EXPLORING ENTREPRENEURIAL INNOVATION OF E-COMMERCE AND ITS EFFECT ON SME'S PERFORMANCE

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ABSTRACT

The purpose of this study is to examine how Covid-19 pandemic has impacted SMEs adoption of e-commerce and its effect on performance. SMEs relied on e-commerce to continue their business activities. The paper aims to analyze the performance of entrepreneurs in small and medium enterprises after implementing e-commerce in their business during COVID-19. The study used a quantitative method to survey 119 entrepreneurs. Results show that companies with employees more than 250, did not agree that they faced challenges/difficulties whereas SMEs with size '1-50' and '51-250' agreed that they faced the inability to convert its traditional business to e-commerce, pay rent and pay salaries to their employees. The paper presents important findings on the TAM model and SMEs performance of E-commerce during the Covid-19. The study builds on existing TAM literature by testing the model in relation to SMEs e-commerce performance during the pandemic which has not been examined.

Keywords: E-commerce, SMEs, Performance, Tam, Entrepreneurship, Covid-19, Innovation.

INTRODUCTION

This study examines entrepreneurs' e-commerce adoption and its impact on small and medium sized enterprises (SME's) during the novel Coronavirus pandemic. In Kuwait small businesses are those identified to employ 1-50 employees; while medium sized businesses are those identified to employ 51-150 employees. The boom of the SME generation was initiated in 2013 with the establishment of the national fund for SME development that motivated youth entrepreneurs to implement their ideas. However, most SMEs also faced some challenges like bureaucratic and time-consuming government policies and regulations, while other start-up owners were inexperienced in how to manage a business.

The Coronavirus pandemic has pushed the country towards an e-transformation phase of development across all sectors of the economy in an unprecedented time. This has been specifically witnessed in small and medium sized businesses that have implemented an e-commerce model and were able to take the lead of the rapid shift of consumer buying behavior driven by strict government quarantine regulations to slow the spread of Covid-19, unlike other SME's that have not previously implemented an e-commerce model. As no research has yet examined the effect of quarantine on user's e-commerce activity in a pandemic situation, this study employs the TAM and aims at exploring user's e-commerce adoption and shopping behavior during the Coronavirus pandemic in Kuwait.

Entrepreneurs adapt to the e-commerce feature to run the business efficiently in the COVID-19 pandemic. E-commerce is the way of selling, buying, exchanging, or transferring services or products, or/and information's online (Osmonbekov et al., 2002). E-commerce provides various benefits for a business such as increasing sales; cost reduction, increasing productivity, reducing time process, increasing customer loyalty, and expanded market reach

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(Gomber et al., 2018). E-commerce adoption helps many business organisations mainly SME (Small to Medium-sized) businesses (Purnamasari et al., 2020) by enabling technology to reduce costs. This study analyses the effects of Covid on entrepreneurial decision-making and the ability of SMEs transformation to e-commerce platforms and its impacts on their performance. This study contributes to the entrepreneurial decision making of SMEs and its effect on performance in the pandemic outbreak of COVID-19 through examining the following objectives:

- Level of SME's performance in relation to company size.
- Online activity preference in relation to small business owners and employee at the company
- Examine SME's online marketing strategy during Covid-19.
- SME Perceived benefits (advantages of e-commerce implementation).
- SME Perceived barriers (difficulties of e-commerce implementation).
- SMEs online activities in relation to a company's main activity (selling products/services).

LITERATURE REVIEW

Entrepreneurs Decision Making Amidst the Covid Pandemic

Entrepreneurial passion and enthusiasm are a unique feeling that are normally triggered by risk taking entrepreneurs and facilitated by technology (Obschonka et al., 2019; Shan et al., 2020; Sharahiley, 2020). During the pandemic entrepreneurs are making decisions remotely, and the knowledge that is required in the decision-making process was collected with the help of technology. A person that is experiencing entrepreneurial passion owns extraordinary and optimistic feelings with a clear inspiring desire to implement novel ideas and strategic decision, this was specifically evident during the pandemic (Karimi, 2020; Saif & Ghania, 2020; Sadiku-Dushi & Ramadani, 2020; Vlacic et al., 2019).

