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The Complexity of Interaction between Social Media Platforms and Organizational Performance

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Abstract: Social media platforms (SMPs) have become a key source of success for many organizations in today’s complex business environment due to advancements in information and communication technologies that have created dynamic innovations. This study aims to explore the complex relationships between SMPs’ usage and organizational performance with respect to small and medium-sized restaurants in Jordan. In addition, it investigates the impact of competition intensity as a moderating variable. The model of the study was assessed and examined by gathering data from 331 Jordanian restaurants using the partial least squares (PLS) method. The findings revealed that SMPs’ usage is positively associated with restaurant performance (financial, marketing, and operational). In addition, the results indicate a significant moderating impact of competition intensity only on the relationship between SMPs’ usage and restaurants’ marketing performance. Based on the results, several theoretical and practical implications for restaurants have been suggested, as well as further research avenues.

Keywords: social media platforms; social media; organizational performance; competition intensity; open innovation; SME restaurants; Jordan

1. Introduction

In the last few decades, the emergence of various innovations in information and communication technology have revolutionized most business operations and become a valuable organizational resource in creating and enhancing business value [1–4]. One of the current trends in the hospitality industry is the intensive use of technology and social media platform (SMP) applications. This intensive use creates a new complex interaction between SMPs and businesses. Social media (SM) and SMPs have emerged because of web 2.0 (participatory web) innovations in an effort to enhance human communication and create dynamic and interactive dialogues [5]. The exceptional impact of SM can be perceived in all business operations [6] and increases the complexity of the SMP–business interaction. Moreover, the increasing number of SMP users, as well as its unique features such as real-time communication, many-to-many interactions, and user-generated content, differentiate it clearly from other web-based tools [7,8] and have stimulated most firms to adopt the use of various SMPs [9].

SMPs are dramatically changing the way businesses conduct their operations. According to Lepkowska-White et al. [10], the usage of an SMP can be viewed as a unique opportunity by many managers in both multi-owner businesses and those individually owned. In terms of the benefits of SMPs, there are two main common ones that can be generated by most firms: cost reduction and profitability enhancing [11]. SMPs are valuable strategic and marketing resources in terms of increasing sales and achieving organizational objectives; communicating, interacting, and collaborating with customers and...
employees [12]; increasing awareness and inquiry; enhancing relationships with a firm’s customers; attracting new customers; reaching customers on a global scale; and co-promoting local businesses to enhance a firm’s image [13,14]. The complex interaction of SMPs—especially social media marketing—with a firm’s performance motivate both academics and practicing managers to investigate the nature of these interactions in an attempt to improve our understanding of these complex systems.

SMPs can be used by various organizations regardless of their size [8,15]. Nowadays, due to the COVID-19 pandemic and other supply chain disruptions, small to medium-sized enterprises (SMEs) have increased their use of these applications, and restaurants are no exception. Restaurants use SMPs for various purposes: marketing, promotion, communications, operations management, order fulfillment, hiring employees, online meetings, and business communications [15,16].

In Jordan, the restaurant industry is one of the most important economic sectors and significantly contributes to the national economy. Based on the information provided by the Jordanian Ministry of Tourism and Antiquities in 2019, the number of restaurants in Jordan was 2070, employing 20,700 persons (15,800 Jordanian and 5400 non-Jordanian). The Jordanian restaurant industry is characterized by intense competition, high labor costs, a lack of qualified human resources professionals, a lack of financial resources, and unstable rules and regulations according to the Jordanian Ministry of Tourism and Antiquities [17]. In general, there is no standard for the classification of restaurants. However, the most widely used classification is from the American National Restaurant Association, where restaurants can be divided into five main types: quick service, fast casual, midscale, moderate (or casual), and fine dining restaurants (or upscale). In addition, restaurants can be classified as independent or multiunit (chain) restaurants [18]. A restaurant chain is a set of related restaurants in various locations that are either under shared corporate ownership or franchising agreements, use a standard format through architectural prototype development, or offer a standard menu and/or services [19]. Independent restaurants are owner-operated restaurants having no partnership with any national or international restaurants [20].

The motivation of this research is to fill the following gaps:

First, despite substantial research into SMPs in different academic fields and industries [21], it has been noticed that most of the published work has focused on SMP usage for marketing purposes [10,22–26]. In fact, SMP usage is not limited to collecting information about customers, but also that about competitors and other stakeholders in the business environment [10]. Pardo et al. [27] and He et al. [15] noted that SMPs and their analytical tools can be used to scan the external environment, to conduct an industry and competitive analyses, and to extract valuable information from the large number of data on available SMPs. However, little attention has been paid to the use of SMPs as a comprehensive and effective tool for gathering information about the business environment and the main competitive forces such as suppliers, competitors, and other central forces. Moreover, most published studies have focused on traditional SMPs [22]. This study considers other platforms (e.g., Snapchat, Foursquare, Pinterest, and TikTok).

Second, several studies have shown that limited attention has been paid to investigating the impact of SMPs on organizational performance [6,14,26,28–32]. In addition, the number of empirical studies is still scarce in the context of SMEs [14,15,25,33,34]. The need for more empirical work to understand the interaction between SMP usage and organizational performance in the context of SMEs is well articulated in the literature [35,36].

Third, most of the published work is related to developed countries. Limited research has been conducted on the use of SMPs among SMEs and its impact on performance in developing countries [37–39]. As stated by Tajvidi and Karami [40], SMP usage might vary across industries and contexts. Thus, further study is needed to discover the extent to which SMP usage is similar or different in other contexts, especially in the Middle East [28].
Fourth, the impact of SMPs on organizational performance is a complex system that is severely influenced by many moderating variables, including environmental, organizational, and individual ones [41, 42]. As claimed by Chen and Wei [42], Ahmad et al. [28], Charoensukmongkol and Sasatanun [43], and Tajvidi and Karami [40], few studies have considered the impact of moderating variables on the relationship between SMPs and organizational performance. Therefore, in this research paper, the impact of a moderating variable is considered, as represented by the intensity of competition.

