The Effect of Social Network Sites on The Hotels' Innovation Capabilities and Performance: A Review

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Abstract—**Social Network Sites (SNSs) play an essential role in knowledge transfer which can be used in several applications. The past literature highlighted the role of SNSs in general communication and social relationship management and in marketing activities such as promotion. However, SNSs are essential sources of knowledge that can be used in social network management or marketing activities and in developing firms' innovation capabilities. Recently, few studies indicated that SNSs are important sources for innovation development and firm performance, but with a slight explanation of how SNSs influence innovation capabilities. Therefore, this study aims to explain the role of SNSs on innovation capabilities and hotel performance. This study also intends to propose a framework that explains the interaction between SNSs and hotel innovative activities and performance.**

Keywords—SNSs; Hotels; Innovation; Performance; Review; Paper

I. INTRODUCTION

RESEARCH of web-based networking media has generated varied theoretical perspectives by different researchers; the technology acceptance model (TAM) [1], the resource-based view (RBV) theory [2] and the theory of planned behaviour (TPB) by [3]. TPB has been extensively applied to forecast the social norm, perceived behaviour, attitude and normative belief on the social network. As an example, [4] determined factors affecting the intent to use online stock trading among investors in Malaysia. The application of the theory of planned behaviour was used to explain the disparity between actual usage and behavioural intent. However, this theory has been criticised as it overlooks an individual's needs after engaging in a particular action, needs that could determine behavioural change irrespective of expressed attitudes [5]. Another theory is the Technology Organizations Environment (TOE), which has been used to investigate the technological, environmental and organisational factors that influence innovation [6]. This theory clearly explains how those three factors influence innovation development.

The technology incorporates external and internal advancements significant to the organisation. The technology in context includes hardware as well as software. Organisational factors cover the attributes and resources of the firm, including the organisation's size, level of centralisation, level of formalisation, administrative structure, HR, the measure of slack assets, and relationships between workers. Environmental factors cover an organisation's size, structure, competition, macroeconomic setting, and the regulations set within the area of operation [6]. Despite extensively clear comprehension in writing on the TOE system, there are still a couple of issues pertaining to the model. One of the issues is that the model dismisses social factors in relation to SMEs' relationships with family, partners and staff [7]. These outlined factors can help organisations acquire inaccessible resources to get to new technologies and markets and exchange aptitudes [8]. Notably, SMEs couldn't manage the cost of retention or recruitment of qualified IS/IT specialists because of limited

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resources [9]. Alternatively, organisations make up for the limitation in funds by getting guidance and assistance from other sources [10]. The technology acceptance model (TAM) [11] came to the forefront as an information systems theory which simulates users' growth to accept and use technology. However, these studies looked at the criteria of friend-networking sites [12] and the difficulties based on users' behaviour as well as the characteristics of the users [13] in terms of satisfaction of the customers with the electronic relationship [14]. In any case, criticism has stemmed from numerous researchers contending that it lacks any applicable value [15]. [16] opined that TAM "Distracted researchers from delving into other vital research concerns which deceptively alluded an impression of advancement in generating new knowledge. Generally, TAM centres around individual 'users' of a PC, with the view of 'perceived benefits', excluding critical social processes of IS advancement and implementation, without inquiry as to whether more innovation and technology is, in reality, beneficial, as well as the social impact of IS use. RBV has been broadly utilised as a managerial framework to determine key strategic assets with the possibility of yielding a comparative advantage over their competition. Since the social network sites assume a fundamental role in information and knowledge acquisition which are the main elements in innovation development and absorptive capacity, RBV is utilised as a focal point to scrutinise the link between innovation performance and SNSs. Nevertheless, the resource-based view has been faulted for several reasons, for example, it doesn't consider how key capacities are acquired, [17] the role of products markets is unexplored in the contention [2] and it disregards the external factors that influence a firms' competitive advantage [18].

