Social Commerce Among Micro and Small Medium Enterprises Before and During the COVID19: A Systematic Literature Review

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Abstract: Social commerce (SC) is a relatively new tool that businesses are using to conduct business using social media (SM). The findings of prior literature are inconclusive. This paper reviews the literature to identify the current status and to identify the determinant of SC. A systematic literature review was conducted. A total of 41 articles were reviewed. A comparison between before and during COVID19 was conducted. The findings showed the number of studies has not increased during COVID-19. The technology acceptance model (TAM) and Technology-Organization-Environment (TOE) are used widely in the literature. The most important factors identified in this study are divided into before COVID19 and during COVID19. Perceived usefulness and perceived ease of use were important in both periods. New variables that were considered important during COVID19 is the organizational readiness, trust, security, and E-word of mouth (EWOM). More research is needed to understand the factors that contribute to SC adoption in different nations. Variables such as trust, environmental uncertainty, and perceived value can be included in future work. Developing a digital ecosystem for SC is a direction for future work. Understanding the important factors can contribute to the advancement of SC.

1 Introduction

Reports from the World Bank showed that there is a high pressure on Micro, Small and Medium Enterprises (MSME) to create jobs and enhance their performance to meet the increasing need for employment and economic growth [1]. However, the recent outbreak of COVID-19 has affected businesses regardless of their size or nationalities [2 , 3]. To meet this challenge and survive in this environment, MSME have to deploy technology to enhance their business performance. Using social media (SM) such as Facebook, Twitter, Instagram, and YouTube as platforms for business has become a must [4, 5, 6] and SMEs are under growing pressure to employ technologies to gain its competitive advantage [7].

An emergent type of SM is social commerce (SC), which is a combination between SM and e-commerce. SC is referred to as a subset of e-commerce and relation based online business [8]. SC is being increasingly used by businesses to improve their performance by enabling buying and selling using the SM as well as marketing products and services. However, limited studies have been conducted on the key predictors of the adoption of SC [9]. The importance of SC has evolved since the early 2000s when researchers predicted that the future generations of online businesses would be driven by communities in attracting new customers [10]. In line with this prediction, businesses are changing and adopting business models that fit SC. Furthermore, the importance of SC is further increased after the outbreak of COVID-19 which has affected the business massively and in particular small businesses [11], [12]. SC seen as beneficial for both customers and companies [13]. Companies can benefit from SC by creating a new business model that is based on the interaction between companies and customers and allowing them to buy and pay using SM. Companies can enhance their ties and relationship with their business partners and identify better business opportunities. SC also enables the business to monetize SM by applying a two-way strategy that includes helping customers to connect and these people will lead each other to buy or recommend products and services [14].

The SC is still a relatively new topic and there is a shortage of studies that have examined the predictors of companies using these tools to market their products and services [15]. Prior literature has mixed findings in terms of the predictors of using the SC by an enterprise. Studies found that cost of usage is a negative predictor [16, 17, 18]

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while others look into the ease of usage [19, 20] as well as the relative advantage of using this tool [21]. Studies in the literature have focused on the individual usage of SC while enterprise usage has received less attention [22, 23, 24, 25]. In line with the individual prediction of using SC, prior literature deployed the technology acceptance model (TAM) by [26] and the unified theory of acceptance and use of technology (UTAUT) by [27]. These models predict individual usage. Therefore, to understand the status of the literature, this study aims to review the prior studies to develop an understanding of the trend in SC and to identify the most important variables that can lead to the usage of SC by enterprises. The remaining of this paper presents the methodology, findings, discussion and implication, and conclusion.

2 Research Methodology

This study conducts a systematic literature review (SLR). SLR examines the most recent literature in more detail. SLR organizes, selects, and assesses prior research to respond to a question [28]. The technique or strategy is established before SLR. SLR is a method that does transparent database searches in an ordered manner. This procedure may be repeated by other researchers. This method of in-depth research aids academics in resolving a problem [29]. Others may replicate the research, verify the results, or investigate the generalizability since the SLR includes information on the review methodology (such as the keywords used and the article selection) [30].

SLR assists in selecting and refining the most relevant content [31]. Additionally, it directs researchers in 1) determining relevant research questions, inclusion and exclusion criteria for systematic reviews, and 2) browsing through a large database of scientific literature at a time [32]. Therefore, this SLR aims to answer two main questions namely, 1) what are the current trend in using SC, 2) what are the most important factors for using SC before and during COVID19?

2.1 Keywords and Data Source

In conducting this type of study, research must specify the keywords as well as the databases along with the time period. The keywords that have been chosen in this study are (("social commerce" or "s-commerce" OR "SC") AND ("enterprises" OR "SMEs" OR "MSME") AND ("factors" OR "predictor*" OR "antecedents"). The database includes IEEE, Scopus, Web of Science (WoS) because they are well known for their reliable and related articles for the topic. In addition, google scholar is included because it has a large number of open access articles. The search resulted in 193 articles. The duplicated articles were removed. This has resulted in 151 articles.