Small businesses faced difficult challenges during the COVID-19 pandemic and the world economy was highly affected by the sudden volatility. Entrepreneurs worked to protect their businesses from unexpected challenges where the operating cost of business was cut (Morrish & Jones, 2020; Jahanshahi et al., 2020). Business operations that relied on the help of technology implementation were key to solving such difficulties (Raju & Phung, 2018). During the pandemic, small and medium sized enterprises were taking innovative decisions using the latest communication technology trends (mobile phones, multimedia, computers, video conferences, social media, etc.) to sell their products online. Entrepreneurs realized it was impossible to sell during the pandemic without e-commerce platforms (Morrish & Jones, 2020) realizing it was a precondition to organizational survival during the pandemic (Burton & Bartlett, 2020; McCall, 2020; Alqahtani & Uslay, 2020). Artificial Intelligence (AI) has facilitated operations that also helped entrepreneurs in decision making, as it helped them work remotely from their own homes (Brown & Rocha, 2020; Omar et al., 2020; Mary George et al., 2016). AI-based technologies played an important role in knowledge-based entrepreneurship to achieve and gain a competitive advantage during the pandemic (Obschonka & Audretsch, 2019; Yigitcanlar et al., 2020; Polas et al., 2019).

Entrepreneurial Decisions and Opportunities Recognition

The Identification stage of any opportunity for an entrepreneur is referred to as entrepreneurial decisions and opportunities recognition (Ploum et al., 2018). This stage helps entrepreneurs in realizing the strategic development and potential of a new business opportunity.

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An important relationship exists between entrepreneurial decisions and opportunity recognition (Yigitcanlar et al., 2020; Nur et al., 2020; Cardon & Kirk, 2015). This is evident when entrepreneurs began to recognize selling new or updated products and services based on e-commerce platforms is a vital step for small businesses during Covid (Chalmers et al., 2021; Brown & Rocha, 2020).

Entrepreneurial Decisions and Opportunity Development

The next step of the entrepreneur's decision-making process is the planning and development process for goods and services that were identified by the entrepreneur in the opportunity recognition stage (Brockman, 2014; Paul & Chowdhury, 2020; Johanson & Vahlne, 2006; Buheji & Ahmed, 2020). According to the resource-based theory, to increase competitive supremacy, organizations' have highly relied on technologies (Lockett et al., 2008; Nur et al., 2020; Davidsson et al., 2017; Jahanshahi et al., 2020) which was the case during Covid where it became a necessity to switch to e-commerce platforms. Therefore, restrictions of the pandemic all over the world increased this resource-based theory's significance where the firms' resources are monitored by the entrepreneurs remotely (Donthu & Gustafsson, 2020; Hortoványi et al., 2006). Knowledge-based organizations build the expertise with the help of technology to improve innovative thinking and creativity (Hmieleski & Baron, 2009; Chalmers et al., 2021; Chandler et al., 2005; Brown et al., 2020).

E-commerce Innovation During the Pandemic

Selling and buying services and goods on the Internet is e-commerce. E-commerce involves a large variety of systems, data, and online sellers' and buyers' tools that involves encryption of online payment and mobile shopping (Wigand, 1997). The businesses that are planning to change or currently changing to e-commerce platforms need to implement innovation and adoption to succeed. The 'stay-at-home' economy growth that involves social media platforms, and e-commerce has increased on various platforms during the pandemic. During the pandemic new technologies were used for last-mile deliveries and logistics by e-commerce firms. Automated technologies like drones, robots, and cars were employed by some of the e-commerce giants like JD, Amazon, and Alibaba to supply contactless delivery to customers safely (Lin, 2020). E-commerce has expanded to fulfill customer needs like telemedicine and online education.

Some challenges were evident during the pandemic, all countries are facing enormous issues, such as imports and exports of products between countries are hampered and delayed. Online business sales increased due to the sudden rise of the pandemic (Abiad et al., 2020). As the numbers of major cities are in lockdowns, self-isolated, maintaining social distance practice, the activities of users using the online applications and e-commerce sites encounter a huge rise in usage. Thus, customer demand has greatly influenced and pressured e-commerce business activities worldwide. The customers are dependent on e-commerce to attain their own needs for survival as there is a lack of availability of services and products in the nearby stores and outlets (MoEngage, 2020). The restrictions of the pandemic impacted the performance of the business and led them to move their businesses to e-commerce platforms. Keeping that in mind external influences also existed for SMEs like the environmental factors such as suppliers' delivery delays', customers' order pressure, and competitors' pressure.

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In addition to other challenges, such as high prices on products, shipping difficulties with border closures, and fraudulent activities were a major concern for companies (Cantú et al., 2020). The sudden increase in online purchase denoted that the protections of the consumers are one of the primary challenges. Dishonest practices and fraudulent reports were increasing (Cabral & Xu, 2021). Three primary challenges faced SMEs on e-commerce platforms during the COVID-19: First, is the availability of product, second, is the transportations and logistic disruptions, and third is the protection of consumers. First, global supply chains were dependent often by e-commerce, and dislocations were caused often by staggering lockdowns. Secondly, e-commerce is disrupted by the services available to support customer's after-sale requirements, shipment, and distribution. A variety of latest services and products was introduced by the e-commerce firms during the pandemic. Therefore, the following hypothesis is examined:

SMEs E-commerce Performance

Recent studies indicate innovativeness contributes positively to SME performance (Shahzad et al., 2020). Four key innovation dimension SME's practice have been evident to trigger performance and adoption, they are product innovation, process innovation, marketing innovation, and organizational innovation, highlighting the importance of building an innovative mindset to prosper (Singh et al., 2020).