TABLE I. DISCRETION OF THE STRENGTHS AND WEAKNESS THEORY

Theory	Strengths	Weakness
Theory of Planned Behaviour (TPB) by [3]	The TPB was used extensively to predict the influence and attitude based on the social norm, normative beliefs, and perceived behaviour on the social network. For example, [4] categorises aspects affecting Malaysian stock traders' intent to use internet stock trading.	TPB received criticism because it omitted individual needs preceding a specific action that would have an impact regardless of expressed attitudes [5]
Technology Accepted Model (TAM) [1]	Investigates the technological, environmental and organisational factors that influence innovation. [6] provides a clear understanding of how innovation development is affected by the three variables outlined above. Technological context assesses the internal and external advancements of significance to the firm. Environmental context incorporates the size and structure of the business, the company's rivals, the macroeconomic setting, and the regulatory environment [6]. TAM is leading as an information systems theory which models how clients come to acknowledge and utilise an innovation/ technology. However, most of these studies were looking at the criteria of friend-networking sites [12] and the difficulties based on user behaviour as well as the characteristics of the users [13] and satisfaction of the customers with the electronic relationship [14].	This model disregards social components of SMEs, for example, family, friends, associates and staff [7]. These facets empower organisations to acquire rare assets, break into new markets/technologies, and share complementary abilities [8]. It is worth noting that SMEs couldn't manage the cost of retaining or enlisting qualified IS/IT specialists because of limited resources [9]. On the other hand, organisations compensate for this limitation by seeking counsel from alternative sources [10]. Many scholars have criticised it because it lacks to value and practical value [15]. Finally, TAM focuses on the individual 'user' of a computer, under the concept of 'perceived usefulness', with an extension to bring in more factors which explain how a user 'perceives' 'usefulness', and ignores the essentially social processes of IS development and implementation without question in situations where technology is beneficial.

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Resource-based view (RBV) theory [2].	The RBV has generally been utilised as an administrative framework to establish which vital assets can deliver comparative advantage to the firm. RBV is used as a lens to examine the relationship between innovation performance and SNSs performance. In this way, web-based media augments SMEs' ability to increase their efficiency [20]. The resource-based view of an organisation establishes the connection between web-based social networking use and value creation for small and medium-sized enterprises [21]. Furthermore, online networking creates value for SMEs concerning internal operations, advertising, client administrations, and deals, which are essential factors for small and medium-sized enterprises. In RBV, resources deemed valuable and scarce and whose advantages can be adopted by the organisation give it a brief competitive advantage.	The resource-based view has been criticised for several reasons, including the lack of consideration of how the key capabilities are acquired, [17] the role of product markets is underdeveloped in the argument [2], and it ignores the external factors that affect the firms' competitive advantage [18].

Despite the criticisms of RBV, it is used widely and by recent research to determine the strategic resources such as technological competencies having the potential leverage and comparative advantage to an organisation via innovation. In this paper, we argue that RBV is more appropriate to be used as a lens to guide the researcher in determining the SNSs that influence innovation and SME performance. To tackle the criticisms, this research introduces an absorptive capacity which measures the mediate effect on the relationship between social network sites, innovation and the firms' performance. Based on the resource-based view asset-based view (RBV), sustainable competitive advantage is plausible when a firm has capabilities and resources [19]. Consequently, SMEs' ability to expand their execution is considerably enhanced through social media [20]. The resource-based view of an organisation fosters a link between web-based social networking use and value creation with the start-up of additional SMEs [21]. In addition, social media generates value for SMEs in relation to internal operations, advertising, sales and client services, which are critical factors for SMEs.

II. SOCIAL NETWORK SITES

The term "small and medium-sized enterprises" refers to all independent businesses with less than 250 employees, less than USD$ 190m in capital investments, and less than USD$ 70m in annual turnovers [22]. However, SMEs can be defined differently in different markets and economies. A commonly used method is the number of employees [23]. Other methods include the firm's capital investments and annual turnovers [24]. The definition of SMEs varies from country to country, market to market, and industry to industry; therefore, there is no single common used definition [25]. In the UAE market, the definition of SMEs is based on the number of employees, which is used in this study and is according to the [22]: small (1-9 employees), medium (10-199 employees), and large (more than 200 employees). Based on the entrepreneurship perspective, knowledge became a core asset for companies' sustainability due to its direct effect on innovation development which is the key driver for competitive advantage. For a long time, companies developed their knowledge either internally through research and development or externally through knowledge