Fifth, it can be inferred that most studies are applied to different industries, while various scholars have asserted the importance of selecting one industry when investigating the impact of SMPs on performance [24, 28]. Therefore, this research paper will focus on small and medium-sized restaurants where SMPs are used extensively [28, 44, 45], and limited attention has been paid to this industry [16, 40, 41, 44–48]. In addition, most earlier investigations were conducted on large restaurants, while SME restaurants have not been given enough attention [49].

Most of the published work has focused on SMP usage for marketing purposes, not only to collect information about customers, but also to learn about competitors and other stakeholders in the business environment. Moreover, most of these studies were conducted in developed countries with more of a focus on big firms in different sectors, with limited attention to developing countries’ restaurant sectors. Based on these notes, the following questions can be raised: Q1. Does SMPs’ usage impact small and medium-sized restaurants’ financial, operational, and marketing performance? Q2. Does competition intensity moderate the relationship between SMPs’ usage and restaurants’ financial, operational, and marketing performance?

To the best of the authors’ knowledge, this is one of the first studies that conducts a comprehensive approach to analyzing the SMP usage in the developing economies context. In addition, it is one of the first studies that focuses on the use of SMPs by SMEs in the restaurant sector with the intensity of competition as a moderating variable. Therefore, this study seeks to contribute to the current research by answering the aforementioned questions and achieving the following research objectives:

- To examine the impact of SMPs’ usage on restaurants’ financial, operational, and marketing performance;
- To examine the moderating effect of competition intensity on the relationship between SMPs’ usage and financial, operational, and marketing performance.

The rest of this research has been organized as follows: Section 2 reviews the related literature. Section 3 presents the methodology and research model; demonstrates the research stages, sampling, and data collection design; and lists the data analysis tools. Section 4 discusses the results, and Section 5 concludes this research.

2. Literature Review

Due to the COVID-19 pandemic and as a result of lockdowns, curfews, and strict health regulations, many sectors including the restaurant sector have been severely affected worldwide [50]. These unconventional disruptions have motivated companies to implement strategies based on the adoption of new technologies [51] and further demonstrate a capacity for innovation. Many SMEs adopted several strategies to enhance their performance, compete successfully, and recover from the pandemic’s negative impact. In addition, companies moved toward open innovation that not only focuses on products, services, and processes, but also on models of conducting business based on innovation [51].

Fava, Lagana, and Nicolosi [52] argue that open innovation is essential for the success of restaurants, and investments in information and communication technology (ICT) are considered one of the main determinants of product and process innovation in the restaurant industry. SMPs are considered one of these ICT tools that restaurants can strategically invest in to integrate open innovation, which in turn can have a positive impact on restaurants’ performance.
The complexity theory and organizations have been studied for years [53,54]. When complexity theory is integrated with organizational issues called complexity strategy [55] or complex adaptive organization [56], it can be defined as the study of organizational systems and their interaction using the complexity theory. Although complexity can be promisingly used in furthering our standing of the organizational complex systems and how they adapt to their complex environments [56] using several uncertainty and nonlinear approaches, we need to consider that complexity is not a complete break from the traditional organizational theory. Complexity theory emphasizes interactions and constant feedback loops that cause/explain systems’ changes [57]. Several application areas for complexity theory have been applied in business studies, such as in understanding how organizations adapt to their environments, how to manage and mitigate risk, how to adopt to uncertainty, and how to understand business systems and their interactions. According to the organizational theory, organizations are adaptive, interdependent, and complex systems that interact in dynamic relationships. According to Ingrassia et al. [50], the relationship between IT innovations’ usage—including SMPs—and organizational performance is complex and ambiguous, and more studies are needed to clarify this relationship. SMPs and their usages are a crucial source for constant change in today’s business environment; thus, this study builds on the complex theory bases in an attempt to understand the complex interaction between SMPs and organizational performance as an open, adaptive, and interactive system.

2.1. SMP and the Restaurant Industry

SMPs play a critical role in the restaurant industry [16] and influence the whole sector [46]. The marketing applications provided by SMPs are well-known and widely used. A recent study showed that in newly established restaurants, 80% of communication is conducted through SM [44]. This can be attributed to its availability, low expense, and simple technical and human requirements [41]. Recently, because of the COVID-19 pandemic, most SMEs have been using several types of SMPs more than ever [58]. SMPs have led to dramatic changes in restaurants’ operations such as those of marketing, promotion, customer relationships, and attracting new employees [45]. For SMEs, SMPs can be used at a low cost and involve minimal technical necessity [59].

Small firms can achieve numerous benefits from using social media marketing and SMPs. For example, they can create awareness of their brand and reputation, promote customer loyalty, expand social search classification with page links, develop new ideas for marketing strategies, investigate customer behavior and other external sources, increase and accelerate product marketing, carry out marketing objectives actively, and meet influencers and groups via SM to extend the promotional period of the brand message, initiate and advance conversation, and, most importantly, differentiate themselves from competitors [37]. Kim and Jang [44] stated that SMPs influence the restaurant industry in 10 ways—most of them are related to marketing issues, including: easy photo-sharing, which allows pictures to be linked to reviews and other social platforms; SM networks, which are sought as one of the most credible sources for reviews; the fact that SM users dine out more often than nonusers; the fact that hashtags are universal across all social platforms; mobile data making location-based marketing possible; SM creating an easy outlet for loyalty programs; the phenomenon of consumers adopting mobile technologies; the fact that people are always looking for the best deals; the fact that applications, sites, and consumer education help many people manage dietary restrictions; and because there is a positive correlation between a restaurant’s SM reviews and revenues.

SMPs and their marketing and administrative applications are here to stay, and businesses need to be smart about how to use them. According to Perlik [60] and DiPietro et al. [16], there are many purposes behind the use of SMPs by restaurants: to find employees at a relatively low cost, to obtain feedback on new menu offerings, to connect with employees and spread ideas and best practices throughout the restaurant system, to use em-
ployees as brand ambassadors, to communicate with customers by answering any frequently asked questions and maintaining a direct dialogue with them, to reach potential new customers, to inform the community of changes within the organization, and to boost excitement and traffic by using contests and giveaways. Furthermore, restaurants that use SM networking appropriately will boost their strategic position and achieve a competitive advantage.

