Z. (2018). The effect of telepresence, social presence and involvement on consumer. *Journal of Retailing and Consumer Services*, 40, 139–149. <https://doi.org/10.1016/j.jretconser.2017.09.011>.

Alhakimi, W., & Mahmoud, M. (2020). The impact of market orientation on innovativeness: Evidence from Yemeni SMEs. *Asia Pacific Journal of Innovation and Entrepreneurship*. <https://doi.org/10.1108/APJIE-08-2019-0060> In press.

Aral, S., Dellarocas, C., & Godes, D. (2013). Introduction to the special issue —Social media and business transformation: A framework for research. *Information Systems Research*, 24(1), 3–13. <https://doi.org/10.1287/isre.1120.0470>.

Ashrafi, R., & Murtaza, M. (2008). Use and impact of ICT on SMEs in Oman. *Electronic Journal of Information Systems Evaluation*, 11(3), 125–138 <https://doi.org/ISSN 1566-6379>.

Aswani, R., Kar, A. K., Ilavarasan, P. V., & Dwivedi, Y. K. (2018). Search engine marketing is not all gold: Insights from Twitter and SEOClerks. *International Journal of Information Management*, 38(1), 107–116. <https://doi.org/10.1016/j.ijinfomgt.2017.07.005>.

Boroso, C., Carrion, G. C., & Roldan, J. L. (2010). Applying maximum likelihood and PLS on different sample sizes: Studies on servqual model and employee behavior model. In V. Esposito Vinzi, W. W. Chin, J. Henseler, & H. Wang (Eds.). *Handbook of partial least squares: Concepts, methods and applications*. (pp. 427–447). Heidelberg: Springer.

Broom, G. M. (2006). An open-system approach to building theory in public relations. *Journal of Public Relations Research*, 18(2), 141–150. https://doi.org/10.1207/s1532754xjpr1802_4.

Brown, I., & Russell, J. (2007). Radio frequency identification technology: an exploratory study on adoption in the South African retail sectors. *International Journal of Information Management*, 27(4), 250–265. [11](https://doi.org/10.1016/j.ijinfomgt.2007.</p>
</div>
<div data-bbox=)

- 02.007.
- Carpenter, S. (2018). Ten steps in scale development and reporting: A guide for researchers. *Communication Methods and Measures*, 12(1), 25–44. <https://doi.org/10.1080/19312458.2017.1396583>.
- Carpenter, S., Grant, A. E., & Hoag, A. (2016). Journalism degree motivations (JDM): The development of a scale. *Journalism & Mass Communication Educator*, 71(1), 5–27. <https://doi.org/10.1177/1077695814551835>.
- Chae, B. (2015). Insights from hashtag #supplychain and Twitter analytics: Considering Twitter and Twitter data for supply chain practice and research. *International Journal of Production Economics*, 165, 247–259. <https://doi.org/10.1016/j.ijpe.2014.12.037>.
- Chatterjee, S., & Kar, A. K. (2018a). Regulation and governance of the internet of things in India. *Digital Policy Regulation and Governance*, 20(5), 399–412. <https://doi.org/10.1108/DPRG-04-2018-0017>.
- Chatterjee, S., & Kar, A. K. (2018b). Effects of successful adoption of information technology enabled services in proposed smart cities of India: From user experience perspective. *Journal of Science and Technology Policy Management*, 9(2), 189–209. <https://doi.org/10.1108/JSTPM-03-2017-0008>.
- Chatterjee, S., Kar, A., & Gupta, M. P. (2018). Success of IoT in Smart Cities of India: An empirical analysis. *Government Information Quarterly*, 35(3), 349–361. <https://doi.org/10.1016/j.giq.2018.05.002>.
- Chin, W. W., & Todd, P. A. (1995). On the use, usefulness, and ease of use of structural equation modelling in MIS research: A note of caution. *MIS Quarterly*, 19(2), 237–246. <https://doi.org/10.2307/249690>.