transfer based on social networks or hiring experts. However, although these approaches significantly affect knowledge acquisition, their processes are lengthy, costly and limited. Thus, social communication technology became an additional competitive advantage for innovation development. The implementation of global business strategies has shifted towards information technology precipitated by the wide use of Social Networks Sites [21] that ''Allow users to develop a community or quasi-community outline within a specific organisation, with a list of other individuals who share a linking and display, and communicate their contacts and those placed by others inside the organisation [26]. SNSs comprise digital platforms such as YouTube as video sharing, Facebook as social networking, Pinterest as picture sharing, Blogs as Foursquare, weblogs as a site-based social networking website, LinkedIn as professional networking, and Twitter as microblogging [21], [27], [28]. International companies utilise all of these digital channels to improve their capacity for leaning [29], [30]. By using SNSs, clients have access to diverse sources of mutual knowledge from different clients regarding their recommendations and experiences. This issue affects their decisions of purchasing [21]. Thus, the significant role of SNSs in evolving association and trust with clients, suppliers and possible companions is an important concern for companies [31]. A company's engagement in SNSs brings values to their business with improved brand worth [32]; sales growth, profitability [33], [34]; business and social business and purchaser trust and Tackiness [31]; and new product and innovation development [21], [29].

Accordingly, the SNSs are probably an appropriate environment where individuals can share knowledge, collaborate, deliberate mutual interests, and create relations [21], [35]. Furthermore, these platforms connect companies with stakeholders such as customers, public organisations, and other trades [27]. SNSs also perceived as original cyberspace where individuals produce content. Companies build brand societies in brand admirer pages, likely improving a cooperative connection between companies and their customers by connecting and observing the brand's poles [32]. For example, companies create a Facebook page to build a platform for directly exchanging information with the client and improve brand faithfulness and reputation by personalising the services. Twitter is also an appreciated digital channel for punctually connecting with consumers; nonetheless would not likely be a good choice if companies cannot respond rapidly.

III. SOCIAL NETWORK SITES AND THE ENTREPRENEURIAL ACTIVITIES

The rapid development of technology and access to these technologies at a reasonable cost has revolutionised how companies work today. The Internet uses by millions of people at this very moment. Therefore, these techniques have led to a paradigm shift in how this communication occurs. The business reputation and presence in the market lies in "social media". Nowadays, the explosion of the pervasive use of the internet (SNSs) microblogging has altered the technique by which entrepreneurs improve their companies' performance and innovation. SNSs are imperative tools for timely response to data collection from customers, competitors, partners and employees [36], [37]. The statistic shows a timeline of the worldwide number of monthly active Facebook users from 2008 to 2018. As of the second quarter of 2018, Facebook had 2.23 billion monthly active users. There are 261 million International **Twitter users**, 79% of Twitter accounts, based outside the United States. There are over 69 million **Twitter users** in the US. Roughly 46% of **Twitter users** are on the platform daily. The types of used social network sites vary from region to region. A study by [38] suggests that the top six social media applications used in Gulf Arab including the UAE, were Facebook, Instagram, WhatsApp, LinkedIn, Twitter and YouTube.This helps the company to come out with needed innovation that has a value-add to the customers in the absence of competitors' opportunities. Effective SNSs help develop innovation, especially in building an effective social network that helps the company to mobilise the needed resources

for innovation development. The upward use of Facebook, WhatsApp, YouTube, Instagram, Blog, Twitter, and others lengthways the integration of outside knowledge backings entrepreneurial trip [39]. Entrepreneurs uncover new methods of conjoining internal and external knowledge taking advantage of market opportunities [40].

