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Predicting the use of social media business models: The mediating role of organizational e-readiness

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ABSTRACT

Social media is remarkably growing and shaping not only the lives of individuals but also the business domain by creating new paradigms of business. This study examines the interplay among some selected predicting organizational variables and the use of what are called Social Media Business Models (SMBMs). Furthermore, the study investigates the mediating role of e-readiness on the relationships among these organizational factors and the use of SMBMs. The study is a quantitative, descriptive and analytical study. Using a self-administered survey, primary data were collected from 150 employees from the Jordanian SMEs. Smart PLS 3 software was employed to validate the proposed study model using a Structural Equation Modelling (SEM). The findings confirmed that compatibility, innovativeness, cultural and management support, and e-readiness have a statistically significant direct impact on the use of SMBMs. Finally, the study confirms that e-readiness mediates the relationship between compatibility and innovativeness as predicting variables and the use of SMBMs.

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1. Introduction

With a remarkable growing rate, the number of social media users reached 4.62 billion around the world in January 2022, which represents 58.4% of the total global population. With 2.91 billion users, Facebook is the most popular social media platform. YouTube, WhatsApp, Instagram, and WeChat follow with more than a billion users. TikTok comes next, with over one billion monthly active users (Datareportal, 2022). These figures are remarkably growing on a daily basis. This will surely have huge consequences on the business and is already creating a new business paradigm. Social media is becoming an inescapable form of technology today. The rapid adoption of such technology is changing the nature of our behavior, the way we communicate and interact as well as our views concerning the business and the way it should be undertaken. The new emerging and drastically changing business environment that is led by communication technologies development is expected to shape and lead the scope and nature of business organizations of the future (Dwivedi et al., 2021). Business core concepts like marketing and sales, business visibility, competition, and customer relationship management are at the heart of confrontation and change.

Regardless of the huge debate regarding its positive and negative impact on societies in general, many benefits are expected due to the effective use of social media for business purposes. Brand building, more effective and efficient communication, cost reduction, and the never-ending flow of information are among the cited benefits of what is so-called Social Media Business Models (SMBM) (Sengar, 2021; Syaifullah et al., 2021; Ajmera et al., 2013). New business models that are based on the use of social media are emerging and starting to gain popularity (Upadhyay, 2019). Numerous questions are challenging

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the traditional business strategies and marketing practices. Can old business models and typical mentalities of the past and present survive in managing the future business? Can we bridge the gap between our current ways of running business and the new technology-driven business paradigm? Can today's business managers realize the emerging and constantly changing needs of the new generation? It seems there is a need for a paradigm shift in the way of running a business.

Additionally, the preparation of an organization for successful and fruitful utilization of social media for business purposes seems extremely essential to improve the readiness level of the organization. The current state of the art concerning the business use of social media is still fragmented and underutilized. The rapid diffusion of social media in modern societies is calling for more consideration of social media as a means to enhance business competitiveness. Social media-based business models are therefore receiving an intense concern in the business literature. Disagreement is apparent and the lack of a holistic framework concerning the influential factors seems obvious. Issues like trust, transparency, security, and privacy are at the core of the picture. Moreover, the need for more research exploring SMBM, as one could argue, is still under-researched considering the potential business opportunities and the skeptical nature of social media in general. Successful exploitation and deployment of SMBM require consideration of some enabling and influential factors (e.g., Alriyami & Ashrafi, 2016; Ainin et al., 2015; Sagala, 2014). Acting and pro-acting are both necessary to challenge businesses to transform their practices and to rethink their fundamentals in ways that support and invest in new emerging trends. New and different skills will soon be required to effectively utilize the dancing technologies of today.

A large portion of the available studies on social media focused on its socio-cultural aspects more than its potential for businesses. This study adopts an organizational intrinsic approach through focusing on the internal organizational setting. Nonetheless, Pourkhania et al. (2019) in his overview of the trends and achievements in the area of social media and business revealed that from the beginning of 2005 through January 2019, 2682 articles have been indexed in Web of Science in the field of social media and business. In spite of a large number of studies relating to social media and business, the great majority of these studies have been conducted in developed countries (Pourkhania et al., 2019). In his analysis of the country's collaboration in studies about social media in business, no single Arab country was among his list, which calls for more concern for this issue within the context of Arab countries.

This study investigates the interplay among some scientifically selected organizational factors and their impact on the use of social media business models as mediated by the level of e-readiness. This study argues that the capabilities of social media as a communication, information, and interaction platform are still to be realized specially within the context of developing countries. It is our belief that the current state of the art concerning business use of social media is still fragmented and underutilized. This provides motivation to conduct this study to add some insights.

Particularly, this study proposes a holistic model that examines the factors that might have a direct impact on the use of SMBM. As modern businesses can use social media to provide continuous two-direction flow of information and services for their customers, this study also suggests that the proposed influential relationships are mediated by the level of e-readiness. Justification of the mediating role of e-readiness is based on the fact that the potential role of the investigated factors can improve the level of e-readiness which in turn can directly influence the success of SMBM.

2. Theoretical Background

2.1 Social Media Business Models

Strauss and Frost (2011: 328) defined social media as "a term used to describe the type of media that is based on conversation and interaction between people online". When using social media, the content is not only generated as a textual form of interaction, but also as a conversation where participants can upload images and videos, discuss, edit and rate each other's content. Abrahams et al. (2012) defines social media as communication channels that use internet networks to help users in providing information and interaction to be public active members. Social media might be used to establish a long-term relationship with customers and to support marketing activities to the target customers (Siricharoen, 2012). No doubt that the extensive use of social media has become an important influential factor on the public attitudes including cognitive, affective and behavioral dimensions. Effective use of social media can also enable facilitating word-of-mouth communication (Chen et al. 2021), increasing sales (Agnihotri, 2021), sharing information in a business context (Irbo & Mohammed, 2020) and generating social support for consumers (Ali, 2011).