2.2 Inclusion and exclusion criteria

The articles were filtered based on specific inclusion criteria. The first criterion is language. The article must be in English. In addition, to have an update view of the literature, the articles were limited to the last six years between 2016 and 2022. Inclusion and exclusion criteria are shown in Table 1. Appling the inclusion and exclusion criteria, this has resulted in reducing the number of articles to 54.

Table 1: Inclusion and Exclusion Criteria

Criteria	Inclusion	Exclusion
Language	English	Non-English
Timeline	2016 – 2022	<2016
Focus	Technological adoption and usage	Technical

2.3 Eligibility and Exclusion Criteria

To determine the eligible articles, a screening of the 54 articles was conducted. The screening was conducted based on title and abstract and this resulted in the removing 13 articles. The reviewed articles in this study include 41 articles as shown in Figure 1. The figure presents the process of selecting the related articles for this study.
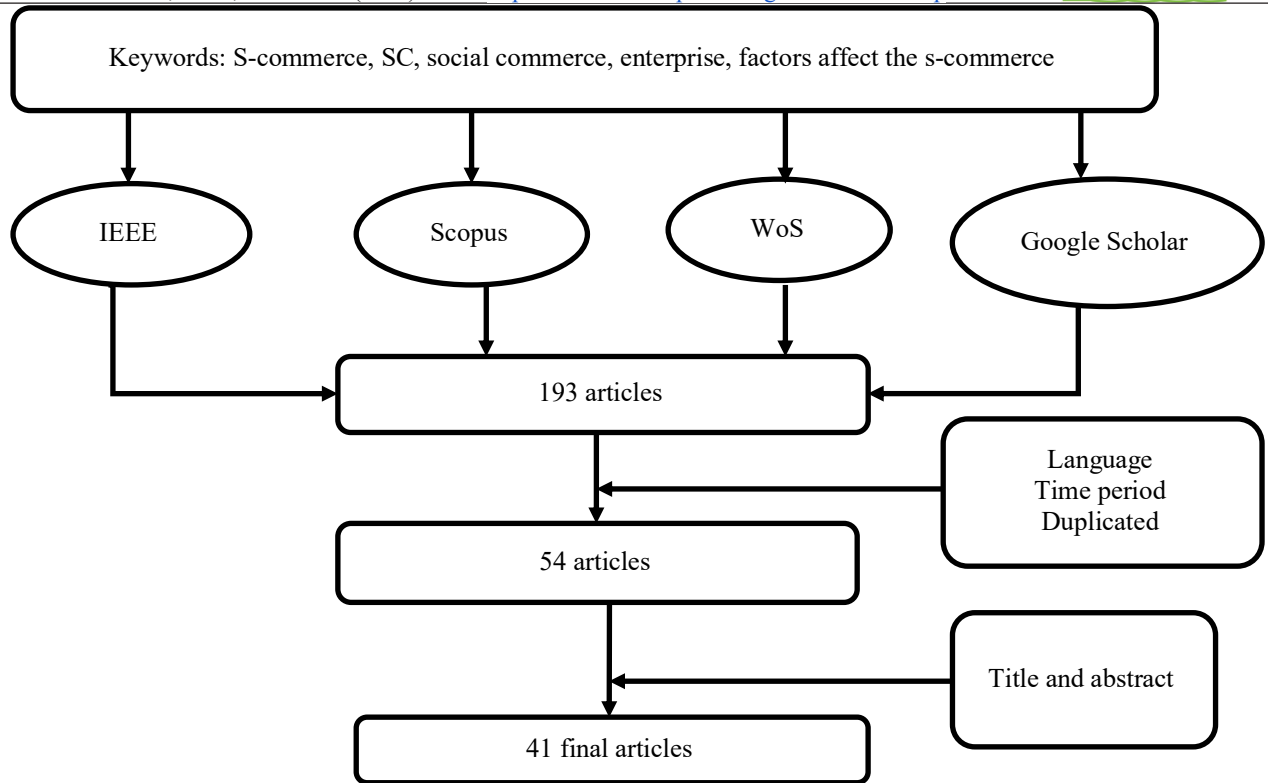
Fig. 1: Process of Selecting Articles

3. Findings

The first objective is to present the current trend of research in SC. The findings are presented in the following sub-sections by presenting the profile of the reviewed articles to understand the trend in the literature. The findings include the year of publication, countries, continents, studies' approach, and data analysis tools as well as important factors.