- Choe, M.-J., & Noh, G.-Y. (2018). Combined model of technology acceptance and innovation diffusion theory for adoption of smartwatch. *International Journal of Contents*, 14(3), 32–38. <https://doi.org/10.5392/IJoC.2018.14.3.032>.
- Chong, A. Y.-L., & Chan, F. T. (2012). Structural equation modeling for multi-stage analysis on radio frequency identification (RFID) diffusion in the health care industry. *Expert Systems With Applications*, 39(10), 8645–8654. <https://doi.org/10.1016/j.eswa.2012.01.201>.
- Chung, A. Q. H., Andreev, P., Benyoucef, M., Duane, A., & O'Reilly, P. (2017). Managing an organization's social media presence: An empirical stages of growth model. *International Journal of Information Management*, 37(1), 1405–1417. <https://doi.org/10.1016/j.ijinfomgt.2016.10.003>.
- Consoli, D. (2012). Literature analysis on determinant factors and the impact of ICT in SMEs. *Procedia - Social and Behavioral Sciences*, 62, 93–97. <https://doi.org/10.1016/j.sbspro.2012.09.016>.
- Culnan, M. J., McHugh, P. J., & Zubillaga, J. I. (2010). How large US companies can use Twitter and other social media to gain business value. *MIS Quarterly Executive*, 9(4), 243–259. <http://dblp.uni-trier.de/db/journals/misqe/misqe9.html#CulnanMZ10>.
- Das, K. (2007). SMEs in India: issues and possibilities in times of globalisation. *Asian SMEs and Globalization, ERIA Research Project Report*, 5, 69–97. http://www.eria.org/SMEs%20in%20India_Issues%20and%20Possibilities%20in%20Times%20of%20Globalisation.pdf.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>.
- Davis, F., Bagozzi, R., & Warshaw, P. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982–1003. <https://doi.org/10.1287/mnsc.35.8.982>.
- de Graaf, M. M. A., Allouch, S. B., & van Dijk, J. A. G. M. (2019). Why would I use this in my home? A model of domestic social robot acceptance. *Human-Computer Interaction*, 34(2), 115–173. <https://doi.org/10.1080/07370024.2017.1312406>.
- Deb, M., & David, E. L. (2014). An empirical examination of customer's adoption of m-banking in India. *Marketing Intelligence & Planning*, 32(4), 475–494. <https://doi.org/10.1108/MIP-07-2013-0119>.
- Derham, R., Cragg, P., & Morrish, S. (2011). *Creating Value: an SME and Social media, PACIS 2011 Proceedings*. Paper 53. Available at: <http://aisel.aisnet.org/pacis2011/53>.
- DeVellis, R. F. (2012). *Scale development Theory and applications* (3rd ed.). Thousand Oaks, CA: Sage. <https://trove.nla.gov.au/work/16802122>.
- Dixon, T., Thompson, B., & McAllister, P. (2002). *The value of ICT for SMEs in the UK: A critical literature review, report for Small Business Service Research Program West Berkshire: The College of Estate Management* Available at: www.sbs.gov.uk/SBS_Gov_files/researchandstats/value_of ICT_for_SMEs_UK.pdf.
- Dwivedi, Y. K., Kapoor, K. K., & Chen, H. (2015). Social media marketing and advertising. *The Marketing Review*, 15(3), 289–309. <https://doi.org/10.1362/146934715X14441363377999>.
- Dwivedi, Y. K., Rana, N. P., Janssen, M., Lal, B., Williams, M. D., & Clement, M. (2017). An empirical validation of a unified model of electronic government adoption (UMEGA). *Government Information Quarterly*, 34(2), 211–230. <https://doi.org/10.1016/j.giq.2017.03.001>.
- Dwivedi, Y. K., Rana, N. P., Jeyaraj, A., Clement, M., & Williams, M. D. (2019). Re-examining the unified theory of acceptance and use of technology (UTAUT): Towards a revised theoretical model. *Information Systems Frontiers*, 21(3), 719–734. <https://doi.org/10.1007/s10796-017-9774-y>.