According to Statista (2022), increased exposure, increased traffic, generated leads, developed loyal fans, and improved sales are the most commonly cited advantages of using social media for marketing purposes among global industry professionals. People use social media for different reasons, 27.5% of people are using social media to research products to buy (Datareportal, 2021). Consequently, business organizations of different types are invited to get all expected benefits of social media through a proper utilization of the concept of social media business model. Identification and consideration of the factors that can influence the business attempt to use social media seem to be a prerequisite.

Business model is a term that has been in use for more than sixty years. In spite of this, there is no widely adopted definition of the business model. Huge debate and disagreement among academics and business practitioners is going on concerning conceptualization and theoretical foundation of the concept (Saniuk & Grabowska, 2021; Wirtz, 2019). However, the concept of business model has received more attention with Internet advent in the late 90's (Teece, 2010). Shafer et al (2005) proposed

that the business model involves a representation of a firm's underlying core logic and strategic choices for creating and capturing value within a value network. This agrees with Stalder (2018) who stated that most business model definitions involve aspects like value creation, value capturing, and the relationship between individual organizational elements.

According to Casadesus-Masanell & Heilbron (2015), the business model has two aspects including its internal constitution and its external alignment and both can be seen as a collection of decisions enforced by the authority of the firm on its employees. Similarly, a business model is a conceptual tool consisting of objects, their attributes, and relationships that provide a simple description of the company's business logic and a state of internal and external alignment or state of harmony (Bezerra Barquet et al., 2013). Osterwalder et al., (2020) argues that the most successful organizations are constantly reinventing their business model and exploring new ways to create value around market opportunities. Osterwalder's understanding of the business model relationships focuses on the integrated role of the business model concept that combines key organizational elements such as business strategy and business orientation and serves better interaction among them. To sum up, the business model combines all internal components or subsystems of an organization with business partners with the aim of enhancing the creation, delivery, and capturing of value.

In their review of the most relevant social media business models, Panda et al. (2017) have identified five general social media business models including freemium model, affiliate model, subscription model, virtual goods model, and advertising model. They revealed that the reliability of their success in social media platforms is yet to be investigated further. Most organizations, as argued by Chung et al., (2018) fail to develop metrics for measuring returns on investment and lack the ability to translate data into actionable insights. In an extensive review of the available literature, Ketonen et al. (2016) stated that very few research papers identified significantly social media-specific business models. In the last five years, it is observed that the number of research papers tackling the SMBM is increasing (e.g. Cartwright et al., 2021; Sengar, 2021; Almazrouei et al., 2020; Iankova et al., 2019; Gavino et al., 2019; Chung, 2018). However, the long term transformational impact of social media on the personal and corporate levels is still to be discovered and explored in more detail especially within the context of developing nations where issues like cultural and managerial support, compatibility, innovativeness, and other technologyrelated issues are still to be explored. In spite of the availability of some studies discussing SMBMs within the context of Arab countries (e.g. Ghanem & Hamid, 2020; Sohail et al., 2020; Abu Bakar et al., 2019; Al-Kandari et al., 2019; Fathelrahman & Basarir, 2018), the determinants of their adoption and actual usage by organizations remain unclear as argued by some (Abu Bakar et al., 2019; AlSharji et al., 2018). Considering the huge, coercive, and normative pressure that is forcing organizations to use or to consider using social media to improve organizational and specifically marketing performance (Lin et al., 2021), more research concern must be given to SMBMs.

It could be argued that the combination between social media and business model concepts is shaping the nature of interactional relationships not only among business entities but also between the whole business and its external stakeholders. This has the potential to influence the strategic business direction and the traditional forms of building and maintaining logical and value added relationships. Furthermore, the diffusion of SMBMs has the potential to be a critical influential factor on the future of business and its ability to achieve its strategic goals. Nonetheless, the literature does not provide a comprehensive picture of the current state of SMBMs (Ketonen et al., 2016; Parveen, 2012) as well as the factors that could influence the diffusion and success of such models. This calls for more research to fill this gap and provides a valid justification to conduct this study.

2.2 Factors Influencing the SMBMs

An extensive review of the available studies concerning the factors influencing the use of SMBMs revealed that many studies have attempted to explore this issue with no agreement concerning the nature and relevance of these factors. Ainin et al. (2015), investigated the factors that influence Facebook usage among small and medium enterprises (SMEs). They concluded that factors such as compatibility, cost effectiveness and interactivity influence Facebook usage among SMEs. Gongora (2016) classified these factors into organizational, technological, and external factors. He finally revealed that external pressure from customers, management knowledge of social media, innovativeness, perceived benefits and ease of use could significantly influence the adoption of social media. Sagala (2014) concluded that the nature of industry, strategic orientation, cost, knowledge and expertise and ease of use are among the factors that can influence the adoption and use of social media business models. Furthermore, an extensive review of the literature made by Alriyami and Ashrafi (2016) who identified some of the most cited critical success factors of social media. According to their study, top management support, training, perceived risk, social media strategy, financial and technical resources were the most influential critical success factors. Abu Bakar et al. (2019) argued that technological context, compatibility and observability are significantly influencing SME's decision to adopt social media. They also revealed that organizational context, top management support, and the overall environmental context also have an impact on SMEs leaders' use of social media in business.