2.2. Social Media and Complexity

With reference to social media, there are various definitions. However, the most common, most frequently mentioned, and the one that can be ascribed to a “simple but comprehensive” [28] definition is attributed to Kaplan and Haenlein ([61], p. 565). They defined SM as “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content.” SM can take many forms, including content communities (i.e., YouTube), social networking sites or blogs (i.e., Facebook and Twitter), and collaborative projects (i.e., Wikipedia) [61,62]. Several studies investigate the role and usage of SMPs in business. He et al. [15] and Sinclaire and Vogus [8] explored the adoption of SMPs by small businesses and global organizations, respectively. Others show that organizations (business firms; SMEs) can use SMPs to perform various business operations such as building relationships with trading partners; for communications; for managing logistics operations across a supply chain [63,64]; for establishing and maintaining a relationship between users and developers [65]; for marketing, sales, and advertising; for customer services and capturing users’ activities and flows [66]; in the human resources and talent selection [67]; towards the innovation process [68] and innovation performance [69]; for competitive analysis; and for strategic roles [15,27,70]. The availability of information, along with the increasing use of SMPs, encourages and eases organizations’ ability to collect information regarding external environmental forces (customers, competitors, suppliers, and other stakeholders). In addition, it increases organizations’ awareness of recent changes and trends in the market, as well as in the internal environment. This, in turn, improves their ability to exploit opportunities and to improve business processes and organizational performance [1,63,71,72].

One of the most well-known SMP uses is for marketing. Social media marketing is the use of SMPs to endorse a product or service and improve a firm’s reputation and market share. Although the terms e-marketing and digital marketing are still in use in business and academia, social media marketing and SMPs are becoming more popular. For marketing purposes, firms need professional staff to manage the use of SMPs called “Social media marketers.” They are marketing specialists who use SMPs to promote the firm’s offerings, products, and services. They often use platforms like Facebook, Instagram, LinkedIn, Twitter, TikTok, and Snapchat for brand promotion, targeting audience growth, influencing website traffic, and driving it to the firm’s website, and increasing sales by reaching new customers, engaging with current ones, and announcing new products or services. Several expected advantages and disadvantages for social media marketing need to be considered and balanced well when using SMP applications [73,74]. According to Barnhart [75], firms need to establish and follow clear social media-marketing strategy to achieve their preestablished SMPs’ goals, ascertain the advantages, and face the disadvantages. The most common goals for social media are increasing brand awareness and increasing community engagement. Therefore, firms need to consider that different SMPs attract different customers; for example, Instagram and YouTube attract more Millennials and those in the Gen Z demographic, while the LinkedIn audience comprises those more educated and professionals. Alves et al. [76] conducted a literature review study about social media marketing and its implications. Their study revealed that most of the studies analyzed focus on the consumer perspective in terms of the usage, share, and influence of social media on consumer decisions and perceptions. Moreover, most of the social media-marketing studies focusing on the firm’s perspective centered not only on the usage of
social media, but also on their implementation, optimization, and measurement of results. Under the increasing levels of competition, SMPs and their interactions with firms are still crucial issues to consider, and not only for marketing, but also for all of a firm’s operations.

2.3. Social Media Usage and Performance in the Context of SMEs

Several organizational factors are needed to enable a successful SM presence, such as [77]: formally written plans and guidelines, a human resources management team with professional SM skills, consumer co-creation encouragement, and marketing planning. These factors are required from all firms regarding their size and/or area of specialization. According to World Bank statistics, SMEs (including restaurants) represent more than 80% of jobs worldwide and contribute more than 25% of the GDP. For years, SMEs have been considered effective drivers of economies in general and of the mitigation of poverty in developing economies. Therefore, SMEs’ success is instrumental for countries’ overall economic development [78]. However, the success of these SMEs is heavily restricted by their limited resources. The financial gap that all SMEs face motivates them to think of creative ideas to overcome this constraint and keep their operations alive. In this context, SMP usage is among the alternatives. However, few studies have considered the effect of SMP usage on SMEs’ performance and very few studies have been concerned with the restaurant industry. Lu, Chen, and Law [79] mapped the progress of SMP studies in the hospitality and tourism industry from 2004–2014. The results indicated that SMP research in the hospitality and tourism industries is in its initial stages; two clear turning points have been identified, 2010 and 2014, when the number of articles rose dramatically and unexpectedly dropped again. The related literature suffers from small numbers of papers and few prominent researchers. The following section summarizes some of the main studies about SMP usages by SMEs in general and in the restaurant industry, with more emphasis on the developing economy context.