On the other hand, companies become knowledge concentrated on their innovative method, frequently altering their daily practice. Such companies are more attentive to making an equilibrium between innovation and knowledge, which is their companies' performance and competitive advantage. They struggle to effectively exploit the opportunities to make up innovations through utilising expensive knowledge [29]. This phenomenon illustrates the significance of intensive knowledge in the entrepreneurship framework, which guides entrepreneurs' tendency to handle uncertainties and create changes or derive benefits from innovative destructions. Nevertheless, as entrepreneurs nowadays compete to generate advanced ideas, there is a rising consciousness that this cannot be achieved without combining digital techniques [35], [41]. That is because companies need to strengthen their capability to take control of outside knowledge predominantly from the cybernetic environment and integrate it with interior knowledge. Management academics documented such aptitude as absorptive capacity (AC), which is probable to enhance companies in obtaining knowledge from the outside environment [42], [43]. Thus, companies intend to develop inventive thoughts without spending on internal research; however, they produce original knowledge over a collaborative and dynamic method.

The integration of opportunity identification and exploitation helps entrepreneurs to create innovation within new undertakings [29]. Therefore, enterprises must be able to obtain information, integrate it within the knowledge of the company and utilise the newly advanced knowledge [44]. Generally, examining the existing effect of social networking sites (SNSs) within companies, practitioners and academics indicate that the expansion of the SNSs approach hastens and extends companies' service innovation and development by indorsing specialisation within, suppliers, clients and other industries. As reported by [29], 86 % of entrepreneurs state that SNSs are imperative for their companies, 69 % understand the platforms' knowledge, and 66 % want to upsurge blogging accomplishments. [29], also, emphasise that the use of SNSs creates three benefits. First, gaining additional contact (89 %); second, the growth in online movement (75 %); and the last relates to lead return (64 %). This situation, in turn, findings in the earlier period to the marketplace, earlier goods acceptance, and efficiency cost for developing the product.

Nowadays, small and medium enterprises have taken the initiative to develop their SNSs extensively [29]. However, the literature on how to use SNSs for innovation development is still scarce. SMEs are generally known as active business forms that certainly affect job creation growth, creation of wealth, and the development of the economy [45], [46]. Indeed, the opportunities exploitation enables SMEs to achieve competitive advantages and continuously improve [47], [48]. These companies are mostly labour concentrated (around 43 %), contributing around 70 % to the total job creation (AUB Observatory 2014). This progression of the firms' performances has progressively motivated existing literature in examining the embeddedness of the active technological online techniques inside their managerial departments [27], [49]. Most of the researchers have focused on social media as advertising methods [50] or on how marketing communication is effectively upsurged by social media tools [51], [52]. Nevertheless, little know how these digital mechanisms may affect the innovation outcome among the companies as an indicator of companies' whole innovativeness [29]. The types of social network sites used differ from country to country. The top six social media applications used were Facebook, Instagram, WhatsApp, LinkedIn, Twitter and YouTube [38]. According to [21], there is a significant positive relationship between online

social networks and hotels' performance in Spain measured by asset, sales, profitability and quality return. Therefore, we hypothesise that

H1: Social Networks Sites has significant positive relationship with hotels performance.

IV. SOCIAL NETWORKS SITES AND INNOVATION

According to the RBV, the firms' capabilities and competencies that are rare, valuable, unique, and distinctive and have an inadequate movement are the drivers of competitive advantage and advanced returns. Nowadays, SNSs have become an important source of any firms which have widely recognised to be an effective business model that influences a company's innovation through delivering new knowledge in inter-organisational learning, which helps to gain better performance and consolidate companies' competitive advantage [53], especially when the firms can obtain knowledge, integrate it in the company knowledge and exploit the newly developed knowledge [44].

Companies use SNSs to create, transform, share, and deliberate internet content with international clients [54]. Thus, good costumers involvement derives from the use of SNSs. [26] states that ''customers gradually use SMSs not just to seek for services and product but to involve with the firms they purchase from, and customers who may have appreciated ideas''. In respect, customers play an active role in promoting innovations [27], [29], [55]. SNSs enable users to have a voice in proposing new creative knowledge and decrease the expenditures on innovation research. The innovative ideas suggested by the customers or others can be transformed into knowledge based on technology by integrating the current knowledge of companies instead of developing and experimenting with new things.

The diverse way of innovation has led to many discussions, leading to the division of scientists on two tracks: first, that exploration is the source of innovation and development, meanwhile the second one advocate that the recreation and utilisation of existing knowledge are the source of innovations [29], [35], [41], [56]. In line with the second stream, we suggest that the collaborative approach is the source of innovation.