3.1. Year of Publication

The papers distributed based on the year of publication are shown in Figure 2. It can be seen that articles have been increasing since 2016. However, despite the shift toward SC increased in 2020, the number of articles is still limited in 2021 and 2022. This could be due to the fact that in 2021, the academia was affected by the outbreak of COVID19, and articles focused on the issue related to COVID19. In 2022, the low number of articles might be due to the time where the review conducted until September. This finding implies that there is still need for more articles in SC.
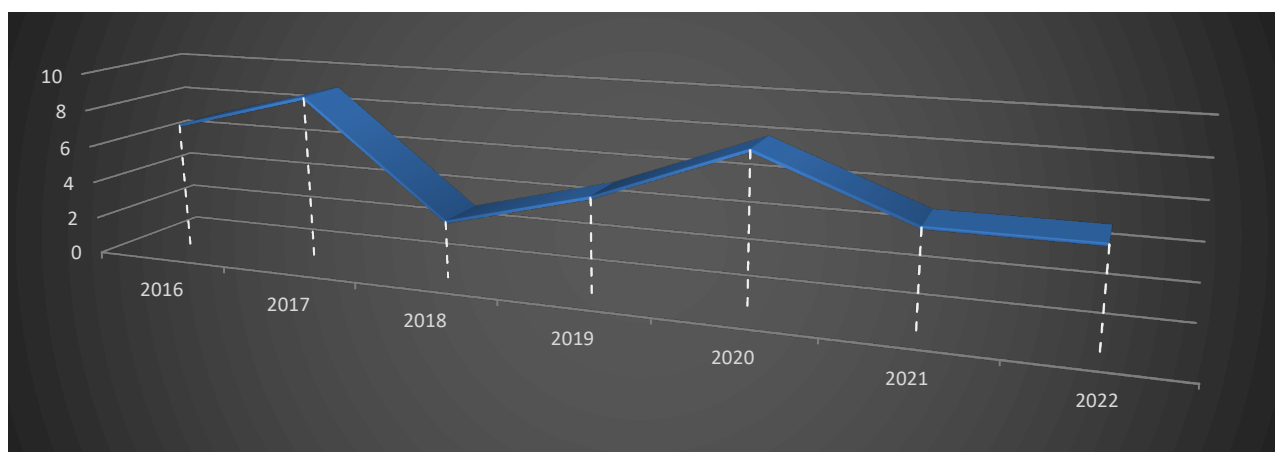
Fig. 2: Year of Publications

3.2. Countries and Economic Classification

Figure 3 shows the distribution of articles based on countries and economic classification. The articles are divided between developed and developing countries. The number of articles in developing countries account for 24 (58.6%) and in developed countries accounted for 11 (26.8%). Studies with no specified countries account for 6 or 14.6%. These studies were either a review of the literature or conceptual studies. It can be understood that studies in developing countries are increasing. However, it can be seen that emerging economies such as Malaysia, Saudi Arabia, Indonesia, India, and UAE were represented in the prior literature while other developing countries has received less attention.
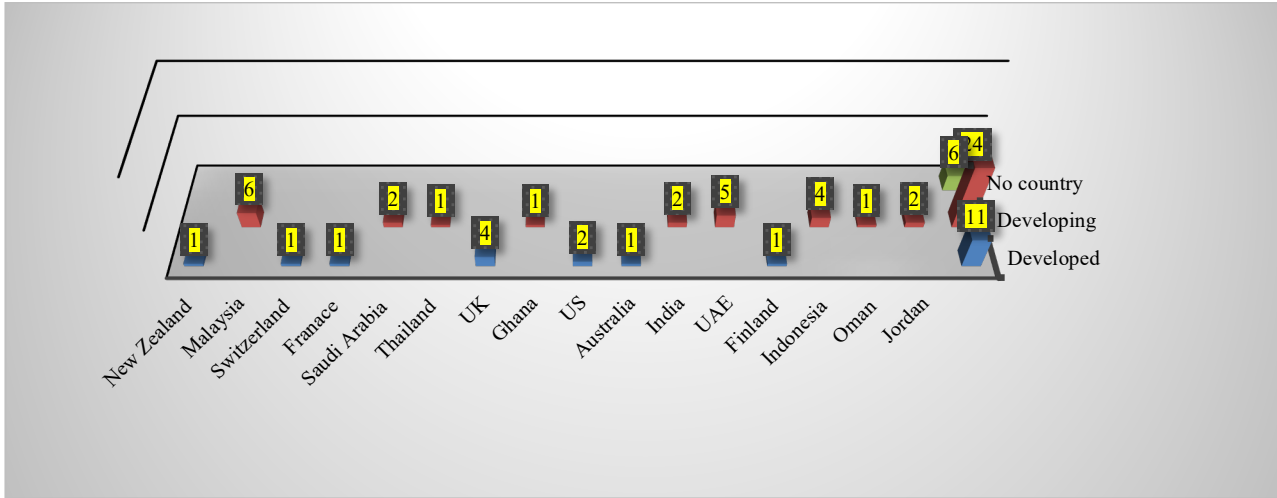