Some scholars have investigated the impact of SMP usage on organizational performance. For instance, Ferrer et al. [30] found that organizational financial performance, market performance, and shareholder value performance are positively influenced by SM networks. Similarly, Wong [4] found that Facebook adoption had a positive effect on SMEs’ sales performance. Parveen [29] found that Facebook is the most widely used SMP among Malaysian public organizations and has had a strong impact on organizational performance. An association between an organization’s efforts using social media (investment and responses) and their market performance has been reported by Chung et al. [80], who examined the impact of firms’ SM efforts in terms of intensity, richness, and responsiveness with respect to consumer behavior and firm performance. Furthermore, Rodrigues et al. [3] examined how customer relationships, social media, and customer orientation impact sales performance. They used a sample of 1700 sales professionals from various industries and discovered that customer relationship management and SMPs positively influenced sales performance. Ainin et al. [33] investigated the impact of Facebook usage on the financial and nonfinancial performance of SMEs in Malaysia. The study revealed that Facebook usage has a strong positive impact on financial performance and positively impacts the nonfinancial performance of SMEs in terms of cost reduction with respect to marketing and customer service, improved customer relations, and improved information accessibility. Jones et al. [13] found that website presence, combined with meaningful and sustained SMP promotion, can have a positive influence on business success in terms of increased traffic, awareness, and revenue. Furthermore, the results revealed that the main benefits of the use of websites and SM sites are an increase in awareness and inquiry, enhanced relationships with customers, an increase in the number of new customers, an enhanced ability to reach customers on a global scale, and the co-promotion of local businesses to enhance the image of small businesses in the region. Parveen et al. [14] investigated the relationship between SMPs and organizational performance and entrepreneurial orientation. The results showed that SMP usage had a strong positive
impact on organizations’ performance in terms of cost reduction, improved customer relations, and enhanced information accessibility. In the same vein, Tajvidi and Karami [40] examined the impact of SMP usage (online and offline networks) on firms’ performance (growth and profitability) in several SME hotels in the UK. The results revealed a positive and significant effect of SMP usage on firm performance. A recent study conducted by Alraja et al. [81] examined factors that affect the adoption of Facebook by SMEs and how the adoption influences organizational performance in Oman. The results indicated that the use of Facebook for advertisements had a significant effect on SMEs’ performance dimensions (efficiency, flexibility, and responsiveness). Varela-Neira et al. [77] try to understand the main organizational factors that enable a successful SM presence by developing a new 25-item SM scale to measure the impact of SM on firms’ success measured by social media strategy success, consumer-related-marketing performance, and financial marketing performance. On the contrary, Ahmad et al. [28] reported exciting different results when they examined the adoption of SMPs by SMEs in the United Arab Emirates and its impact on performance. The paradox of these results increases both the complexity of the SMPs, -i.e., regarding the firms’ performance interaction- and the need for more research to manage these issues.

2.3.1. Social Media Usage and Restaurant Performance

Prior studies have illustrated the importance of information technology (IT) usage in the restaurant industry. IT applications such as point of sale (POS) systems, accounting and payroll functions, menu item tracking, graphical user interfaces, mealtime duration, kitchen display systems, and advanced input devices such as touchscreens are commonly used by restaurants [82]. Currently, SMPs are widely used, playing a valuable role in the restaurant industry, and significantly improving restaurant performance [22]. SMPs are considered one of the IT tools that restaurants can use to integrate open innovation, which in return can have a positive impact on restaurants’ performance. Undoubtedly, SMP usage has brought about a fundamental revolution in internal and external restaurant operations. Indeed, SM usage is considered by restaurants as a strategic weapon that enables them to exploit opportunities, improve performance, and reinforce their competitive position [15], especially for small and medium-sized independent restaurants [22,82].

SMPs are essential tools that support the proposed view about the interaction between open innovation, economic growth, and firms’ performance [62,83]. Open innovation and innovative capabilities including SMPs are especially important for SMEs because of their limited resources towards competing against big corporates. Song and Jing [84,85] argue that the more grounded the innovation that is controlled by the firm, the more successful its performance including the SMEs. The relationship between innovation and SMEs’ performance have been extensively studied [83,84], and in most cases significant relationships have been found [84–86]. Moreover, a strong significant impact on competitiveness has been reported [87,88]; therefore, innovation is an effective approach to keep SMEs competitive [83]. SMPs act as a crucial tool that facilitates and hastens innovation and can play a significant role in the SME restaurant sector, especially in a highly competitive environment.

Several studies have focused on the impact of SMPs on consumers’ restaurant choices [89,90], while few studies have investigated the impact of SMP usage on restaurants’ performance. One of the first studies that investigated SMP usage in the U.S. restaurant industry was conducted by DiPietro et al. [83]. This study showed that even in developed economies there is no consistent use of SMP sites and managers of these restaurants have different opinions about the expected usefulness of such sites. The results revealed that SMP usage positively influences restaurants’ performance in terms of customer satisfaction, revenue, and employee productivity. Kwok and Yu [91] argued that an SMP, namely, Facebook, can increase sales for restaurants, since it enables them to reach many customers by generating visibility. Based on the analysis of SM messages on Facebook, they
found a positive effect of the adoption of Facebook on SME restaurants’ sales performance. Needles and Thompson [45] revealed that SMPs significantly influence restaurants’ operations; it was also found that independent restaurants were more likely to use SM than chain restaurants. Kim et al. [41] investigated the impact of the SM activities of 178 U.S. restaurants on financial performance by using the Restaurant Media Index to measure SMP usage and Tobin’s-q to measure financial performance. The results found a positive linear relationship between SMP usage activities and financial performance. In another study, Kim, Li, and Brymer [92] investigated the impact of the total number of online reviews from four SM sites in 2016 (TripAdvisor, Yelp, Foursquare, and UrbanSpoon) on performance. The results demonstrated a positive impact of online reviews on the restaurants’ performance. The results also showed the significant impact of “the Excellence certificate of restaurants” as a moderating variable on the relationship between the number of online reviews and restaurants’ performance. Similarly, Kim et al. [41] examined how SM influences restaurants’ performance and found that positive SM ratings or favorable reviews enhanced the restaurants’ sales, profits, and number of guests. However, their findings were specific to only one luxury restaurant chain in the USA.

Some studies focused on the impact of technology on restaurant revenue [93], compared technology adoption between a chain and independent full-service restaurants [94], or used secondary data to build an initial framework for restaurant information technology [95]. Nowadays, the importance of SMP usage in restaurants is receiving more attention from different perspectives. While some studies follow a previous trend of SMP adoption factors, others focus on the marketing dimensions that affect SMP usage in restaurants [96–101]. Hanaysha [21] studied the effect of SMP advertisements on brand equity in the fast-food restaurant industry in the East Coast region of Malaysia. The findings indicated that SM advertisements have a significantly positive effect on all the dimensions of brand equity (brand image, brand loyalty, brand preference, and brand leadership). Another study with almost similar findings, conducted by Lucas and Sines [102], studied the SM-marketing strategies of five small family restaurants in Maryland. Lucas and Sines found three main themes; accordingly, it was found that SMPs are most effective in increasing sales and relationship marketing. The results demonstrated that owners of restaurants who engage and actively in SM-marketing strategies can establish relationships and build trust with customers, which in turn positively influence sales. Lima, Mainardes, and Cavalcanti [30] examined the impact of SM on the brand equity image and purchase intention in Crab Island restaurants in Brazil. They found that restaurants use SMPs to promote services, communicate, and maintain relationships with customers. They also concluded that using SMPs is valuable for restaurants. Other scholars found that the use of Instagram has a positive impact on restaurants’ financial and nonfinancial performance in terms of promotion, cost reduction, access to competitors’ information, brand visibility, and the number of customers [103]. In Saudi Arabia, Binsawad [46] examined the impact of SMPs on the success of five Saudi restaurant businesses. The results indicated that restaurants that use online services such as online menus, locations, pictures, and customer handling are ranked higher than those offering less of these services. The study concluded that SM utilization by restaurants is effective for marketing, branding, and delivering customer care services. Furthermore, Binsawad [46] concluded that the suitable use of SMPs will positively influence the performance and profitability of restaurant businesses.