Both online market costs and revenue boosted by online shopping: Revenues were increased for Alibaba (27%), Shopify (74%), Mercado Libre (50%), and Amazon (34%), during the first half of the year 2020. During the pandemic, Amazon employed 175000 employees due to the additional business, and 4 billion dollars were spent on protective equipment involves thermal cars and testing labs and 2 dollar per hour bonuses for the employees. 62% of new stores were created by Shopify from March 13 to April 24 as the number of retailers using online shopping was increased compared to the previous six weeks.

E-commerce emerges from the COVID-19 pandemic in strong position: After the announcement of the lockdown, e-commerce companies' stock prices increased in several markets worldwide. A permanent shift to online shopping was evident by consumers online shopping behavior, particularly in necessary categories such as pharmaceuticals, and specifically the groceries, that previously had poor online transactions. As previous studies claim that research on SME activity and performance is porous and lagging attention. There's a limited amount of research in how information and communication technology have impacted SME's calling for further research on this field (Shahzad et al., 2020). Therefore, this study explores SME's e-commerce activity and its impact on performance considering the novel Coronavirus through exploring the following objectives:

Objective 1: Company size has a positive effect on SME e-commerce performance where the bigger the company the greater the performance.

Objective 2: Company size is positively influenced by SME e-commerce implementation benefits where the greater the company the greater the benefits of e-commerce adoption.

Objective 3: Company size is negatively influenced by SME e-commerce implementation barriers (difficulties) where the smaller the company the greater the barriers of e-commerce adoption.

Objective 4: Marketing strategy has a positive effect on SME e-commerce performance where the greater the variety of marketing strategy the greater the SME performance.

Objective 5: Performance is affected by the main activity of the company whether selling the products or services.

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Objective 6: Average Perception of Performance exist between those who 'Have small businesses' and 'Employees at the company'.

Objective 7: Average frequencies of online activities are not different between those who are having small Businesses and 'Employees at the company'

Objective 8: Average frequencies of online activities are not different between those who are selling products and services.

Theoretical Grounding

This research employs the technology acceptance model (TAM) (Davis, 1985) to examine user's adoption of e-commerce and its impact on SME performance considering the COVID-19 pandemic. The TAM is a prevalent model in the field of technology adoption that has been recurrently used to examine the adoption and use of several new and developing technologies. The model examines the relationship of users' perceived benefits and perceived barriers when using e-commerce and perceived usefulness (PU) and perceived ease of use (PEOU). Perceived Usefulness and Perceived Ease of Use are important predictors that affects a user's decision to adopt or reject a technology (Davis, 1985; 1989). Perceived Ease of Use is how easy and effortless a system is for a person to use, while Perceived Usefulness is the degree of usefulness a person feels when using a certain system (Davis, 1985).

Research Methodology

This study examines the performance of entrepreneurship and SMEs adoption of e-commerce during the pandemic. The survey questions concerning the COVID-19 effects on SMEs in Kuwait were included and validated for this study to compare the distinct layouts. Literature-based reflective constructs measured this model's focus constructs and Likert scale systems were used to develop and simplify the measurements. This scale consists of five degrees: strongly disagree (1), disagree (2), not sure (3), agree (4), strongly agree (5). The 14 item questionnaires for the respondents' demographic profile in this study meets the robust instruments' minimum needs (Hair et al., 2014).

Data Collection and Sampling

Stratified random sampling was used to collect the needed data. Entrepreneurs at small and medium sized firms in Kuwait was taken as sample population. The questionnaires are provided electronically or directly through mail or by friends due to the pandemic restrictions of COVID-19. 202 of the 259 distributed questionnaires were responded. 96 questionnaires were incomplete, and the results were based on 116 questionnaires samples with 57% response rate. Two sections that the questionnaires were partitioned. The demographic profile of the respondents was covered in section I. Items used for variables measurement was covered in section II.

The control variables' data was collected in Section I: entrepreneur's gender, age, academic qualifications, job type. The independent variables were measured in Section II: funding sources of the businesses, employee's strength in the company, main activity of the company, company products' marketing strategies, online services the company offers. These measurements use a Likert five-point scale (1 - strongly disagree, 2 - disagree, 3 - not sure, 4 - agree, 5 - strongly agree).