Al-Kandari et al. (2019) studied the impact of Arab cultural values on the use of Instagram and argued that Instagram fosters individualism, which challenges collectivist nature of Arab culture. In their study of factors influencing social media usage and adoption amongst SMEs in developing countries, Sangi et al. (2018) stated that perceived usefulness, expected cost effectiveness, and previewed ease of use are significantly influencing Facebook usage by the SMEs. Ramachandran et al. (2019) emphasized the significant impact of ease of use, usefulness and trust on the adoption of social media. Alkenani (2019), in his study of social e-commerce success factors in Saudi Arabia concluded that information quality, information or knowledge

sharing, trust, relationship quality and network are among the success factors influencing the adoption of social e-commerce in Saudi businesses.

With regards to the Jordanian context, Trawnih et al. (2021) proposed and tested a comprehensive model representing that factors influencing the adoption of social media by SMEs during the Covid-19 crisis and concluded that environmental factors (government support, environmental uncertainty, and competitive pressure) were the most significant predictors of social media adoption during the Covid-19 pandemic crisis.

The inconclusive results of these studies combined with the overall ambiguity of SMBM calls for more research in this domain especially with the rapid diffusion of social media applications. In spite of the potential benefit and the developing numbers of adopters, previous studies show that only a few SMEs are concerned about social media adoption.

The current study examines the impact of some selected factors on the use of SMBM. Two of these factors (compatibility and top management support) are selected from the Technological, Organizational and Environmental (TOE) model developed by Tornatzky et al. (1990). The remaining three factors (strategic orientation, innovativeness, and cultural support) are proposed based on the researchers' understanding and consideration of the nature of the research context. These three factors have not been examined by previous studies in similar contexts.

2.3 E-Readiness

Readiness is described as the extent to which an individual, group or organization is willing, able and prepared to use social media for professional purposes (Hoffmann et al., 2014). The foundation and evolution of social media readiness is informed by many theories that describe the development of this concept. Among these theories is the digital divide theory which is focused on the individual antecedents of general ICT use (Blank & Reisdorf, 2012). Much of the digital divide literature focuses on individual level attributes. Social media at the organizational or group level are not at the core of digital divide studies. Within the context of technology diffusion literature, Technology Acceptance Model (TAM) is a well-respected model of IT adoption and operation (Al-adaileh, 2009). This model specifies the causal relationships between system design features, perceived usefulness, perceived ease of use, attitudes toward using and actual usage behavior (Davis, 1993). In contrast to the digital divide approach, TAM has frequently been used to explain technology acceptance on the organizational level (Hoffmann et al., 2014).

According to Jacobs & Nakata (2012), organizational readiness research has evolved from change management theory and behavioral science theory. In their organizational semiotics approach for identifying organizational readiness factors for internal use of social media within information intensive organizations, different factors have been identified including resources, organizational climate, processes, motivational readiness, benefits and organizational control factors. Masouleh (et al, 2014) provides a comprehensive review of the e-readiness assessment tools. They proposed seven factors (Infrastructural, Human, Educational, Government, Management, Socio-cultural and Legal) and 44 indicators. However, our assessment of e-readiness will be a simplistic one that focuses only on technical readiness including technical awareness (e.g. Ayalew et al., 2010; Bui et al., 2003) ICT infrastructure (e.g. Ayalew et al., 2010; Mouzakitis & Askounis, 2010; Fathian et al., 2008) and e-willingness (Ayalew et al., 2010; Arunbabu et al., 2009). The selection of these factors is justified based on the nature of the e-readiness as a mediating variable in this study. The study seeks to differentiate influential relationships (if any) between technical factors (e-readiness) and non-technical (organizational) factors.

3. Research Model and Hypotheses

A research model is proposed based on an understanding of the relevant literature. It delineates the influential relationships between a set of organizational factors (strategic orientation, cultural support, compatibility, innovativeness, and management support) as independent variables with the use of SMBMs as a dependent variable. Additionally, the study model examines the impact of e-readiness on the use of SMBMs as well as its mediating role between the proposed organizational variables and the use of SMBMs. The research model is depicted in (Fig. 1).

To test the proposed model, the following hypotheses are proposed.

H1: There is a statistically significant direct impact for organizational factors (compatibility, strategic orientation, innovativeness, cultural support, and management support) on the use of SMBMs.

- H1.1 There is a statistically significant direct impact for compatibility on the use of SMBMs.
- H1.2 There is a statistically significant direct impact for strategic orientation on the use of SMBMs.
- H1.3 There is a statistically significant direct impact for innovativeness on the use of SMBMs.
- H1.4 There is a statistically significant direct impact for cultural support on the use of SMBMs.
- H1.5 There is a statistically significant direct impact for management support on the use of SMBMs.
- H1.6 There is a statistically significant direct impact for e-readiness on the use of SMBMs.

H2: E-readiness mediates the relationship between organizational factors (compatibility, strategic orientation, innovativeness, cultural support, and management support) and the use of SMBMs.

• H2.1: E-readiness mediates the relationship between compatibility and the use of SMBMs.

- H2.2: E-readiness mediates the relationship between strategic orientation and the use of SMBMs.
- H2.3: E-readiness mediates the relationship between innovativeness and the use of SMBMs.
- H2.4: E-readiness mediates the relationship between cultural support and the use of SMBMs.
- H2.5: E-readiness mediates the relationship between management support and the use of SMBMs.