Finally, Fernández-Miguélez et al. [103] analyzed online reviews of eight hundred active restaurants in five European countries (France, the United Kingdom, Germany, Italy, and Spain). They found that online reviews on SMPs have a positive effect on financial performance in terms of the return on net worth and return on capital.

2.3.2. Hypothesis Development and Research Model

Based on the findings of the related studies, it can be inferred that SMPs are valuable for SME restaurants and, when adopted appropriately for various tasks, they will positively influence organizational performance. Therefore, this research proposes that SMPs’
usage has a positive impact on restaurants’ organizational performance (financial, operational, and marketing). Accordingly, the following hypotheses were developed:

**Hypothesis 1 (H1):** There is a significant positive impact of SMP usage on financial performance.

**Hypothesis 2 (H2):** There is a significant positive impact of SMP usage on operational performance.

**Hypothesis 3 (H3):** There is a significant positive impact of SMP usage on marketing performance.

The environmental effect is considered in this research as a moderating effect that influences the direction of the relationship between SM and restaurants’ performance. The environmental effect in this research is represented by competition intensity, as one of the main factors that contributes to environmental hostility [38,47]. Competition intensity refers to a situation where “the competition is aggressive due to the increasing number of existence competitors and the lack of opportunities for further growth” [104]. It is argued that, as the level of competition increases, the behaviors of restaurants become unpredictable and ambiguous [105] and they will try to utilize their internal resources efficiently and effectively. SMPs are valuable sources and can be used as a competitive tool in the business environment. Furthermore, SMP usage is significantly influenced by competition intensity [1,106].

In Jordan, the restaurant industry is characterized by high competition, especially among small and medium-sized restaurants. Accordingly, the authors assume that it is particularly useful to discover the contingent effect of competition intensity on the relationship between SM usage and performance. Thus, this study expects that the impact of SMPs’ usage on organizational performance will increase due to the presence of competition intensity. Therefore, the following hypotheses were postulated:

**Hypothesis 4 (H4):** Competition intensity positively and significantly moderates the relationship between SM and restaurants’ financial performance.

**Hypothesis 5 (H5):** Competition intensity positively and significantly moderates the relationship between SM and restaurants’ operational performance.

**Hypothesis 6 (H6):** Competition intensity positively and significantly moderates the relationship between SM and restaurants’ marketing performance.

Figure 1 summarizes the research model and relates the hypotheses.

![Figure 1. Research model.](image-url)
The proposed conceptual model considers three performance aspects including the operational, financial, and marketing, with competition intensity as a moderating variable.

3. Methodology

The research model was analyzed using Structural Equations Modeling (SEM) since it has the advantage—compared to multiple regression [107]—of enabling the examination of extensive interactions between moderator and latent predictor variable indicators [108].

3.1. Population, Sampling, and Data Collection

To achieve the objectives of this study, a quantitative cross-sectional research approach was undertaken and primary data were gathered using an online questionnaire. There are about 2070 restaurants in Jordan [17]. Therefore, a sample between 300 to 330 is considered enough according to sample size table. The questionnaire was distributed to owners and managers of small and medium-sized restaurants. A total of 345 online questionnaires were completed, and 331 of them were valid for analysis based on convenience sampling procedures.

3.2. Development of Measurement

Social media platform (SMP) usage in this study includes Facebook, Instagram, WhatsApp, Twitter, YouTube, Snapchat, and Pinterest. SMP usage is viewed based on the “system-centered fashion” adopted by Praveen et al. [14], in which the measures of system usage are based on the various tasks for which the system is used, namely, for customers, supplier, competitors, environment, and marketing and selling. SMP usage is conceptualized as a second-order construct having five first-order factors: customer, supplier, competitor, environment, and marketing and sales. All items were measured on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). There are twenty-five items for measuring SMP usage, adopted from [14,33,108–110]. Competition intensity was measured by seven items adopted from [111–113]. In this research, the intensity of competition reflects price wars, competitive moves, and the matching of competitive offers. As for the dependent variables, items for financial performance were adopted from [114–116], items for marketing performance were adopted from [33,114,116], and items for operational performance were adopted from [117].

4. Analysis and Results

To verify the proposed model and research hypotheses, a variance-based structural equations modeling (SEM) technique was used since it allows for the simultaneous analysis of both the measurement model and structural model. Different structural equation models can be used. For example, the Partial Least Squares (PLS)-SEM is preferred in the exploratory stage and its model fit is based upon accounting for variance in the internal constructs. Whereas Covariance-Based (CB)-SEM is used for testing existent theories and its model fit is based on the accuracy of observed covariance estimation [118]. Therefore, PLS-SEM, specifically Smart PLS V3, was used in this study over CB-SEM since it is more appropriate for predictive applications and theory building [107] and can model hierarchical component models as stated by Siponen and Vance [119].