Fig. 3: Distribution of studies based on countries

3.3. Theoretical Framework

Various theoretical frameworks were deployed in the reviewed studies. Among the widely used frameworks is the TAM with 18% of the studies that have deployed this model. This is followed by TOE with 18% and UTAUT with 10%. Combined theories of TAM, TOE, UTAUT, TPB, and others accounted for 13% while studies that did not deploy theories accounted for 26%. In total, it can be seen that single theories were used by 61% while combined theories were used by 13%. Figure 4 shows the theoretical framework of reviewed studies. The literature is still focusing on a single theory such as TAM, TOE, UTAUT while other theories such as IS success, DOI, and cultural value received less attention. The literature also lacks combining more than one theory. In addition, 26% of studies did not deploy theories which refer to the notion that the literature into SC is still emerging with exploratory approach are in quarter of the studies.
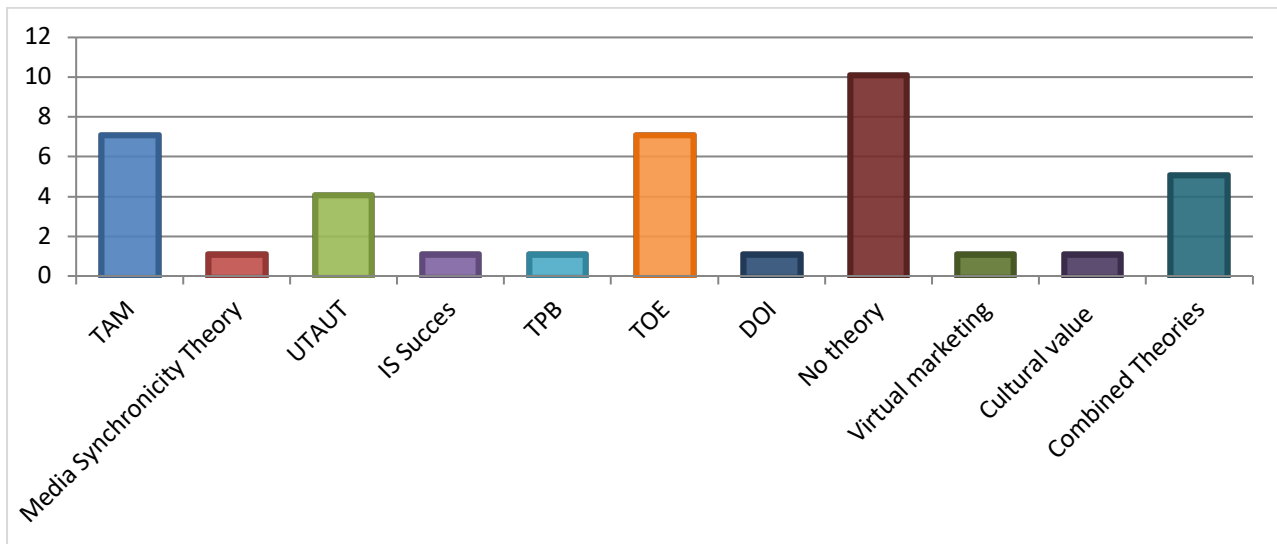

Fig. 4: Theoretical Framework

3.4. Methodological Approach

There are four ways to split the examined research. The first is quantitative and accounted for 65% of the articles. This is followed by qualitative with 14% and conceptual with 14%. The review studies accounted for 7%. Those quantitative studies have deployed several analytical techniques. Figure 5 presents the methodological approach of the studies that have been reviewed. It can be seen that qualitative approach is minimal, and more importantly, the mixed methods by including quantitative and qualitative approach are limited in the reviewed studied.
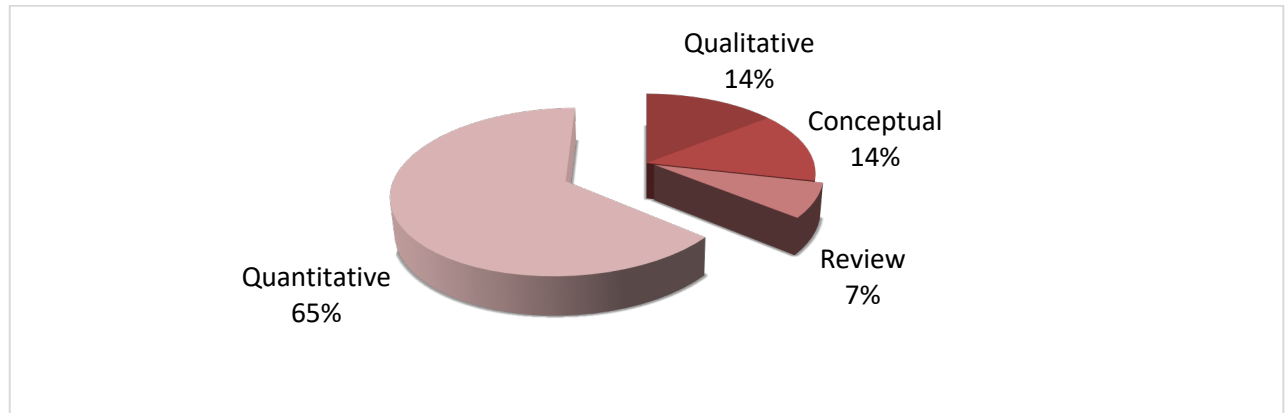
Fig. 5: Methodological Approach