- Elbanna, A., Bunker, D., Levine, L., & Sleight, A. (2019). Emergency management in the changing world of social media: Framing the research agenda with the stakeholders through engaged scholarship. *International Journal of Information Management*, 47, 112–120. <https://doi.org/10.1016/j.ijinfomgt.2019.01.011>.
- Ernst and Young (Commissioned by the National Office for the Information Economy (NOIE) of Australia) (2001). *Advancing with e-commerce*. Available at: www.noie.gov.au.
- Fatima, T., & Bilal, A. (2019). Achieving SME performance through individual entrepreneurial orientation: An active social networking perspective. *Journal of Entrepreneurship in Emerging Economies*. <https://doi.org/10.1108/JEEE-03-2019-0037> In Press.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.2307/3151312>.
- Gefen, D. (2000). E-commerce: The role of familiarity and trust. *The International Journal of Management Science*, 28(6), 725–737. [https://doi.org/10.1016/S0305-0483\(00\)00021-9](https://doi.org/10.1016/S0305-0483(00)00021-9).
- Gefen, D., & Straub, D. (2005). A practical guide to factorial validity using PLS-Graph: Tutorial and annotated example. *Communications of the Association for Information Systems*, 16(5), 91–109. <http://aisel.aisnet.org/cais/vol16/iss1/5>.
- Ghanem, H. (2013). *Role of micro and small enterprises in Egypt's economic transition*. Brookings <https://doi.org/10.1.1.306.7389>.
- Hair, J., Black, W. C., Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate data analysis* (6th edition). Prentice Hall, New Jersey, USA: Pearson.
- Hair, J., Jr, Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Prentice Hall.
- Harman, H. H. (1976). *Modern factor analysis* (3rd edition). Chicago, IL: University of Chicago Press.
- Harrigan, P., Soutar, G., Choudhury, M. M., & Lowe, M. (2015). Modelling CRM in a social media age. *Australasian Marketing Journal*, 23(1), 27–37. <https://doi.org/10.1016/j.ausmj.2014.11.001>.
- Harris, L., Rae, A., & Grewal, S. (2008). Out on the pull: How small firms are making themselves sexy with new online promotion techniques. *International Journal of Technology Marketing*, 3(2), 153–168. <https://doi.org/10.1504/IJTMKT.2008.018862>.
- Henderson, R., & Divett, M. (2003). Perceived usefulness, ease of use and electronic supermarket use. *International Journal of Human-computer Studies*, 59(3), 383–395. [https://doi.org/10.1016/S1071-5819\(03\)00079-X](https://doi.org/10.1016/S1071-5819(03)00079-X).
- Henson, R. K., & Roberts, J. K. (2006). Use of exploratory factor analysis in published research. Common errors and some comment on improved practice. *Education and Psychological Measurement*, 66(3), 393–416. <https://doi.org/10.1177/0013164405282485>.
- Hinkin, I. P. (1996). A review of scale development in the study of behavior in organizations. *Journal of Management*, 21(5), 967–988. <https://doi.org/10.1177/014920639502100509>.
- Hofsted, G. (1997). *Culture and organizations: Software of the mind* (3rd edition). USA: McGraw-Hill Education.
- Hosseini, S., Fallon, G., Weerakkody, V., & Sivarajah, U. (2019). Cloud computing utilization and mitigation of informational and marketing barriers of the SMEs from the emerging markets: Evidence from Iran and Turkey. *International Journal of Information Management*, 46, 54–69. <https://doi.org/10.1016/j.ijinfomgt.2018.11.011>.
- Hoyle, R. H. (1995). *The structural equation modeling approach: Basic concepts and fundamental issues*. Thousand Oaks, CA: Sage Publications.
- Hsu, C., Lu, H., & Hsu, H. (2007). Adoption of the mobile internet: An empirical study of multimedia message services (MMS). *The International Journal of Management Science*, 35(6), 715–726. <https://doi.org/10.1016/j.omega.2006.03.005>.
- Hu, L.-T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>.