4.1. Social Media Usage as a Higher-Order Component

According to Hair et al. [118], hierarchical component models (HCMs) involve testing higher-order structures that contain two layers of constructs. There are four different types of HCMs. This study is based on a reflective-reflective HCM type that indicates a reflective relationship between the higher-order component (HOC) and the lower-order components (LOCs) in which all LOCs are measured by reflective indicators [118].
In this study, the number of indicators across the LOCs do not vary. Therefore, the repeated indicators approach was used to model Social Media Usage (SMU) as a reflective HOC as recommended by Hair et al. [118]. The relationships between social media usage and its contributing LOCs were as follows (competitors = 0.553, customers = 0.889, environment = 0.848, marketing and sales = 0.866, and suppliers = 0.856). To assess the multicollinearity of the LOCs, the variance inflation factor (VIF) was calculated. The VIF values were within the commonly accepted range of above 0.1 and below 10; for instance, the VIF value for SMU/competitors was 1.00, SMU/customers—1.00, SMU/environment—1.00, SMU/marketing and sales—1.00, and SMU/suppliers—1.00. Furthermore, the values were consistent with Hair, Risher, Sarstedt, and Ringle [120], who proposed ideal VIF values for a PLS-SEM analysis of VIF < 3.

4.2. The Measurement Model

The measurement quality of the research model was verified by examining the convergent validity, discriminant validity, and internal consistency. To assess the convergent validity, the reliability of each item was examined. According to Bagozzi and Yi [121], convergent validity requires the indicator loading to be 0.6 or higher. Therefore, a few items were removed from the model because they did not meet the minimum acceptable level. Table 1 shows the remaining items with an acceptable loading level. In addition, the average variance extracted (AVE) was determined for each construct. The AVE values of the constructs were greater than the 0.5 threshold recommended by Fornell and Locker [122] and Chin [123], which indicates satisfactory reliability and convergent validity.

<table>
<thead>
<tr>
<th>Latent Variable</th>
<th>Indicators</th>
<th>Loadings</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP</td>
<td>COMPT2</td>
<td>0.776</td>
<td>0.871</td>
<td>0.628</td>
</tr>
<tr>
<td></td>
<td>COMPT4</td>
<td>0.766</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>COMPT5</td>
<td>0.796</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>COMPT8</td>
<td>0.830</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FINP</td>
<td>FINP2</td>
<td>0.844</td>
<td>0.913</td>
<td>0.678</td>
</tr>
<tr>
<td></td>
<td>FINP3</td>
<td>0.840</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FINP4</td>
<td>0.837</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FINP5</td>
<td>0.764</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FINP6</td>
<td>0.829</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAKP</td>
<td>MAKP2</td>
<td>0.718</td>
<td>0.946</td>
<td>0.780</td>
</tr>
<tr>
<td></td>
<td>MAKP3</td>
<td>0.912</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MAKP4</td>
<td>0.929</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MAKP5</td>
<td>0.914</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MAKP6</td>
<td>0.923</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPEP</td>
<td>OPEP1</td>
<td>0.771</td>
<td>0.948</td>
<td>0.753</td>
</tr>
<tr>
<td></td>
<td>OPEP2</td>
<td>0.795</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OPEP3</td>
<td>0.894</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OPEP4</td>
<td>0.898</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OPEP5</td>
<td>0.924</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>OPEP6</td>
<td>0.911</td>
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</tr>
<tr>
<td>SMUC</td>
<td>SMUC2</td>
<td>0.941</td>
<td>0.974</td>
<td>0.882</td>
</tr>
<tr>
<td></td>
<td>SMUC3</td>
<td>0.939</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Discriminant validity was assessed in many ways. First, all the items loaded well onto their corresponding constructs and more heavily than onto other constructs, as shown in Table 2, which satisfies the discriminant validity according to Chin [123]. Second, consistent with the guidelines of Fornell and Larcker [122], the square root of the AVE value for each factor was higher than the correlations with all the other factors. As shown in Table 3, the values on the diagonal represent the square roots of the AVEs, which are greater in all cases than the off-diagonal values in their corresponding rows and columns. Third, according to Hair et al. [118], the Heterotrait–Monotrait ratio (HTMT) of the correlations close to one indicates a lack of discriminant validity. In other words, the confidence interval of the HTMT statistic should not include the value one for all combinations of constructs, which was the case in our study as shown in Table 4. Thus, the discriminant validity of our scale, which indicates the extent to which a particular construct differs from other constructs, was supported.

Table 2. Loadings (in bold) and cross-loadings.

<table>
<thead>
<tr>
<th></th>
<th>COMP</th>
<th>FINP</th>
<th>MAKP</th>
<th>OPEP</th>
<th>SMUC</th>
<th>SMUE</th>
<th>SMUM</th>
<th>SMUS</th>
<th>SMUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP2</td>
<td>0.776*</td>
<td>0.213</td>
<td>0.402</td>
<td>0.358</td>
<td>0.417</td>
<td>0.369</td>
<td>0.418</td>
<td>0.291</td>
<td>0.275</td>
</tr>
<tr>
<td>COMP4</td>
<td>0.766</td>
<td>0.155</td>
<td>0.316</td>
<td>0.312</td>
<td>0.354</td>
<td>0.352</td>
<td>0.314</td>
<td>0.252</td>
<td>0.244</td>
</tr>
<tr>
<td>COMP5</td>
<td>0.796</td>
<td>0.259</td>
<td>0.341</td>
<td>0.338</td>
<td>0.401</td>
<td>0.389</td>
<td>0.375</td>
<td>0.270</td>
<td>0.349</td>
</tr>
<tr>
<td>COMP8</td>
<td>0.830</td>
<td>0.241</td>
<td>0.484</td>
<td>0.438</td>
<td>0.529</td>
<td>0.389</td>
<td>0.496</td>
<td>0.343</td>
<td>0.372</td>
</tr>
<tr>
<td>FINP2</td>
<td>0.270</td>
<td>0.844</td>
<td>0.557</td>
<td>0.432</td>
<td>0.347</td>
<td>0.452</td>
<td>0.406</td>
<td>0.331</td>
<td>0.282</td>
</tr>
</tbody>
</table>

Notes: COMP = Competitiveness, FINP = Financial Performance, MAKP = Marketing Performance, OPEP = Operational Performance, SMUC = Social Media Usage/Customers, SMUE = Social Media Usage/Environment, SMUM = Social Media Usage/Marketing and Sales, SMUS = Social Media Usage/Suppliers, and SMUT = Social Media Usage/Competitors.
## Table 3. The constructed correlation matrix.