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Data Analysis and Discussion

In terms of testing SMEs performance during Covid in relation to the company's size, where size is tested according to the number of employees, it has been evident with 95 % level of confidence it can be inferred that average performance of companies is considerably differing across the size categories of it, because P-Value (Sig. = 0.005) < 0.05 (significance level 5%), as shown in Table 1.

This difference is not significant when the two categories of company sizes (51-250) and (1-50) are compared, because Sig. (0.938) is above 0.05. This tells us that average performance between '1-50' and '51-250' is somewhat similar but when it comes to 'more than 250' it differs, as evident on Table 1. This finding indicates that small and medium sized companies faced the similar performance challenges during Covid.

In addition, from Table 2 we can say that the average opinion Regarding the performance is same for small and medium sized companies having size '1 to 50' and '51-250'. Their generalized opinion is below average performance. However, most the of firms having more than 250 employees have expressed their opinion regarding performance during the pandemic to be average performance. This showed that small and medium sized companies had fewer capabilities and faced harder situations during the pandemic.

Objective 1: Company size has a positive effect on SME e-commerce performance where the bigger the company the greater the performance.

Table 1
COMPANY PERFORMANCE BASED ON COMPANY SIZE

ANOVA

How do you rate the company's performance considering the current coronavirus?

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	18.833	2	9.416	5.583	.005
Within Groups	199.035	118	1.687		
Total	217.868	120			

From the above table with a 95% level of confidence, it is proved that the average performance of companies is considerably different across the size categories of it. Because P-Value (Sig. = 0.005) < 0.05 (significance level 5%).

Table 2
SME PERFORMANCE COMPARISON DURING COVID-19 BASED ON NUMBER OF EMPLOYEES

Multiple Comparisons

Dependent Variable: How do you rate the company's performance considering the current coronavirus

(I) About how many employees work at the company	(J) About how many employees work at the company	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1 – 50	51 – 250	.151	.337	.895	-.65	.95
	more than 250	1.151*	.345	.003	.33	1.97
51 – 250	1 – 50	-.151	.337	.895	-.95	.65
	more than 250	1.000	.439	.063	-.04	2.04
more than 250	1 – 50	-1.151*	.345	.003	-1.97	-.33
	51 – 250	-1.000	.439	.063	-2.04	.04

*. The mean difference is significant at the 0.05 level.

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Company Benefited During Covid Based On Company Size

In relation to testing the advantages that the company benefited from during the coronavirus, where average agreement level across company benefits do not differ significantly across different company sizes. From the above it can be said with 95 % level of Confidence that the average level of agreement is not differing across the company size for the following benefits of e-commerce implementation during the coronavirus.

- Increase online sales.
- Forcing the customer to use websites and shop online.
- Increase the culture of website use.
- Increase user awareness of the benefits of e-shopping.
- Increase user awareness with ease of using e-shopping.

Therefore, for all the identified advantages with regards to its aggregate agreement level across the various company sizes is accepted. Findings indicate that regardless of size all companies faced similar situations in terms of advantages.

Objective 2: Company size is positively influenced by SME e-commerce implementation benefits where the greater the company the greater the benefits of e-commerce adoption.

Table 3
SME ADVANTAGES IN ADOPTING E-COMMERCE

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
What are the advantages that the company benefited from during the coronavirus (Increase online sales)	Between Groups	1.733	2	.867	.365	.695
	Within Groups	280.317	118	2.376		
	Total	282.050	120			
What are the advantages that the company benefited from during the coronavirus (Forcing the customer to use websites and shop online)	Between Groups	5.157	2	2.578	1.201	.304
	Within Groups	253.273	118	2.146		
	Total	258.430	120			
What are the advantages that the company benefited from during the coronavirus (Increase the culture of website use)	Between Groups	1.632	2	.816	.414	.662
	Within Groups	232.434	118	1.970		
	Total	234.066	120			
What are the advantages that the company benefited from during the coronavirus (Increase user awareness of the benefits of e-shopping)	Between Groups	5.124	2	2.562	1.493	.229
	Within Groups	202.413	118	1.715		
	Total	207.537	120			
What are the advantages that the company benefited from during the coronavirus (Increase user awareness with ease of using e-shopping)	Between Groups	3.524	2	1.762	1.069	.347
	Within Groups	194.542	118	1.649		
	Total	198.066	120			

From the above table, it can be said with a 95% level of confidence that the average level of agreement is not different across the company size for the mentioned benefits of e-commerce implementation during the coronavirus (Table 3).

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Company Barriers During Covid Based on Company Size

Regarding testing the barriers in terms of difficulties the company had faced during the pandemic, indicative of SME e-commerce barriers (difficulties) differ significantly across different company sizes. It has been evident as per the company's size; the average agreement level is not differing for the following challenges, during the coronavirus pandemic.