- Hung, Y. H., & Lai, H. Y. (2015). Effects of facebook like and conflicting aggregate rating and customer comment on purchase intentions. *International Conference on Universal Access in Human-Computer Interaction, 193–200*. Los Angeles, CA: Springer International. *Information Dimensions, Communications of the Association for Information Systems*, 1–23. https://doi.org/10.1007/978-3-319-20678-3_19 31(5).
- Ilavarasan, P. V., & Levy, M. R. (2010). *ICTs and urban microenterprises: Identifying and maximizing opportunities for economic development final report*. *Human communication research* https://pdfs.semanticscholar.org/be28/a2949381e5c270f2b63a8-f0a122d3bc4618f.pdf?_ga=2.205962003.1630805733.1572778369-1929475400.1572778369.
- James, G., Witten, D., Hastie, T., & Tibshirani, R. (2017). *An introduction to statistical learning* (8th edition). New York: Springer Science Publication.
- Junaidah, H. (2007). Information communication technology (ICT) adoption among SME owners in Malaysia. *International Journal of Business and Information*, 2(2), 221–240. <https://doi.org/10.5897/AJBM10.1398>.
- Kafai, Y. B., Fields, D. A., & Burke, W. Q. (2010). Entering the clubhouse. *Journal of Organizational and End User Computing*, 22(2), 21–35. <https://doi.org/10.4018/joeuc.2010101906>.
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1), 59–68. <https://doi.org/10.1016/j.bushor.2009.09.003>.
- Kapoor, K. K., Tamilmani, K., Rana, N. P., Patil, P., Dwivedi, Y. K., & Nerur, S. (2018). Advances in social media research: Past, present and future. *Information Systems Frontiers*, 20(3), 531–558. <https://doi.org/10.1007/s10796-017-9810-y>.
- Kar, A. K. (2015). Integrating websites with social media—An approach for group decision support. *Journal of Decision Systems*, 24(3), 339–353. <https://doi.org/10.1080/12460125.2015.969585>.
- Kar, A. K., Ilavarasan, V., Gupta, M. P., Janssen, M., & Kothari, R. (2019). Moving beyond smart cities: Digital nations for social innovation & sustainability. *Information Systems Frontiers*, 21(3), 495–501. <https://doi.org/10.1007/s10796-019-09930-0>.
- Keskin, H., Sentürk, C., Sungur, O., & Kiris, H. M. (2010). The importance of SMEs in developing economies. *2nd International Symposium on Sustainable Development*, 183–192. http://eprints.ibu.edu.ba/151/1/ISSD2010_Economy_Management_p183-p192.pdf.
- Kim, T., & Chiu, W. (2019). Consumer acceptance of sports wearable technology: The role of technology readiness. *International Journal of Sports Marketing and Sponsorship*, 20(1), 109–126. <https://doi.org/10.1108/IJMSM-06-2017-0050>.
- Kim, K. J., & Shin, D. H. (2015). An acceptance model for smart watches: implications for the adoption of future wearable technology. *Internet Research*, 25(4), 527–541. <https://doi.org/10.1108/IntR-05-2014-0126>.

- Kline, R. B. (2013). Exploratory and confirmatory factor analysis. In Y. Petscher, C. Schatschneider, & D. L. Compton (Eds.), *Applied quantitative analysis education and the social sciences* (pp. 171–207). New York, NY, USA: Routledge.
- Kline, R. B. (2005). *Principles and practice of structural equation modelling*. New York: Guilford.
- Kock, N., & Lynn, G. (2012). Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations. *Journal of the Association for Information Systems*, 13(7), 546–580. <http://aisel.laisnet.org/jais/vol13/iss7/2>.
- Kuo, Y.-F., & Yen, S.-N. (2009). Towards an understanding of the behavioral intention to use 3G mobile value-added services. *Computers in Human Behavior*, 25(1), 103–110. <https://doi.org/10.1016/j.chb.2008.07.007>.
- Lee, Y., Kozar, K. A., & Larsen, K. R. T. (2003). The technology acceptance model: Past, present and future. *Communications of the Association for Information Systems*, 12(1), 752–780. <https://doi.org/10.17705/1CAIS.01250>.