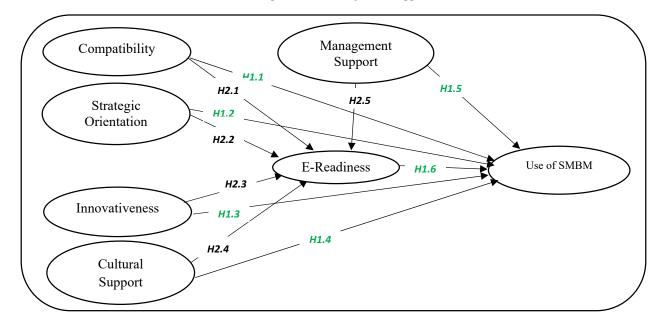


Fig. 1. Research Model

4. Methodology

This research is described as quantitative and hypothetical-based research or analytical research to explain the influential relationships among the research variables. A structured survey through the use of questionnaires is used to collect the necessary data. The development of the data collection instrument is based on extensive review of previous literature concerning the research topic. Research population includes employees from the Jordanian SMEs. According to JEDCO (Jordan Enterprise Development Corporation) About 98% of all businesses in Jordan are classified as SMEs, two third of which have less than 19 employees. The selection of this sector is justified based on the great potential for social media. The emerging new paradigms of interaction with customers, as this study argues, is opening the door for more investment and calling for more concern to hunt the available opportunity that is made possible through social media diffusion. Since the population of the study is huge, a convenient sampling strategy is used to select the participants. (165) questionnaires were distributed. 150 were collected and analyzed. The questionnaire was written in English and translated into Arabic as the native language for respondents. Fig. 2 presents a summary of the sample characteristics.

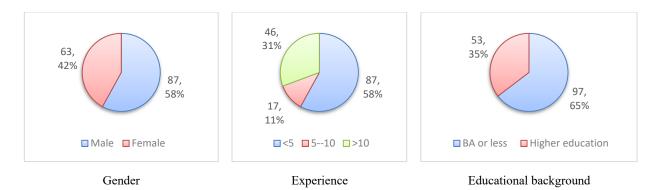


Fig. 2. Sample Characteristics

Smart PLS 3 software was used to conduct Structural Equation Modelling (SEM) following the recommendations of (Hair et al, 2017). The model was measured using 5000 bootstraps according to the recommendations by (Henseler, 2016). Validity and reliability analysis for research instruments were measured. In line with (Hair et al., 2017), these were conducted by

applying Cronbach's Alpha; composite reliability (CR); Average Variance Extracted (AVE). Accordingly, all indices reveal good reliability and validity of the constructs and exceed the cut-off values (CR<0.60; Alpha<0.60; AVE<0.50). Table 1 summarizes these findings.

Table 1 Scale validity and reliability

Constructs	Alpha Cronbach's	Composite Reliability (CR)	AVE
Compatibility	0.711	0.825	0.612
Cultural Support	0.862	0.906	0.708
Innovativeness	0.829	0.875	0.541
Management Support	0.740	0.825	0.521
Strategic Orientation	0.728	0.831	0.565
E-readiness	0.779	0.845	0.519
Use of SMBMs	0.891	0.917	0.649

Besides, discriminant validity assesses the level to which each variable is distinct and represents a phenomenon of interest that is not captured by other variables within the same measurement model (Hair et al., 2017). A correlation test was applied to test discriminant validity. Correlation coefficients between independent, mediator and dependent variables ranged from 0.841 to 0.441, which indicates moderate-effect size among antecedents and outcome variables. Furthermore, this outcome increased our confidence in discriminant validity as Kline (2011) noted that correlation coefficients less than 0.80 suggest evidence of discriminant validity. Table 2 summarizes correlation results.

Table 2
Discriminant validity

Constructs	1	2	3	4	5	6	7
1. Compatibility	0.783						
2. Cultural Support	0.645	0.841					
3. E-readiness	0.673	0.644	0.692				
4. Innovativeness	0.441	0.704	0.652	0.736			
5. Management Support	0.549	0.482	0.503	0.543	0.699		
6.Strategic Orientation	0.677	0.612	0.654	0.655	0.457	0.752	
7.Use of SMBMs	0.651	0.552	0.799	0.686	0.661	0.616	0.805

5. Hypotheses Testing

The statistical analysis was conducted using the PLS 3 software package, and the proposed model was validated using structural equation modelling (SEM) as the most useful and strongly recommended method for model validation (Awang, 2012; Hajli, 2013). The SEM (Fig. 3 and Table 3) was assessed by checking path coefficients and the R^2 values. Both direct and indirect effects were evaluated. The mediation effect was checked following the (Zhao et al., 2010) recommendations.

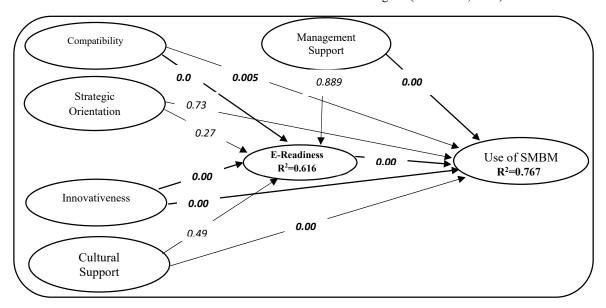


Fig. 3. Full path Model

Table 3Direct Path analysis

IV	DV	В	S.E	t - value	P value
Compatibility	Use of SMBMs	0.207	0.074	2.792	0.005
Strategic Orientation	Use of SMBMs	-0.028	0.083	0.336	0.737
Innovativeness	Use of SMBMs	0.313	0.071	4.383	0.000
Cultural Support	Use of SMBMs	-0.220	0.073	3.034	0.002
Management Support	Use of SMBMs	0.250	0.064	3.904	0.000
E-readiness	Use of SMBMs	0.490	0.071	6.877	0.000

As shown in Fig. 3, the values of \mathbb{R}^2 of the research variable E-readiness and Use of SMBMs were 0.616; 0.767 respectively which advocate that the model provides a proper explanation, and its predictive power is meaningful.