3.5. Sample size

Figure 6 displays the study sample sizes for the quantitative research. As can be seen in the graph, the range of possible sample sizes extends from 42 respondents to 6,129 respondents. The means the sample size is 500 respondents. a total of 95% of the articles have a sample size between 42 and 1,742 respondents while only 5% have a sample size between 5,142 to 6,842. Figure 6 shows the sample size. The large mean of sample size indicated that recent studies are more into deploying the structural equation modelling, which requires at least a sample size of 200 response or more [33]. Therefore, studies in SC are recommended to have larger sample size to increase the generalizability of the findings.
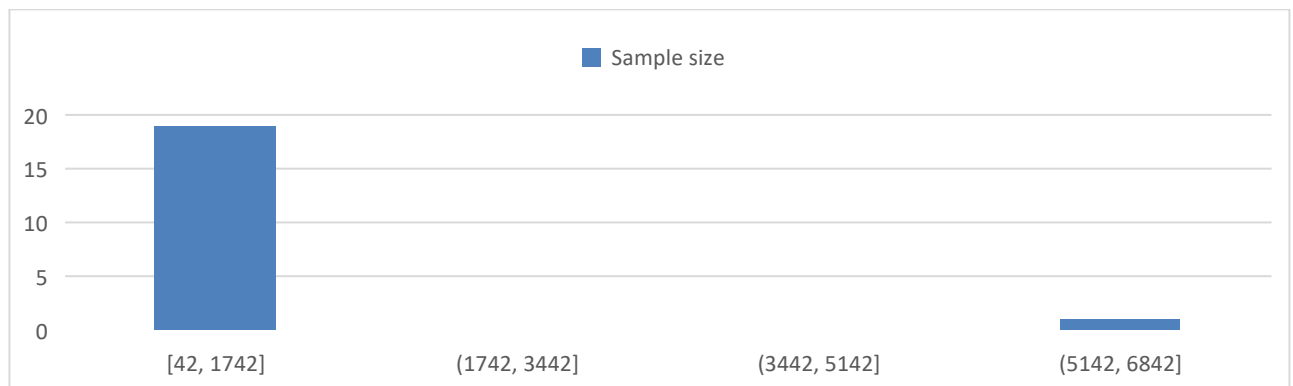
Fig. 6: Sample Size

3.6. Data analytical techniques

Data analytical tools that have been used in prior literature are shown in Figure 7. It can be seen that the largest number of articles (12) deployed the smart partial least square (PLS) followed by an Analysis of moments structure (AMOS). Content analysis was used for qualitative studies while 9 articles did not use software for analysis. These articles are either a review of the literature or conceptual articles. Further, the use of a structural equation model (SEM) which include AMOS and PLS accounted for 48.7% of the reviewed studies while SPSS accounted for 14.6%. The high percentage of AMOS and PLS which is embedded in SEM confirmed the notion that current studies are deploying SEM more frequently compared with the first generation of data analysis technique such as SPSS. This indicates that simple models are not adequate to measure construct such as advancement of SC and there is a need to include mediators and moderators which can be examined using SEM such as AMOS and PLS.
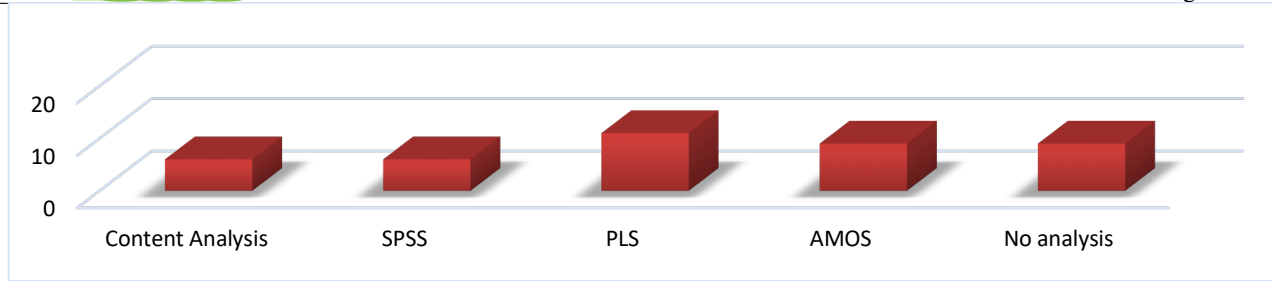
Fig. 7: Analytical tools

3.7. Factors affected the SC Implementation Before COVID 19 (2016-2020)

During the period before COVID 19, several factors were considered as critical for the SC implementation. Table 2 shows the factors.