- Mangold, W. G., & Faulds, D. J. (2009). Social media: The new hybrid element of the promotion mix. *Business Horizons*, 52(4), 357–365. <https://doi.org/10.1016/j.bushor.2009.03.002>.
- Massey, C., Cameron, A., Cheyne, J., Harris, C., Tweed, D., Wallace, C., et al. (2004). *Speaking up: Stories of growth in small & medium enterprises in New Zealand*. <https://doi.org/10.1191/0969733005ne8000a>.
- Misirlis, N., & Vlachopoulou, M. (2018). Social media metrics and analytics in marketing – 3SM: A mapping literature review. *Journal of Information Management*, 38, 270–276. <https://doi.org/10.1016/j.jifm.2018.10.009>.
- Natemeyer, R. G., Bearden, W. O., & Sharma, S. (2003). *Scaling procedures: Issues and applications*. Thousand Oaks, CA: Sage Publications.
- Ng, H., Kee, D., & Ramayah, T. (2019). Examining the mediating role of innovativeness in the link between core competencies and SME performance. *Journal of Small Business and Enterprise Development*, 27(1), 103–129. <https://doi.org/10.1108/JSBED-12-2018-0379>.
- Ongori, H., & Migiro, S. O. (2010). Information and communication technologies adoption in SMEs: Literature review. *Journal of Chinese Entrepreneurship*, 2(1), 93–104. <https://doi.org/10.1108/17561391101190401>.
- Paris, C., Lee, W., & Seery, P. (2010). The role of social media in promoting special events: Acceptance of facebook' Events'. *Information and Communication Technologies in Tourism*, 14, 531–541. https://doi.org/10.1007/978-3-211-99407-8_44.
- Park, S. (2009). An analysis of the technology acceptance model in understanding university students' behavioral intention to use e-Learning. *Educational Technology & Society*, 12(3), 150–162.
- Park, E., Kim, K. J., & Kwon, S. J. (2016). Understanding the emergence of wearable devices as next-generation tools for health communication. *Information Technology and People*, 29(4), 717–732. <https://doi.org/10.1108/ITP-04-2015-0096>.
- Pett, M. A., Lackey, N. R., & Sullivan, J. L. (2003). *Making sense of factor analysis. The use of factor analysis for instrument development in health care research*. Thousand Oaks, CA: Sage Publications, Inc.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *The Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>.
- Premkumar, G., & Roberts, M. (1999). Adoption of new information technologies in rural small businesses. *Omega*, 27(4), 467–484. [https://doi.org/10.1016/S0305-0483\(98\)00071-1](https://doi.org/10.1016/S0305-0483(98)00071-1).
- Rana, N. P., Barnard, B. J., Baabdullah, A. M. A., Rees, D., & Roderick, S. (2019). Exploring barriers of m-commerce adoption in SMEs in the UK: Developing a framework using ISM. *International Journal of Information Management*, 44, 141–153. <https://doi.org/10.1016/j.jifm.2018.10.009>.
- Rathore, A. K., Ilavarasan, P. V., & Dwivedi, Y. K. (2016). Social media content and product co-creation: An emerging paradigm. *Journal of Enterprise Information Management*, 29(1), 7–18. <https://doi.org/10.1108/JEIM-06-2015-0047>.
- Rathore, A. K., Kar, A. K., & Ilavarasan, P. V. (2017). Social media analytics: Literature review and directions for future research. *Decision Analysis*, 14(4), 229–249. <https://doi.org/10.1287/deca.2017.0355>.
- Rogers, E. M. (1983). *Diffusion of innovations*. New York, NY: Free Press.
- Ruel, E. E., Wagner, W. E., & Gillespie, B. J. (2016). *The practice of survey research*. Thousand Oaks, CA: Sage.
- Sawhney, M., & Prandelli, E. (2000). Communities of creation: Managing distributed innovation in turbulent markets. *California Management Review*, 42(4), 24–54. <https://doi.org/10.2307/41166052>.
- Segars, A. H., & Grover, V. (1993). Re-examining perceived ease of use and usefulness: A confirmatory factor analysis. *MIS Quarterly*, 17(4), 517–525. <https://doi.org/10.2307/249590>.