Furthermore, hypothesis **H1.1** predicted that compatibility is positively and directly associated with the use of SMBMs. This hypothesis is accepted as the path between these constructs is **supported** and significant at p < 0.01; and $(\beta=0.207; t=2.792)$.

Hypothesis **H1.2** proposes that strategic orientation is positively and directly associated with the use of SMBMs. This hypothesis however is rejected as the path between these constructs is **not supported** at p >0.05; and (β =-0.028; t=0.336).

Moreover, the **H1.3** predicted that innovativeness is positively and directly associated with the use of SMBMs. This hypothesis is accepted as the path between these constructs is **supported** and significant at p < 0.01; and $(\beta=0.313; t=4.383)$.

Furthermore, **H1.4** and **H1.5** presumes that cultural and management support are positively and directly associated with the use of SMBMs. These hypotheses are accepted as the path between these constructs are **supported** at p > 0.05; and $(\beta = -0.220; 250; t = 3.034, 3.904$ respectively).

Finally, hypothesis **H1.6** predicted that E-readiness is positively and directly associated with the use of SMBMs. This hypothesis is accepted as the path between the two constructs is **supported** and significant at p < 0.01; and $(\beta = 0.490)$; t = 6.877).

With reference to the second hypothesis and its sub-hypotheses regarding the mediating effect of e-readiness, they were assessed using indirect effect analysis and 95% confidence interval following (Preacher, Rucker, & Hayes, 2007) recommendations. Results reveal that the standardized indirect effect (mediation path) of compatibility on the Use of SMBMs through E-readiness was (0.192) and (p = .003, 95% confidence interval: 0.066 - 0.318). As such, **H2.1 received empirical support**. Furthermore, results reveal that the standardized indirect effect (mediation path) of innovativeness on the Use of SMBMs through E-readiness was (0.171) and (p = .009, 95% confidence interval: 0.042 - 0.300). As such, **H2.3 received empirical support (see Table 4).**

Table 4
Indirect Path analysis

IV	Mediator	DV	β	t-value	Confidence Level LO -UP	P value
Compatibility	E-readiness	Use of SMBM	0.192	2.992	(0.066-0.318)	0.003
Cultural Support	E-readiness	Use of SMBM	0.035	0.690	-	0.491
Innovativeness	E-readiness	Use of SMBM	0.171	2.612	(0.042-0.300)	0.009
Management Support	E-readiness	Use of SMBM	0.007	0.138	-	0.890
Strategic Orientation	E-readiness	Use of SMBM	0.054	1.075	-	0.282

Thus, this study concludes that compatibility and innovativeness influence the overall use of SMBM through the mediating variable E-readiness. In other words, a one-unit increase in compatibility and innovativeness will increase the use of SMBMs through E-readiness by 19.2% and 17.1% respectively. Moreover, the results fail to confirm the mediation impact between (cultural support, management support and strategic orientation) and the Use of SMBMs.

6. Discussion

The purpose of this study was to develop a holistic model that takes into account the factors that influence the use of SMBM, particularly for the Jordanian SMEs as the target population. The primary goal was to provide a better understanding of the SMBM and its application to the proposed research population. The proposed model of the study was examined using a survey of employees from a random sample of Jordanian SMEs. 150 usable responses were collected and analyzed.

The statistical analysis revealed that, with the exception of the strategic orientation factor, all of the proposed independent variables have a direct and statistically significant impact on the use of SMBM. The lack of a clear strategic vision in the majority of SMEs may justify the insignificant impact of the strategic orientation on the use of SMBM. The compatibility of social media applications and their ability to become a successful medium for business contributes to the flexibility of emerging technologies in general, allowing them to become a new trend in modern businesses and a promising business model. This flexibility comes from the compatibility of the existing infrastructure to connect to the internet and access to social media by

everyone, which enables individuals and businesses to easily adopt SMBM. This finding is consistent with the earlier research indicating that compatibility is a significant factor in the adoption of social media (Alriyami & Ashrafi, 2016; Abu Bakar et al., 2019). Furthermore, the positive effect of the mediation of e-readiness on the compatibility influences the usage of SMBM and supports the tangible role of new technologies and social media, as well. Considering the limited financial resources of SMEs, social media can be an affordable and appropriate tool to reach a larger number of customers by advertising and promoting, obtaining information about their potential customers or competitors, and improving customer relations without requiring a huge investment.

Moreover, the findings of this study confirmed that innovativeness has a significant impact on the use of SMBM. As previously stated, this result is consistent with the findings of Tornatzky et al. (1990) and Gongora (2016). Additionally, this study concluded that compatibility and innovativeness have an impact on the overall use of SMBM through the mediation of ereadiness, which is particularly true for SMBM. This result explains the interactive nature of social media, which gives an opportunity to create communication channels with all parties of the business model and positively affects the organizations that use it. Both compatibility and innovativeness can lead to the development of technology infrastructure, level of awareness as well as e-willingness (Arunbabu et al., 2009; Ayalew et al., 2010) which can encourage the use of SMBM.