Table 2: Factors affected SC Implementation Before COVID 19

Author/year	PU/PE/RA/IQ	PEOU/EE/COX/SSQ	EN/PL	AT	SI/SN	PR	SE	SO	FC/COMP	TR	SQ	FA	TMS	CT	IS	CP	CPR	GS
[34]	✓	✓	✓															
[35]	✓	✓				✓												
[36]								✓										
[37]	✓	✓		✓	✓		✓		✓									
[38]				✓			✓											
[39]	✓	✓								✓	✓							
[40]					✓					✓		✓						
[16]	✓	✓							✓			✓	✓	✓	✓	✓	✓	✓
[17]									✓					✓				
[41]	✓	✓							✓				✓				✓	
[42]	✓	✓																
[43]												✓						
[44]	✓	✓							✓				✓			✓	✓	
[45]	✓	✓		✓	✓				✓					✓				
[18]	✓	✓							✓					✓				
[46]	✓	✓			✓				✓									
[47]												✓						
[19]	✓	✓								✓								
[20]	✓											✓						
Total	13	12	1	3	4	1	2	1	8	3	1	5	3	4	1	2	3	1

Note: *AT: Attitude, CO: convenience, COMP: Compatibility, COX: complexity, CP: Customer pressure, CRP: Competitive pressure, CT: Cost, EE: Effort expectancy, EN: enjoyment, FA: Familiarity, FC: facilitating condition, GS: Government support, IQ: information quality, IS: Information sharing, MO: Mood, OR: Organizational readiness, PE: performance expectancy, PEOU: Perceived ease of use, PL: playfulness, PR: perceived risk, PSV: perceived strategic value, PU: Perceived usefulness, SA: Satisfaction, SE: Self-efficacy, SEC: Security, SI: social influence, SN: subjective norms, SO: Strategic orientation, SQ: Service quality, SS: Social support. SSQ: system quality.*

Based on Venkatesh 2003, PU is equal to PE, RA, and IQ. The above analysis showed that 13 studies have examined the effect of PU and found that there is a critical impact on the SC implementation. This is followed by PEOU and FC or COMP. This could be due to the notion that the technology was a new and there is a need to understand the benefits of using the technology (PU) as well as the process of using the technology (PEOU). Further, the compatibility of SC with existing technology and system was critical for such a move. This also why the familiarity with the SC was among the most critical factor followed by cost (CT), and subjective norms/social influence (SN/SI). Therefore, these variables were the most critical for implementing the SC in the early stage of using SC.

These findings regarding the importance of the identified factors were derived from prior literature such as Razak et al. [34], who proposed PU and PEOU as important for the usage of SM. This is also was confirmed in the study of Beier

and Wagner [35] in term of PU but not in terms of PEOU. PEOU however was confirmed in the study of Alraja et al. [20] to affect significantly the use of SM for advertisement. Information quality is equivalent for PU and it is found along with system quality which is equivalent to PEOU, and service quality were critical for the usage of SC [39]. Other factors that have emerged is the self-efficacy (SE) and attitude toward the SC which were examined in the study of Adam et al. [37] who confirmed the importance of PE, EE, SI, FC as well as AT and SE. Similarly, the importance of PE, EE, SI, FC and cost (CT) were also confirmed in the study of Vatanasakdakul et al. [45]. Abdat [46] also along with PE, EE, and SI confirmed the importance of SM marketing by enterprise for using the SC. Again, AT and information sharing (IS) were confirmed in the study of Hajli [40]. Odoom et al. [17] on the other hand, refers to the importance of cost and compatibility.

Multidimensional framework to assess the usage of SC were emerged in 2018 with the study of AlSharji et al [41] who found that the environment, as well as the organizational context, are critical for the usage of SM by SMEs but not the technological context. Similar findings were derived from the study of [44] which found that only organizational and environmental factors affected SM adoption. On the other hand, [48] in UAE found that technological factors (compatibility, observability), organizational factors (top management support), and environmental factors affect SM usage by SMEs. Effendi et al. [47] deployed TOE to examine the usage of SM for marketing purposes. The results demonstrated that the intention to employ SM marketing during COVID 19 was influenced by SM awareness, technological, organisational, and environmental context. In Malaysia, [16] dispatched TOE to investigate the uptake of social customer relationship management (CRM). The results demonstrated that all TOE factors, except for complexity and government support, are relevant.

Using qualitative method, the findings of prior researchers differ slightly from the quantitative method. Mainly, the qualitative studies focused on the reasons why enterprise might use SC. For instance, Wang et al. [49] demonstrated that SM usage is influenced by several factors, with information security and control emerging as key ones. The applications include marketing, creativity, and cooperation. Abed et al [50]'s conclusion is that trust is essential for the adoption of SM. In addition, Hajli et al. [51] indicated that businesses may use SM and online brand communities to improve their branding strategies by utilising relationship marketing and an online co-creation approach. He et al. [52] concluded that factors such as personal traits, SI, current business performance, and business objectives are crucial for SM adoption. They also noted that perceptions of SM such as PEOU, PU, and enjoyment are also important. Ahmad et al. [53] demonstrated that SM aids SMEs in income production, acquiring new clients, maintaining a competitive edge, and increasing consumer clientele, brand recognition, loyalty, and reputation.