- Selvanayagam, K., & Rehman, V. (2019). Materialism, television and social media – Analysis of the transformation of post-colonial Indian market. *Journal of Historical Research in Marketing*, 11(3), 250–270. <https://doi.org/10.1108/JHRM-03-2018-0011>.
- Shareef, M. A., Mukerji, B., Alryalat, M. A. A., Wright, A., & Dwivedi, Y. K. (2018). Advertisements on Facebook: Identifying the persuasive elements in the development of positive attitudes in consumers. *Journal of Retailing and Consumer Services*, 43, 258–268. <https://doi.org/10.1016/j.jretconser.2018.04.006>.
- Shareef, M. A., Mukerji, B., Dwivedi, Y. K., Rana, N. P., & Islam, R. (2019). Social media marketing: Comparative effect of advertisement sources. *Journal of Retailing and Consumer Services*, 46, 58–69. <https://doi.org/10.1016/j.jretconser.2017.11.001>.
- Shareef, M. A., Kumar, V., Kumar, U., & Dwivedi, Y. K. (2011). e-Government Adoption Model (GAM): Differing service maturity levels. *Government Information Quarterly*, 28(1), 17–35. <https://doi.org/10.1016/j.giq.2010.05.006>.
- Sharma, S., Mukherjee, S., Kumar, A., & Dillon, W. R. (2005). A simulation study to investigate the use of cutoff values for assessing model fit in covariance structure models. *Journal of Business Research*, 58(7), 935–943. <https://doi.org/10.1016/j.jbusres.2003.10.007>.
- Shi, S., Cao, Y., Chen, Y., & Chow, W. (2019a). How social media brand pages contribute to functional conflict: The central role of commitment. *International Journal of Information Management*, 39, 156–168. <https://doi.org/10.1016/j.jifm.2018.11.007>.
- Shi, S., Cao, Y., Chen, Y., & Chow, W. S. (2019b). How social media brand pages contribute to functional conflict: The central role of commitment. *International Journal of Information Management*, 45(4), 95–106. <https://doi.org/10.1016/j.jifm.2018.11.007>.
- Shiau, W. L., Dwivedi, Y. K., & Yang, H. S. (2017). Co-citation and cluster analyses of extant literature on social networks. *International Journal of Information Management*, 37(5), 390–399. <https://doi.org/10.1016/j.jifm.2017.04.007>.
- Shiau, W.-L., Dwivedi, Y. K., & Lai, H.-H. (2018). Examining the core knowledge on Facebook. *International Journal of Information Management*, 43(12), 52–63. <https://doi.org/10.1016/j.jifm.2018.06.006>.
- Singh, R. K., Garg, S. K., & Deshmukh, S. G. (2010). The competitiveness of SMEs in a globalized economy: Observations from China and India. *Management Research Review*, 33(1), 54–65. <https://doi.org/10.1108/01409171011011562>.
- Srinivasan, S., Rutz, O., & Pauwels, K. (2015). Paths to and off purchase: Quantifying the impact of traditional marketing and online consumer activity. *Journal of the Academy of Marketing Science*, 44(4), 440–453. <https://doi.org/10.1007/s11747-015-0431-z>.
- Steiger, J. H. (2007). Understanding the limitations of global fit assessment in structural equation modeling. *Journal of Personality and Individual Differences*, 42(5), 893–898. <https://doi.org/10.1016/j.jpaid.2006.09.017>.
- Stephen, A. T., & Toubia, O. (2010). Deriving value from social commerce networks. *Journal of Marketing Research*, 47(2), 215–228. <https://doi.org/10.1509/jmkr.47.2.215>.
- Stieglitz, S., Mirbabaie, M., Ross, B., & Neuberger, C. (2019). Social media analytics – Challenges in topic discovery, data collection, and data preparation. *International Journal of Information Management*, 39, 156–168. <https://doi.org/10.1016/j.jifm.2017.12.002>.