- Pressure and delay in order delivery
- The company's loss of sales due to quarantine

With 95% level of confidence, it can be claimed that the general opinion regarding the above two challenges/ difficulties during the coronavirus pandemic do not noticeably differing as per the company size. Because their Sig. Values are above 0.05 (5% significance level). Therefore, SME e-commerce barriers (difficulties) differ significantly across different company sizes is rejected in relation to the companies (pressure and delay in order delivery, and loss of sales due to quarantine). That means there is no significant difference across company sizes in terms of the barriers faced by the companies in relation to the above two factors during quarantine. Findings show that all companies faced the above-mentioned difficulties during the pandemic regardless of size as evident on Table 4

Objective 3: Company size is negatively influenced by SME e-commerce implementation barriers (difficulties) where the smaller the company the greater the barriers of e-commerce adoption.

Table 4
SME BARRIERS IN ADOPTING E-COMMERCE DURING COVID

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
What problems or difficulties did the company face during the Coronavirus (The company's loss of sales due to quarantine)	Between Groups	3.854	2	1.927	1.686	.190
	Within Groups	134.889	118	1.143		
	Total	138.744	120			
What problems or difficulties did the company face during the Coronavirus (The company's inability to convert its traditional business to e-commerce)	Between Groups	13.917	2	6.958	3.681	.028
	Within Groups	223.042	118	1.890		
	Total	236.959	120			
What problems or difficulties did the company face during the Coronavirus (The company's inability to pay the salaries of employees)	Between Groups	25.551	2	12.775	8.906	.000
	Within Groups	169.259	118	1.434		
	Total	194.810	120			
What problems or difficulties did the company face during the Coronavirus (The company's inability to pay rent)	Between Groups	16.714	2	8.357	5.534	.005
	Within Groups	178.211	118	1.510		
	Total	194.926	120			
What problems or difficulties did the company face during	Between Groups	2.099	2	1.050	.644	.527
	Within Groups	192.231	118	1.629		

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the Coronavirus (Pressure and delay in order delivery)	Total	194.331	120			

As per the company's size, the average agreement level is not different for the following challenges, during the coronavirus pandemic.

- Pressure and delay in order delivery
- The company's loss of sales due to quarantine

With a 95% level of confidence, it can be claimed that the general opinion regarding the above two challenges/difficulties during the coronavirus pandemic do not noticeably differs as per the company size because of their Sig. values are above 0.05 (5% significance level).
However, at the same time average agreement level for the following challenges (the company's inability to convert its traditional business to e-commerce; the company's inability to pay rent; and the company's inability to pay the salaries of employees) can be different across the three categories of company sizes.

Therefore, the average agreement level for the following challenges can be different across the three categories of company size.

- The company's inability to convert its traditional business to e-commerce.
- The company's inability to pay rent.
- The company's inability to pay the salaries of employees.

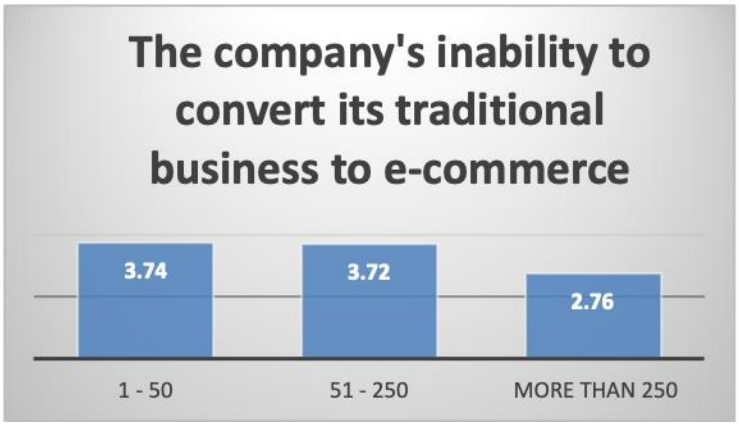

FIGURE 1
THE COMPANY'S INABILITY TO CONVERT ITS TRADITIONAL BUSINESS TO E-COMMERCE

Findings indicate small businesses (1-50) had the most difficulty in converting their traditional business to e-commerce platforms (3.74); medium sized business (51-250) were ranked second in terms of ability to convert to e-commerce platforms (3.72), findings are very close for small and medium sized businesses, this could be due to limited finances and capabilities. While large businesses (more than 250) faced the least difficulty in switching to e-commerce platforms as shown in Figure 1.