The findings of this study, also, confirm that cultural and management support have a positive and direct impact on the use of SMBM. This study argues that the dominance of supportive cultural attributes such as openness to change, sharing of knowledge, and trust can encourage the use of SMBM especially in SMEs where culture integration is possible. These cultural attributes can encourage people to use SMBM and any new technologies. By its nature, social media encourages people to share their experiences and knowledge. Besides, the role of management in training and developing their employees to use new technologies is crucial and can help to initiate and improve a supportive organizational environment necessary to support business transformation. The significant role of management begins with the approval of this transformation, continues with its support, and reflects the positive impact of this transformation on their plans and objectives. Making it possible to build the necessary IT infrastructure, as well as their belief in the importance of investing in this field. A further finding of the study was the evidence that e-readiness had no effect on the relationship between cultural and management support and the use of SMBM, as demonstrated by the results of the study. This confirms the significant impact of cultural and management support, whether or not the influence of e-readiness is present.

7. Research Implications

Numerous studies have been undertaken recently to explore and investigate the most influential factors and characteristics of social media on business. Issues like trust, transparency, performance, security, and privacy, as well as cost effectiveness have been heavily debated. The literature of this study concluded that there is a need to define a holistic framework for demonstrating the most influential factors of SMBM adoption in SMEs.

This study provides useful theoretical insights concerning the available studies that investigate social media as a business model and new paradigm of doing business in the virtual world. It adds to the current body of knowledge regarding the potential value of social media in business context. Considering the limited number of the available studies in the Jordanian context and similar developing countries, the outcome of this study provides a valid theoretical contribution by improving the level of awareness and enriching the available limited knowledge. Empirical findings of this study agree with the findings of some previous studies regarding the impact of compatibility, innovativeness, and management support (e.g. Gongora, 2016; Alriyami & Ashrafi, 2016; Ainin et al., 2015). Nonetheless, the current study findings regarding the strategic orientation disagree with the available studies as no significant impact was confirmed (Alriyami & Ashrafi, 2016; Sagala, 2014). Furthermore, the current study contributes to the available body of knowledge by investigating the mediating role of e-readiness, which is found to be mediating the relationship between compatibility and innovativeness as predicting variables and the use of SMBM as a dependent variable.

Additionally, this study has practical implications for individuals and managers within the context of SMEs as it has identified the most critical factors influencing SMBM. Obviously, most SMEs are still confused about the efficiency of social media adoption and its belonging business model, especially in the developing countries. Considering these factors could enhance the capabilities of Jordanian SMEs, which represents the largest proportion of the total business in Jordan, to adopt SMBM. Managers must consider the proposed significant factors when planning to use SMBM. As a result, this study paves the way for a more nuanced understanding of the true value and prospective opportunities associated with social media usage in modern enterprises. The findings of this study will stimulate and guide SMEs and decision makers in many developing countries to adopt social media tools and applications into their planning strategies and marketing activities.

Nonetheless, this study employed a cross-sectional research method by examining the research sample in a particular point of time within a particular research context. Future research can use the longitudinal method to investigate the development of the influence of the proposed factors over multiple periods and clarify whether there are any differences in results between time points. Additionally, the selected sample was drawn from the Jordanian SMEs, the research model could be verified in a variety of firm sizes and business activities from different countries in order to verify and/or generalize the study's findings.

8. Conclusion

The current study comes at the right time considering the promising opportunities created by new emerging and continuously developing technologies. Furthermore, the noticeable development of the telecommunication technologies and the increasing level of awareness and usage of social media platforms not only in Jordan but also on the global level are pushing towards more adaptable and dynamic business models. The rapidly growing number of social media users is creating a real opportunity for individuals and startup businesses to transform their simple innovative ideas into valuable and profitable business gates. The current study proposed and validated some of the critical factors that must be considered to hunt this opportunity. Successful SMEs must improve their capabilities to achieve a leapfrog transformation as the impact of social media is extending and the time spent by users of social media on social media platforms is increasing. Factors like compatibility, innovativeness, management support and the diffusion of positive culture are seen as critical success factors for SMBM. The potential role of SMBM and other technology-driven models of business are expected to shape the future of business, which makes disregarding such models a serious threat.