Exploratory studies were also conducted in which the variables belong to no specific theory. For example, Dutot & Bergeron [36] concluded SM performance was impacted by strategy orientation, which also influenced SM orientation. The study of Koski et al. [43] investigated the usage of SM in Finland. The results demonstrated that a company's likelihood of adopting SM is increased by its digital orientation, inventiveness, external collaboration in marketing and sales, and orientation towards consumer markets. Larger and younger businesses are also more likely to move quickly.

3.8. Factors affected the SC Implementation During COVID 19 (2020-2022)

During the COVID19, businesses have increased their investment in SC to avoid direct contact with customers and to capture the increasing shift in consumers toward the SM. Factors that affect the implementation of SC differ slightly after during the COVID19. Similarity between factors of PU and PEOU can be seen. However, the importance of trust has increased due to fraud and cybercrimes. In addition, the importance of security as well increased. Additional variables emerged such as organizational readiness. The shift toward SC was not expected by business therefore, enterprise with low readiness did not manage to shift promptly to use the SC. This also raised the issue of cost as important emerging variables in the SC implementation. Since users had adequate time during COVID19, the importance of E-WOM were also confirmed during the period. Additionally, perceived value, and competitors' pressure also were identified as important variables during the COVID19. Table 3 shows the factors that affected the SC implementation during COVID19.

Table 3: Factors affected the SC Implementation during COVID19

Author/year	PU/PE/RA/IQ	PEOU/EE/COX/SSQ	AT	SI/SN	SE	FC/COMP	TR	TMS	CT	IS	CP	CPR	GS	SEC	OR	PV	EWOM	SA	CO	MO	SS
[54]	✓							✓			✓	✓		✓	✓						
[55]					✓		✓			✓											
[21]	✓	✓			✓	✓		✓	✓		✓	✓	✓								
[56]	✓	✓				✓			✓			✓	✓	✓	✓						
[57]																✓					

Author/year	PU/PE/RA/IQ	PEOU/EE/COX/SSQ	AT	SI/SN	SE	FC/COMP	TR	TMS	CT	IS	CP	CPR	GS	SEC	OR	PV	EWOM	SA	CO	MO	SS
[15]																✓	✓				
[58]	✓	✓	✓	✓			✓		✓						✓			✓			
[59]	✓	✓					✓										✓	✓			
[59]	✓																				
[60]																			✓	✓	✓
Total	6	4	1	2	1	2	3	2	3	1	2	3	2	2	3	2	2	2	1	1	1

As mentioned previous, the trust was emerged as important variables along with PU and PEOU as well as the satisfaction of customers as shown in the study of Hassan and Shahzad [59]. The importance of E-WOM and perceived value were shown in the study of Al-Omoush et al. [15]. Customers have access to SC, and they can easily compare the value and cost with other service providers. More often the researchers combined theories to better explain the SC implementation. As a result of combing TAM and TOE, Trawnih et al. [21] examined the use SM. The study combined TAM and TOE. The study found that the combination concluded that technological and organizational factors affected the variables of TAM (PEOU and PU) which in turn also mediated the effect of the technological and organizational factors on SM adoption. Abed, [54] referred to the increasing importance of security and organizational readiness as well as the pressure of competitors. Jalaludin et al. [58] was also in agreement with Abed who also noted the importance of readiness, attitude, and satisfaction to effectively implement SC. Due to the anxiety during COVID19, new variables such as mood which have positive and negative mood as well as social support and convenience were emerged as important variables for SC during COVID19 as shown in the study of Bazi et al. [60].

Nevertheless, due to the differences between customers and cultures, mixed findings were obtained in several studies. SM usage has no effect on the performance of enterprises. Setiyani & Rostiani [56] in Indonesia found similar results regarding the insignificant role of technological factors in the use of e-commerce by SMEs. Alzaabi & Omar [57] in UAE examined the effect of only the organizational factors and concluded that the organizational factors and perceived strategic value affected the e-commerce adoption. Perceived strategic value mediated the effect of organizational factors on e-commerce.

4 Discussion and Direction for Future Work

The findings of this paper showed that the number of articles is still limited. Especially during COVID-19, the number of articles increased in 2020 and reduced in 2021. This could be due to the fact that the articles related to SC are still relatively limited and this is in line with the findings of other researchers who referred to the scarcity of the study of SC [9]. In terms of countries, the number of articles in developing countries has increased and outperformed the developed countries. These findings contradict the finding of prior literature which noted the lack of studies in developing countries [61]. Nevertheless, based on countries' analysis, a large portion of the studies focused on Malaysia, the UAE, and Indonesia while other countries received less attention. Further, these countries can be classified as emerging economies, which might explain the conclusion of prior literature regarding the lack of studies in developing countries. In addition, the shift toward SC by enterprises is increasing because it enables sellers to reach large number of users regardless of the status of the country, whether developed or developing.