The online environment is a location of various events such as innovative adaptation or technical catapulting. This situation is where companies come together with their customers to promote a current product that includes the change in the original design [29]. The online medium enhances the ability of companies to innovate by streamlining coordinated procedures and facilitating the flow of internal and external knowledge. Internet technology facilitates the creation of a supportive environment that facilitates innovation development by simplifying the procedures of gaining external knowledge [29], [56]. In this respect, SNSs are perceived as imperative platforms that can influence customers and facilitate innovation development [29], [35], [41], [56]. A study by [57] found a positive relationship between online social networks and hotels' innovation performance. Thus, we hypothesise that:

H2: Social Networks Sites has significant positive relationship with innovation activities in the hotels.

V. INNOVATION AND FIRM PERFORMANCE

Innovation has been hypothesised in a variety of ways. [58] defines innovation as "implementing a new or improved product (services or goods), a method, a new advertising and marketing approach, or a new managerial practice. [58], Differentiation between 4 types of innovations: Product innovations contain considerable adjustments in the abilities of services or products; both new services and goods and major enhancements to present products are encompassed. Process innovations are seen as a significant alternation in manufacturing and delivery approaches. Organisational innovations can be seen as an application of new management techniques. These modifications can be in the practices of business enterprises rather than the company's business or outside relations. Innovations at the marketing level include applying innovative marketing

techniques; these can comprise modifications in product and service design or packaging, in the advertising process of the products or services and placement, and approaches for services and goods pricing. Generally, the literature on the subject matter considers innovation as a crucial key for sustainable firm success, especially in dynamic markets [59]. The underlying logic of this idea is that innovation frequently assists in coping with an uncertain environment. Based on the Schumpeterian view, to survive environments, companies have to be capable of coping with increasing complexity and high-speed alteration. In such contexts, enterprises with the aptitude to innovate will be capable of reacting to the defies quicker, manufacturing upgraded new services, products, and efficient exploit opportunities compared to non-innovative enterprises [60]. Several academic works have reported that innovation positively correlates with performance [59]–[63]. [59] emphasise that managerial innovation leads to superior company performance. In addition, [60] reported a significant positive association between innovation and the enterprises' growth in the sales and labour among Pakistanis textile and apparel manufacturers. [64], argue that innovation is a key to the success of wine micro and small business performance in Italy. It improves product quality and process efficiency, which improves sales and growth and helps the sustainability of the wine industry. Innovation is an important strategic feature to assure evolution and sustainable prosperity for every business, especially for businesses where markets are soaked and customers select services and products from all over the world, such as tourism [65], which requires further empirical and theoretical investigation. A study by [21] stated that innovation capacity mediates the association between an online social network and the outcome of Spanish tourism companies, which is positively associated with the profitability and sales growth of the Spanish tourism companies. Therefore, we hypothesise that:

H3: The association between SNSs and the hotels' performance is mediated by its innovation capability.

VI. CONCLUSION

This study provides a comprehensive definition of innovation and distinguishes four different types of innovation: product, process, organisational, and marketing. It also highlights the importance of innovation for the sustainable success of businesses, particularly in dynamic markets. The idea is that companies need to innovate to cope with an uncertain environment, and those with the ability to innovate will be better equipped to react to challenges, exploit opportunities, and manufacture upgraded products or services.

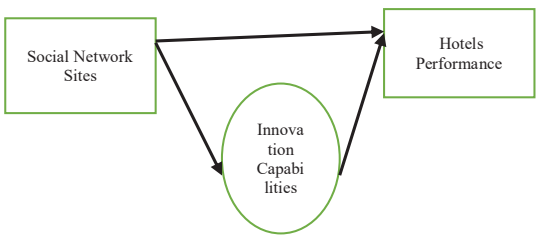

Fig. 1. Framework

In conclusion, as depicted in Figure 1, innovation is an essential strategic feature for the evolution and sustainable prosperity of every business, particularly in saturated markets, such as tourism, which requires further empirical and theoretical investigation.

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