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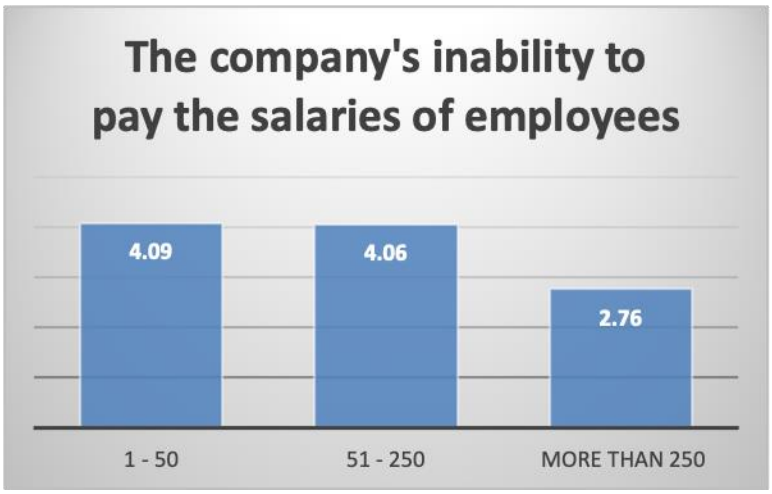

FIGURE 2
THE COMPANY'S INABILITY TO PAY THE SALARIES OF EMPLOYEES

Findings indicate small businesses (1-50) had the most difficulty in paying the salaries of employees during Covid (4.09); while medium sized business (51-250) were ranked second in terms of their ability to pay the salaries of employees (4.06), findings are also very close for small and medium sized businesses, this could be due to also to the limitation of finances and capabilities. While large businesses (more than 250) faced the least difficulty in paying the salaries of employees during Covid as shown in Figure 2.

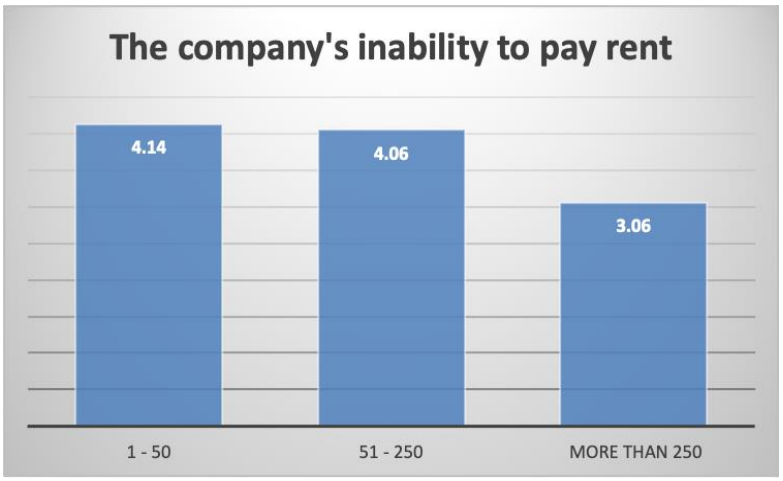

FIGURE 3
THE COMPANY'S INABILITY TO PAY RENT

From the above Figure 3 it is evident that large companies where number of employees are (more than 250) are the more able to pay their rent. While, in comparison to small companies (1-50) faced the greatest inability to pay their rent (4.14) and medium sized companies (51-60) faced the second greatest inability to pay their rent (4.06).

In summary, all three Figures 1, 2 and 3 indicate that most difficulties have been faced by SMEs while large businesses differed greatly and did not face such circumstance and get affected

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by the pandemic as much as SMEs in converting their traditional business to e-commerce, paying their rent, and paying salaries to their employees as evident in Table 5.
From the above charts, it is evident that companies with numbers of employees more than 250, in general, they are not agreeing with the mentioned challenges/difficulties whereas companies with size '1-50' and '51-250' were mostly agreed that they faced the inability to convert its traditional business to e-commerce, pay rent and pay salaries to their employees.

The statistical output for the same is given in the tables below where sig. values above 0.05 are not indicating a difference in the agreement level.