- Sullivan, Y. W., & Koh, C. E. (2019). Social media enablers and inhibitors: Understanding their relationships in a social networking site context. *International Journal of Information Management*, 49, 170–189. <https://doi.org/10.1016/j.jifm.2019.03.014>.
- Sykes, T. A., Venkatesh, V., & Gosain, S. (2009). Model of acceptance with peer support: A social network perspective to understand employees' system use. *MIS Quarterly*, 33(2), 371–393. <https://doi.org/10.2307/20650296>.
- Turner, M., Kitchenham, B., Brereton, P., Charters, S., & Budgen, D. (2010). Does the technology acceptance model predict actual use? A systematic literature reviews. *Information and Software Technology*, 52(5), 463–479. <https://doi.org/10.1016/j.infsof.2009.11.005>.
- Urbach, N., & Ahlemann, F. (2010). Structural equation modeling in information system research using partial least squares. *Journal of Information Technology Theory and Application*, 11(2), 5–40. <http://aisel.laisnet.org/jitta/vol11/iss2/2>.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *Source: MIS Quarterly*, 27(3), 425–478. <https://doi.org/10.2307/30036540>.
- Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157–178. <https://doi.org/10.2307/41410412>.
- Walsh, M., & Lipinski, J. (2009). The role of the marketing function in small and medium sized enterprises. *Journal of Small Business and Enterprise Development*, 16(4), 569–585. <https://doi.org/10.1108/14626000911000929>.
- Wang, Y.-M., Wang, Y.-S., & Yang, Y.-F. (2010). Understanding the determinants of RFID adoption in the manufacturing industry. *Technological Forecasting and Social Change*, 77(5), 803–815. <https://doi.org/10.1016/j.techfore.2010.03.006>.
- Ware, J. (2018). Wearable technologies and journalism ethics: Students' perceptions of Google glass. *Teaching Journalism & Mass Communication*, 8(1), 17–24. https://doi.org/10.1007/978-3-319-25684-9_25.
- Williams, M. D., Rana, N. P., & Dwivedi, Y. K. (2015). The unified theory of acceptance and use of technology (UTAUT): A literature review. *Journal of Enterprise Information Management*, 28(3), 443–488. https://doi.org/10.1108/JEIM-09-2014-0088_1-10.
- Wold, S., Sjostrom, M., & Eriksson, L. (2001). PLS-regression: a basic tool of chemometrics. *Chemometrics and Intelligent Laboratory Systems*, 58(2), 109–130. [https://doi.org/10.1016/S0169-7439\(01\)00155-1](https://doi.org/10.1016/S0169-7439(01)00155-1).
- Worthington, R. L., & Whittaker, T. A. (2006). Scale development research. A content analysis for recommendations for best practices. *The Counseling Psychologist*, 34(6), 806–838. <https://doi.org/10.1177/0011000006288127>.
- Wu, L., Li, J.-Y., & Fu, C.-Y. (2011). The adoption of mobile healthcare by hospital's professionals: An integrative perspective. *Decision Support Systems*, 51(3), 587–596. <https://doi.org/10.1016/j.dss.2011.03.003>.
- Yi, C., Liao, P., Huang, C., & Hwang, I. (2009). Acceptance of mobile learning: A Re specification and validation of information system success. *World Academy of Science, Engineering and Technology*, 53, 726–730.
- Yoon, S.-B., & Cho, E. (2016). Convergence adoption model (CAM) in the context of a smart car service. *Computers in Human Behavior*, 60, 500–507. <https://doi.org/10.1016/j.chb.2016.02.082>.
- Yousafzai, S. Y., Foxall, G. R., & Pallister, J. G. (2007). Technology acceptance: A meta-analysis of the TAM: Part 1. *Journal of Modeling Design and Management of Engineering Systems*, 2(3), 251–280. <https://doi.org/10.1108/17465660710834453>.
- Zhang, C., Fan, C., Yao, W., Hu, X., & Mostafavi, A. (2019). Social media for intelligent public information and warning in disasters: An interdisciplinary review. *International Journal of Information Management*, 49, 190–207. <https://doi.org/10.1016/j.jifm.2019.04.004>.