References

- Abrahams, A.S., Jiao, J., Wang, G.A., & Fan, W. (2012) Vehicle Defect Discovery from Social Media. *Decision Support Systems*, 54(1), 87-97.
- Abu Bakar, A. R., Ahmad, S. Z., & Ahmad, N. (2019). SME social media use: A study of predictive factors in the United Arab Emirates. *Global Business and Organizational Excellence*, 38(5), 53-68.
- Agnihotri, R. (2021). From sales force automation to digital transformation: how social media, social CRM, and artificial intelligence technologies are influencing the sales process. In *A Research Agenda for Sales*. Edward Elgar Publishing.
- Ainin, S., Parveen, F., Moghavvemi, S., Jaafar, N., & Shuib, N. (2015). Factors influencing the use of social media by SMEs and its performance outcomes. *Industrial Management & Data Systems*, 115(3), 570 588
- Ajmera, J., Ahn, H. I., Nagarajan, M., Verma, A., Contractor, D., Dill, S., & Denesuk, M. (2013, May). A CRM system for social media: challenges and experiences. *In Proceedings of the 22nd international conference on World Wide Web (pp. 49-58) (on line)*, available: http://dl.acm.org/citation.cfm?id=2488394.
- Al Riyami, F., & Ashrafi, R. (2016). Factors Impacting Social Media Adoption in Public Sector Organizations: Case of Oman. *International Journal of Computing & Information Sciences*, 12(2), 167-177.
- Al-adaileh, R. (2009). An Evaluation of Information Systems Success: A User Perspective the Case of Jordan Telecom Group. *European Journal of Scientific Research*, 37(2), 226-239.
- Ali, H. (2011). Exchanging value within individuals' networks: social support implications for health marketers. *Journal of marketing Management*, 27(3-4), 316-335.
- Al-Kandari, A. A., Gaither, T. K., Alfahad, M. M., Dashti, A. A., & Alsaber, A. R. (2019). An Arab perspective on social media: How banks in Kuwait use instagram for public relations. *Public Relations Review*, 45(3), 101774.
- Alkenani, A. A. N. (2019, March). Factors influencing social e-commerce success in saudi arabia-a review. In 2019 6th International Conference on Computing for Sustainable Global Development (INDIACom) (pp. 1331-1335). IEEE.
- Almazrouei, F. A., Alshurideh, M., Kurdi, B. A., & Salloum, S. A. (2020, October). Social media impact on business: a systematic review. In *International conference on advanced intelligent systems and informatics* (pp. 697-707). Springer, Cham.
- AlSharji, A., Ahmad, S. Z., & Bakar, A. R. A. (2018). Understanding social media adoption in SMEs: Empirical evidence from the United Arab Emirates. *Journal of Entrepreneurship in Emerging Economies*, 10(2), 302-328.
- Arunbabu, A., Nataraju, M. S., & Gokulraj, M. P. (2009). e-Readiness of Information Communication Technology (ICT) beneficiaries in Kerala. *Mysore Journal of Agricultural Sciences*, 43(1), 138-142.
- Awang, Z. (2012). Analyzing The SEM Structural Model. In A Handbook on SEM (4th ed.). UiTM Kelantan.
- Ayalew, E., Lessa, L., & Yigzaw, M. (2010, August). E-commerce readiness in Ethiopia: A macro-level assessment. In SI-GeBIZ track of the Americas Conference on Information Systems (pp. 76-86). Springer, Berlin, Heidelberg.
- Bezerra Barquet, A., de Oliveira, M., Román Amigo, C., Cunha, V., & Rozenfeld, H. (2013). Employing the business model concept to support the adoption of product–service systems (PSS). *Industrial Marketing Management*, 693-704.
- Blank, G., & Reisdorf, B. C. (2012). The Participatory Web. Information, Communication & Society, 15(5), 537-554.
- Bui, T. X., Sankaran, S., & Sebastian, I. M. (2003). A Framework for Measuring National E-readiness. *International Journal of Electronic Business*, 1(1), 3 22.
- Cartwright, S., Liu, H., & Raddats, C. (2021). Strategic use of social media within business-to-business (B2B) marketing: A systematic literature review. *Industrial Marketing Management*, 97, 35-58.
- Casadesus-Masanell, R., & Heilbron, J. (2015). *The business model: Nature and benefits*. Emerald Group Publishing Limited. Chen, Z. F., Ji, Y. G., & Men, L. R. (2021). Effective social media communication for startups in China: Antecedents and outcomes of organization–public dialogic communication. *New Media & Society*, 14614448211051984.
- Chung, A. Q., Andreev, P., Benyoucef, M., Duane, A., & O'Reilly, P. (2018). Where the shoe pinches: Realizing dominant problems as an organizational social media business profile evolves. *International Journal of Information Management*, 41, 33-49.
- Davis, F.D. (1993). User Acceptance of Information Technology: System Characteristics, User Perception and Behavioral Impacts. *International Journal of Man-Machine Studies*, *38*, 475487.