For the theoretical framework, the finding of this study agrees with the findings of prior literature in terms of the dominance of the TAM model. However, as a new finding, the TOE is also receiving more attention in terms of SC usage. A notable finding is a lack of combining theories in the literature on SC where only a small portion has combined more than one theory to explain the variation in SC usage. The findings of the study also showed that quantitative studies have accounted for the majority of the reviewed studies with a sample size large enough to meet the assumption of SEM (above 200 responses) [62, 63, 64]. This might be due to the fact that the trend in the literature is to use SEM because it can enable testing complex models [64]. It is learned that TAM is not capable to explain large percentage of the variation in using SC. In addition, the use of explanatory or interaction variables is limited in the reviewed studies. Thus, to extend the findings of previous studies, future studies need to focus on including mediators and moderators.

The important factors were examined and divided into two time periods. Important factors before COVID 19 included the PU, PEOU, compatibility, familiarity, cost, and social influence while the COVID19 has left some important variables such as PU and PEOU but additional variables were emerged and these include the organizational readiness, trust, security, and EWOM as well as the competitor's pressure. These factors have been frequently examined in the literature [16, 21, 41, 44, 56]. Based on these studies, the variables can be divided into technological factors which can include complexity, relative advantage, and compatibility [21, 41, 44] while organizational factors include top

management support, organizational readiness, and cost as well as familiarity with SC [21, 56]. Environmental factors include external pressure (customers, competitors, and business partners) and government support [16, 41, 44].

This study has contributed to the literature because most of the prior reviews were limited. For instance, Yadav [65] reviewed the benefits and challenges of adopting SM by businesses. The findings showed that the main benefits of SM are to increase the brand reputation, brand exposure, and better management of online presence. [66] also reviewed the literature and concluded that there are numerous benefits of SM such as business expansion and promotions as well as marketing, advertisement, and customer relationship management. Kumar et al. [67] also found as a result of reviewing the literature that there are benefits for marketing and business performance by using SM businesses.

In terms of the identified variables, this study is in line with the study of Erwin et al. [68] who reviewed the literature and found that TAM and UTAUT are widely used in the SC literature. Variables of TAM as well as trust and facilitating conditions and information quality are the most important variables that affect the use behavior of SM by SMEs. Similarly, [69] reviewed the literature on SMEs adoption of technology and found that SM is beneficial for SMEs. The study also again found that variables of TAM and UTAUT such as PEOU and PU as well as facilitating conditions are critical for the adoption. In a meta-analysis study, the findings referred to the importance of trust as well as social presence, informational support, and emotional support as the important variable for the BI of using SM among companies [55].

As a way forward, this study will examine the effectiveness of these variables in explaining SC usage by MSMEs in the context of developing countries such as Kuwait. This study suggests for future research to examine SC usage among SMEs, individuals, and large enterprises. This is because the studies of SC are still limited. More studies are needed in developing countries because this study found that articles focused on Malaysia, the UAE, and Indonesia while other countries such as Middle Eastern countries, African countries, and Latin American countries have fewer studies.

Further studies are recommended to examine SC usage using several adoption theories such as combining TAM with TOE and social exchange theory or TOE, UTAUT, and ISS. DOI as a theory has been used by a limited number of studies. Therefore, this theory (DOI) along with TOE and ISS can be combined to explain further the variation in SC usage.

The use of several theories will result in a complex model. Further studies are recommended to use the SEM as a data analytical tool due to its capabilities in testing complex models. Important mediators that have been identified in this study include SC information seeking, PEOU, PU, perceived strategic value, E-WOM, perceived value, and SM use while only user experience was examined as a moderator. Further studies are recommended to examine the moderating role of perceived value, trust, and environmental uncertainty. These variables might help in explaining the variation in SC usage.

5 Conclusion

This study was conducted to review the literature related to SC practices. The findings of the review indicated that the number of studies decreased particularly during the second year of COVID-19. The studies in specific developing countries are increasing. However, in the context of this study, developed countries are fewer than developing countries in terms of the number of articles. TAM is still used by many studies, while TOE is also receiving more attention. The SEM is increasingly being used in literature with a sample size sufficiently enough to meet the rule of thumb to use the SEM. The most important variables are PU and PEOU before and during COVID19. Newley emerged variables include the organizational readiness, trust, security, and EWOM. The findings are based on the inclusion criteria which specified the time and the keyword. It is also limited to the database where the articles have been extracted. Using different inclusion criteria and databases might lead to different results. This study can help decision-makers in determining the essential factors for using the SC. Understanding these factors might help in increasing the use of SC by enterprises. Having adequate knowledge of the prior literature helps future studies to expand the findings and contribute to our understanding of the SC practices among MSMEs so that informed decision regarding the practices of SC by these entities can be made.

6 Recommendations

The research recommends additional research to be conducted to understand the status of the MSMEs and their contribution to the economic growth and employment in other countries. The research recommended more studies to empirically examine the predictors of the MSMEs usage of SC and how this usage of SC can lead to better performance of MSMEs.

Acknowledgment

Conflicts of Interest

The authors declare that there is no conflict regarding the publication of this paper.

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