<table>
<thead>
<tr>
<th></th>
<th>COMP</th>
<th>FINP</th>
<th>MAKP</th>
<th>OPEP</th>
<th>SMUT</th>
<th>SMUC</th>
<th>SMUE</th>
<th>SMUM</th>
<th>SMUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP</td>
<td>0.793*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FINP</td>
<td>0.277</td>
<td>0.823</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAKP</td>
<td>0.497</td>
<td>0.576</td>
<td>0.883</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPEP</td>
<td>0.463</td>
<td>0.494</td>
<td>0.802</td>
<td>0.867</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: COMP = Competitiveness, FINP = Financial Performance, MAKP = Marketing Performance, OPEP = Operational Performance, SMUC = Social Media Usage/Customers, SMUM = Social Media Usage/Marketing and Sales, SMUS = Social Media Usage/Suppliers, and SMUT = Social Media Usage/Competitors. * Bold values are the loads for each variable.
The internal consistency was examined in accordance with Chin’s recommendation. The composite reliability (CR) measures were extracted for each construct. The results indicated that all the CR measures were greater than the 0.7 threshold. Therefore, the internal consistency was met.

Common-Method Bias (CMB) “is a phenomenon that is caused by the measurement method used in an SEM study, and not by the network of causes and effects in the model being studied” [125]. A high CMB may lead to incorrect conclusions and be a source of measurement error [121]. Different methods can be used to assess the CMB. For instance, Harman’s single-factor test assesses if a single common factor accounts for the majority of variance across all factors. In addition, the constructs’ correlation matrix can provide an indication of the CMB if any constructs correlate at an exceptionally high level. Kock [125] argues that the full collinearity test is an effective alternative to identify the CMB. According to Kock, the full collinearity test is a comprehensive procedure that simultaneously assesses both vertical and lateral collinearity and can be checked by referring to inner variance inflation factors (VIF) for all the latent variables in the model. As shown in Table 5, VIF values greater than 3.3 indicate that the model may be disturbed by a CMB. In this study, all the VIF values were less than 3.3, which satisfies Kock’s proposed criteria for identifying CMB.

### Table 5. Inner VIF Values.

<table>
<thead>
<tr>
<th></th>
<th>COMP</th>
<th>FINP</th>
<th>MAKP</th>
<th>OPEP</th>
<th>SMUT</th>
<th>SMUC</th>
<th>SMUE</th>
<th>SMUM</th>
<th>SMUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP</td>
<td>1.471</td>
<td>1.471</td>
<td>1.471</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMU</td>
<td>1.471</td>
<td>1.471</td>
<td>1.471</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Notes: COMP = Competitiveness, FINP = Financial Performance, MAKP = Marketing Performance, OPEP = Operational Performance, SMUC = Social Media Usage/Customer, SMUE = Social Media Usage/Environment, SMUM = Social Media Usage/Marketing and Sales, SMUS = Social Media Usage/Suppliers, and SMUT = Social Media Usage/Competitors. * Bold values are the constructed correlation between each variable and itself, it should be the highest value in any column/row.
Usage/Environment, SMUM = Social Media Usage/Marketing and Sales, SMUS = Social Media Usage/Suppliers, and SMUT = Social Media Usage/Competitors.

The results suggest that the proposed measurement model demonstrates sufficient and acceptable convergent and discriminant validity, internal consistency, and the absence of CMB that is necessary to justify the testing of the proposed hypotheses.

4.3. The Structural Model

The results of the structural model with interaction effects are represented in Table 6 and Figure 2. The predictive power of the model for each endogenous variable is represented by the $R^2$ (R squared) and $f^2$ (f squared) values. The $R^2$ values explain the variance in the dependent variable elucidated by the independent variable. The $f^2$ value is the amount of change in $R^2$ when the independent variable is removed from the model. As shown in Table 6, the model explains 25.3% of the variance in financial performance, 58.2% of the variance in marketing performance, and 59.2% of the variance in operational performance. According to Bagozzi et al.’s [121] guidelines, $f^2$ values of 0.02, 0.15, and 0.35 represent small, medium, and large effect sizes. Thus, the $f^2$ value of 0.235 for social media usage’s effect on financial performance indicated a medium effect size. The $f^2$ values of 0.803 and 0.925 for social media usage’s effects on marketing performance and operational performance indicated large effect sizes.

Table 6. Summary of $R^2$ and $f^2$ results.

<table>
<thead>
<tr>
<th>Relationship</th>
<th>$R^2$</th>
<th>$f^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Performance</td>
<td>25.3%</td>
<td>23.5%</td>
</tr>
<tr>
<td>Marketing Performance</td>
<td>58.2%</td>
<td>80.3%</td>
</tr>
<tr>
<td>Operational Performance</td>
<td>59.2%</td>
<td>92.5%</td>
</tr>
</tbody>
</table>

To compute the t-statistics and obtain the significance levels for each hypothesis, bootstrapping was performed. The results confirmed that three of the hypothesized relationships were significant. Social media usage had a positive influence ($\beta = 0.489; p < 0.001$) on financial performance, operational performance ($\beta = 0.741; p < 0.001$), and marketing performance ($\beta = 0.680; p < 0.001$).

For the moderating (interacting) variable, a statistically significant beta path coefficient was indicated. Competitiveness (competitive pressure) had a negative ($\beta = -0.080; p < 0.05$) interacting effect with social media usage with respect to marketing performance. On the other hand, competitiveness (competitive pressure) had an insignificantly negative interacting effect with social media with respect to financial performance ($\beta = -0.068; p > 0.05$) and operational performance ($\beta = -0.015; p > 0.05$).
This study aimed to investigate the impact of SMPs’ usage on SME restaurants’ performance. Two research questions were raised to elucidate the relationship between the variables in detail. The first research question aimed at examining the impact of SMPs’ usage on restaurants’ financial, operational, and marketing performances. Whereas the second question aimed at examining the moderating effect of competition intensity on the relationship between SMPs’ usage and SME restaurants’ financial, operational, and marketing performance. Thus, we proposed and empirically tested a model through a survey on SMPs’ usage for five different purposes.