- Dwivedi, Y. K., Ismagilova, E., Rana, N. P., & Raman, R. (2021). Social media adoption, usage and impact in business-to-business (B2B) context: A state-of-the-art literature review. *Information Systems Frontiers*, 1-23.
- Fathelrahman, E., & Basarir, A. (2018). Use of social media to enhance consumers' options for food quality in the United Arab Emirates (UAE). *Urban Science*, 2(3), 70.
- Fathian, M., Akhavan, P., & Hoorali, M. (2008). E-readiness assessment of non-profit ICT SMEs in a developing country: The case of Iran. *Technovation*, 28(9), 578-590.
- Gavino, M. C., Williams, D. E., Jacobson, D., & Smith, I. (2019). Latino entrepreneurs and social media adoption: Personal and business social network platforms. *Management Research Review*, 42(4), 469-494.
- Ghanem, S. K. R., & Hamid, N. A. B. A. (2020). The effect of Facebook, WhatsApp, Twitter and email on SMEs performance: empirical evidence from United Arab Emirates. *Journal of Internet Social Networking and Virtual Communities*, 2020, 1-17
- Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management & Data Systems*, 117(3), 442-458.
- Hajli, M. (2013). A research framework for social commerce adoption. *Information Management & Computer Security*, 21(3), 144–154. https://doi.org/10.1108/IMCS-04-2012-0024
- Hoffmann, C., Lutz, C., Meckel, M. (2014). Social Media Readiness in Public Administration Developing a Research Framework. (http://dx.doi.org/10.2139/ssrn.2408737).
- Iankova, S., Davies, I., Archer-Brown, C., Marder, B., & Yau, A. (2019). A comparison of social media marketing between B2B, B2C and mixed business models. *Industrial Marketing Management*, 81, 169-179.
- Irbo, M. M., & Mohammed, A. A. (2020). Social media, business capabilities and performance: A review of literature. *African Journal of Business Management*, 14(9), 271-277.
- Jacobs, A., & Nakata, K. (2012). Organisational semiotics methods to assess organisational readiness for internal use of social media, AMCIS 2012 Proceedings. Paper 24. http://aisel.aisnet.org/amcis2012/proceedings/EndUserIS/24 (10).
- JEDCO: Available at https://www.jedco.gov.jo/Default/Ar, Visited on 24/February 2022.
- Ketonen-Oksi, S., Jussila, J. J., & Kärkkäinen, H. (2016). Social media -based value creation and business models. *Industrial Management and Data Systems*, 116(8), 1820-1838. https://doi.org/10.1108/IMDS-05-20150199.
- Kline, R. B. (2011). Convergence of structural equation modeling and multilevel modeling.
- Lin, J., Luo, Z., Benitez, J., Luo, X. R., & Popovič, A. (2021). Why do organizations leverage social media to create business value? An external factor-centric empirical investigation. *Decision Support Systems*, 151, 113628.
- Masouleh, Z. D., Allahyari, M. S., & Atani, R. E. (2014). Operational indicators for measuring organizational e-readiness based on fuzzy logic: A challenge in the Agricultural Organization of Guilan Province, Iran. *Information Processing in Agriculture*, *I*(2), 115-123.
- Mouzakitis, S., & Askounis, D. (2010). A knowledge-based framework for measuring organizational readiness for the adoption of B2B integration systems. *Information Systems Management*, 27(3), 253-266.
- Osterwalder, A., Pigneur, Y., Smith, A., & Etiemble, F. (2020). The Invincible Company: How to Constantly Reinvent Your Organization with Inspiration From the World's Best Business Models (Vol. 4). John Wiley & Sons.
- Panda, R., Mehta, B., & Karani, A. (2017). Business models on Social Media. *International Journal of Marketing & Financial Management*, 5(2), 34-42, DOI URL: http://doi.org/10.5281/zenodo.495250.
- Parveen, F. (2012). Impact of social media usage on organisations. in Proceedings of the Pacific Asia Conference on Information Systems, Paper 192. http://aisel.aisnet.org/pacis2012/192 [Accessed 23 February 2022].
- Pourkhani, A., Abdipour, K., Baher, B., & Moslehpour, M. (2019). The impact of social media in business growth and performance: A scientometrics analysis. *International Journal of Data and Network Science*, 3(3), 223-244.
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate behavioral research*, 42(1), 185-227.
- Ramachandran, A. T., Ahmad, N., Miskon, S., Iahad, N. A., & Ali, N. M. (2019, September). Factors influencing the adoption of social media in service sector small and medium enterprises (SMEs). In *International Conference of Reliable Information and Communication Technology* (pp. 917-925). Springer, Cham.
- Sangi, N., Shuguang, L., & Sangi, A. R. (2018, January). Robustness of factors influencing social media usage/adoption amongst SMEs in developing countries: A case of Pakistan. In *Proceedings of the 9th International Conference on E-Education, E-Business, E-Management and E-Learning* (pp. 103-109).
- Saniuk, S., & Grabowska, S. (2021). Challenges of business model concept of small-and medium-sized enterprise cooperation. New York, NY, USA: Routledge.
- Sengar, A. S. (2021). The impact of social media on business growth and performance in India. *Asian Journal of Research in Business Economics and Management*, 11(12), 27-31.
- Shafer, S. M., Smith, H. J., & Linder, J. C. (2005). The power of business models. Business horizons, 48(3), 199-207.
- Siricharoen, W. V. (2012). Social media, how does it work for business?. *International Journal of Innovation, Management and Technology*, 3(4), 476.
- Sohail, M. S., Hasan, M., & Sohail, A. F. (2020). The impact of social media marketing on brand trust and brand loyalty: An Arab perspective. *International Journal of Online Marketing (IJOM)*, 10(1), 15-31.
- Stalder, O. (2018). An Exploration of the Business Model Concept's Meaning and Usage in Switzerland: Towards an Application Framework (Doctoral dissertation, University of Gloucestershire).

- Statista: https://thenextweb.com/tech/2019/06/11/most-popular-social-media-networks-year-animated/
- Strauss, J., & Frost, R. (2011). E-Marketing. 6th ed., Prentice Hall.
- Syaifullah, J., Syaifudin, M., Sukendar, M. U., & Junaedi, J. (2021). Social media marketing and business performance of MSMEs during the COVID-19 pandemic. *The Journal of Asian Finance, Economics, and Business*, 8(2), 523-531.
- Teece, D. J. (2010). Business models, business strategy and innovation. Long range planning, 43(2), 172-194.
- Tornatzky, L. G., Fleischer, M., & Chakrabarti, A. K. (1990). Processes of technological innovation. Lexington books.
- Trawnih, A., Yaseen, H., Al-Adwan, A. S., Alsoud, R., & Jaber, O. A. (2021). Factors influencing social media adoption among smes during Covid-19 crisis. *Journal of Management Information and Decision Sciences*, 24(6), 1-18.
- Upadhyay, N. (2019) Social Media Business Model", Transforming Social Media Business Models Through Blockchain, Emerald Publishing Limited, Bingley, pp. 1-13. https://doi.org/10.1108/978-1-83867-299-720191002.
- Wirtz, B. W. (2019). The Business Model Concept. In Digital Business Models (pp. 17-50). Springer, Cham.
- Zhao, X., Lynch Jr, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of consumer research*, 37(2), 197-206.



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