Table 5
BARRIERS FACED BY SME IN IMPLEMENTING E-COMMERCE

Multiple Comparisons

Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
What problems or difficulties did the company face during the Coronavirus (The company's inability to convert its traditional business to e-commerce)	1 - 50	51 – 250	.022	.356	.998	-.82	.87
		More than 250	.979*	.365	.022	.11	1.85
	51 - 250	1 – 50	-.022	.356	.998	-.87	.82
		More than 250	.958	.465	.103	-.15	2.06
	More than 250	1 - 50	-.979*	.365	.022	-1.85	-.11
		51 - 250	-.958	.465	.103	-2.06	.15
What problems or difficulties did the company face during the Coronavirus (The company's inability to pay the salaries of employees)	1 - 50	51 - 250	.037	.310	.992	-.70	.77
		More than 250	1.328*	.318	.000	.57	2.08
	51 - 250	1 - 50	-.037	.310	.992	-.77	.70
		More than 250	1.291*	.405	.005	.33	2.25
	More than 250	1 - 50	-1.328*	.318	.000	-2.08	-.57
		51 - 250	-1.291*	.405	.005	-2.25	-.33
What problems or difficulties did the company face during the Coronavirus (The company's inability to pay rent)	1 - 50	51 - 250	.084	.319	.962	-.67	.84
		More than 250	1.081*	.326	.003	.31	1.85
	51 - 250	1 - 50	-.084	.319	.962	-.84	.67
		More than 250	.997*	.416	.047	.01	1.98
	More than 250	1 - 50	-1.081*	.326	.003	-1.85	-.31
		51 - 250	-.997*	.416	.047	-1.98	-.01

*. The mean difference is significant at the 0.05 level.

Company's Performance in Relation to Marketing Mode

In relation to testing the kind of marketing a company has used to market its products and services to customers indicative in different marketing modes:

- In a shop
- Using a website

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- Using an application
- On social media sites
- Other (please specify)

Objective 4: Marketing strategy has a positive effect on SME e-commerce performance where the greater the variety of marketing strategy the greater the SME performance.
Therefore, finding indicate that average performance does not affect the marketing mode used by the company, whether the company markets its products on a website, or application, or on social media sites.

Table 6
COMPANY'S PERFORMANCE IN RELATION TO MARKETING MODE

ANOVA					
How do you rate the company's performance considering different marketing modes?					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.036	4	1.509	.916	.460
Within Groups	103.773	63	1.647		
Total	109.809	67			

From the above Table 6, it can be said with a 95% level of confidence that the average performance is not significantly different across the following modes of marketing the product.

Company's Main Business Activity in Relation to Performance

Two main business activities are tested whether a company's main activity is selling products or services in relation to its performance during Covid, where:

Objective 5: Performance is affected by the main activity of the company whether selling the products or services.

Results indicate that average performance score is almost same between those companies selling products (3.90) and those which are selling services (4.03). Therefore, there is no significant difference for a company that is selling products to another one that is selling services when it comes to performance as evident in Table 7.

Table 7
COMPANY PERFORMANCE BASED ON MAIN BUSINESS ACTIVITY (SELLING PRODUCTS/ SERVICES)

Group Statistics					
	What is the main activity of your company	**N**	**Mean**	**Std. Deviation**	**Std. Error Mean**
How do you rate the company's performance in light of the current coronavirus	Sell products	51	3.90	1.345	.188
	Sell services	65	4.03	1.334	.165

From the above table, it is proven that the average performance score is almost the same between those companies selling products (3.90) and those are selling services (4.03). Therefore, there is no significant difference for a company that is selling products to another one that is selling services when it comes to performance as evident in Table 7.

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As Table 8 indicates 95% level of confidence, it can be inferred that Companies' average performance is not differing as per the business activities they are performing in terms of selling products or selling services during the pandemic. Therefore, performance is not significantly affected by the main business activity of the company.

Table 8
COMPANY PERFORMANCE OF SELLING PRODUCTS AND SERVICES BASED ON VARIANCE

		t-test for Equality of Means		
		t	**df**	**Sig. (2-tailed)**
How do you rate the company's performance considering the current coronavirus	Equal variances assumed	-.514	114	.608
	Equal variances not assumed	-.514	107.111	.609

From the above table with a 95% level of confidence, it is evident that companies' average performance is not different based on the business activities they are doing.

Perception of Performance Depending on Status (Business owners/ Company employees)

This section examines the perception of performance between small business owners and employees at the companies.

Objective 6: Average Perception of Performance exist between those who 'Have small businesses' and 'Employees at the company'.

It has been evident in that business owners perceived the average performance of their businesses as higher than employees in the company, as evident in Tables 9, 10.

Table 9
PERFORMANCE OF SMALL COMPANY DURING PANDEMIC SITUATION

Group Statistics

		N	**Mean**	**Std. Deviation**	**Std. Error Mean**
How do you rate the company's performance considering the current coronavirus	I have a small business	96	4.17	1.262	.129
	I am employee at a company	25	3.20	1.414	.283

From the above Table 9, it was identified a noticeable difference in the average performance score between the two types of business categories.

Company's E-commerce Activity in Relation to Individual Status

This section displays the results of the relationship between a company's e-commerce activities (online message, online marketing, online ordering, online payment, and online tracking) and the individual status (small business owner, employee at the company). In relation to testing e-commerce activity with individual status, where individuals are either small business owners or company employees.

Objective 7: Average frequencies of online activities are not different between those who are having small Businesses and 'Employees at the company'.