To answer the research questions, six hypotheses were developed. The study confirmed three proposed hypotheses and rejected three. In more detail, the first hypothesis indicates that SMPs’ usage has a positive impact on financial performance. The findings revealed that SMPs have a significant positive impact on restaurants’ financial performance, which agrees with prior studies by Ferrer et al. [59] who found that organizational financial performance is positively influenced by social media networks, Wong [4] who confirmed a positive effect of Facebook adoption on sales performance, Rodrigues et al. [3] who discovered in their study that SMPs positively influence sales performance, Ainin et al. [33] whose study revealed that Facebook usage has a strong positive impact on financial performance, and Parveen et al. [14] who confirmed that SMP usage had a strong positive impact on organizations’ performance in terms of cost reduction. The findings also confirmed the second hypothesis that proposed a significant positive impact of SMPs on operational performance. The number of prior studies that investigated the impact of SMPs on operational performance is scarce. Nevertheless, the findings of this study support Needles and Thompson’s [45] study that reported a significant influence of SMPs’ usage on restaurants’ operations. For the third hypothesis, the findings confirmed a positive impact of SMPs’ usage on marketing performance, which is consistent and in agreement with previous studies by Ferrer et al. [59]; Chung et al. [80]; Hanaysha [21]; Lucas and Sines [102]; Lima, Mainardes, and Cavalcanti [30]; and Fernández-Miguélez et al. [38].
These findings support the first three research hypotheses and answer the first research question.

Finally, the other three hypotheses were proposed to examine the moderating impact of competition intensity on the relationship between SMPs’ usage and SME restaurants’ operational, financial, and marketing performances, and therefore to answer the second research question. Surprisingly, the results revealed that competition intensity does not moderate the relationship between SMPs’ usage and restaurants’ financial and operational performances. A significant negative effect of SMPs’ usage upon marketing performance was found, which can be inferred as a phenomenon wherein social media usage has become a necessity and restaurants do not feel pressured to use social media tools due to the level of competition. The contributions of this approach can be addressed from both theoretical and practical perspectives, as follows.

5.1. Theoretical Contributions

We argue that this study contributes to the existing SMPs’ usage literature through a number of important theoretical insights. This study is considered as one of the first studies that sheds light on SMPs’ usage for different and various purposes, while many of the previously published studies have focused on using social media for marketing purposes [10,22–26]. In addition, the proposed model examined the impact of SMPs’ usage on three different types of performances (operational, financial, and marketing). Prior studies stated that limited attention has been paid to organizational performance when studying the impact of social media usage [6,14,26,28–32]. Furthermore, the sample was drawn from small and medium-sized restaurants since the number of such studies in the context of SMEs is scarce [14,15,25,33,34].

The first research question extends prior research on SMPs’ usage by including a comprehensive and holistic perspective that measures SMPs’ usage based on the various tasks for which the platforms are used. For instance, this study included tasks related to customers, suppliers, competitors, the environment, marketing, and sales. This study enriches and adds to the literature by examining the impact of using such innovations on organization’s operational, financial, and marketing performances.

In line with the second research question, few studies have considered the impact of moderating variables on the relationship between SMPs’ usage and organizational performance [28,40,42,43]. Therefore, the moderating impact of competition intensity was examined. Although the results revealed that competition intensity had a negative interacting effect with SMPs with respect to performance, it can be inferred that during uncertainties and ambiguous situations, such as pandemics, organizations might be motivated to use innovations and IT technologies due to different reasons rather than the level of competition intensity in the industry.

5.2. Practical Contributions

The findings of this study offer substantial insights into restaurants that use social media in Jordan as well as the potential users. The study highlights the positive impact SMPs might have on restaurants’ performance. Moreover, the study may attract SME restaurants’ managers’ attention with respect to the crucial role of SMPs in monitoring and collecting information regarding customers, competitors, suppliers, and the environment. Thus, restaurants’ managers and/or owners may plan to fully harness the benefits of such tools instead of solely focusing on the marketing benefits.

Managers and owners can use the findings of this study to powerfully and strategically employ social media through understanding and considering the impact of SMPs’ usage while formulating their strategies and plans. SME restaurants’ managers and owners should not underestimate the number and type of services and benefits they can obtain from utilizing such valuable and low-cost technologies.
The identification of SMP usages, types, and their impact on performance contributes to a better understanding of the restaurant context in developing economies. This identification and their impacts on performance provide richer information for restaurant managers with respect to different SMP types, usages, and their expected outcomes under different situations and/or for different expected performances. Managers can use the outcomes of this study to match their SMP usage strategy and desired performance outcomes. The study findings provide crucial information for restaurant managers regarding ways to combine the use of different SMPs and direct them to specific performance outcomes. Additionally, data on restaurants’ SMP usage can help with identifying areas of strength and weakness, and therefore areas for improvement and benchmarking.

5.3. Limitations and Future Research

Social media usage varies between countries due to cultural differences. This study focused on one country, Jordan. Therefore, future studies should apply the proposed model in different countries to help improve the generalization of the results. The study investigated the impact of SMPs’ usage on restaurants’ performances regardless of any differences between the studied restaurants in terms of the age of the restaurant, the type of the restaurant, and its location. It is recommended to conduct a study that considers such differences between restaurants. In the proposed model, SMPs’ usage was assessed through tasks related to customers, suppliers, competitors, the environment, and marketing and sales. The main objective of this study was not concerned with assessing the strengths and weaknesses of using SMPs by small and medium-sized restaurants. However, future research can use the proposed model as a basis for conducting such an analysis and can further provide an insight into SMEs in the food industry.

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Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The collected data used to support the findings of this study are available from the second author upon request. Dr. Saleh Al Omar: saleh.alomar@yu.edu.jo.

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Conflicts of Interest: The authors declare that they have no conflicts of interest.

References


77. Varella-Neira, C.; Dwivedi, Y.K.; Camoiras-Rodriguez, Z. Social media marketing system: Conceptualization, scale development and validation. Internet Res. 2022, ahead of print.