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It has been evident that the relationship of a company's e-commerce activities to individual status where communication preferences is compared between small busines owner and employee preferences in Average frequency of E-commerce activity differs significantly between small business owners and company employees is accepted for *"online messaging"*. When it comes to 'Online messaging', employees at the company always prefer that, whereas the owners of small business do not always use online to message their customers.

Therefore, average frequency of E-commerce activity differs significantly between small business owners and company employees is accepted, for the first variable (online messaging) and rejected for the remaining variables, as evident in Table 10 sig. values are all above 0.05 except first one (online messaging). Which is a clear indication of acceptance ('online messaging').

Table 10
COMPARISON BETWEEN INDIVIDUAL EMPLOYEE AND SMALL BUSINESS ENTREPRENEUR

Group Statistics

	I am:	N	Mean	Std. Deviation	Std. Error Mean
What online services does the company use with its customers (Online messaging)	I have a small business	96	3.74	1.438	.147
	I'm an employee at a company	25	4.32	.988	.198
What online services does the company use with its customers (Online marketing)	I have a small business	96	3.67	1.477	.151
	I'm an employee at a company	25	4.00	1.000	.200
What online services does the company use with its customers (Online ordering)	I have a small business	96	3.34	1.548	.158
	I'm an employee at a company	25	3.60	1.384	.277
What online services does the company use with its customers (Online payment)	I have a small business	96	3.16	1.517	.155
	I'm an employee at a company	25	3.72	1.542	.308
What online services does the company use with its customers (Online tracking)	I have a small business	96	2.70	1.597	.163
	I'm an employee at a company	25	2.96	1.670	.334

When it comes to 'online messaging', companies having employees always prefer that. While most of the small companies do not always use the online platform to message their customers.

Company's E-commerce Activity in Relation to Main Business Activity

This section displays the results of the relationship between a company's e-commerce activities (online message, online marketing, online ordering, online payment, and online tracking) and the main business activity of the company (selling products, or selling services), indicative in average frequency of online activities are not differing between those who are selling products and services.

Results indicate there is no major difference in a company's e-commerce activities when it comes to selling products or services. Here, the frequency of usage of online platform for

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various (mentioned) business activities is not differing noticeably between the two types of business activities. The statistical output of reveals the same as P-values (sign values) are all above 0.05. So, with 95 % level of confidence. Therefore, Average frequency of online activities are not differing between those who are selling products and services is accepted, that is indicates there is not much frequency difference in the usage of online platform (for listed purposes) between those who are selling product/ services, as shown in Table 11.

Objective 8: Average frequencies of online activities are not different between those who are selling products and services.

Table 11
COMPANIES E-COMMERCE ACTIVITY IN RELATION TO MAIN BUSINESS ACTIVITY

Group Statistics

	What is the main activity of your company	N	Mean	Std. Deviation	Std. Error Mean
What online services does the company use with its customers (Online messaging)	Sell products	51	3.90	1.375	.193
	Sell services	65	3.80	1.416	.176
What online services does the company use with its customers (Online marketing)	Sell products	51	3.82	1.438	.201
	Sell services	65	3.65	1.408	.175
What online services does the company use with its customers (Online ordering)	Sell products	51	3.47	1.604	.225
	Sell services	65	3.35	1.462	.181
What online services does the company use with its customers (Online payment)	Sell products	51	3.24	1.531	.214
	Sell services	65	3.34	1.554	.193
What online services does the company use with its customers (Online tracking)	Sell products	51	2.78	1.641	.230
	Sell services	65	2.77	1.589	.197

Here, the frequency of usage of the online platform for various (mentioned) business activities is not differing noticeably between the two types of business activities.

The statistical output reveals the same as P-values (sign values) are all above 0.05. Hence, with a 95% level of confidence, it was evident that there is not much frequency difference in the usage of online platforms (for listed purposes) between those who are selling products/services.

CONCLUSION

The purpose of this research was to examine how the Covid-19 pandemic has impacted SME's adoption of e-commerce and its effect on performance. A unique data collection of 119 questionnaires from SME business in Kuwait country was used. Likert scale was used to measure the performance of those businesses in the COVID-19 pandemic. Eight objectives were proposed in this study and identified that the average performance of companies is considerably different across the size of the company and not different across the marketing modes of company. The average agreement level is not different for SMEs benefits during the pandemic. However, in terms of barriers results indicate that most difficulties have been faced by SMEs while large businesses differed greatly and did not face such circumstance and get affected by

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the pandemic as much as SMEs. The major challenges that SMEs faced during the pandemic were converting their traditional business to e-commerce, paying their rent, and paying salaries to their employees. Results show that companies with numbers of employees more than 250, did not agree that they faced challenges/difficulties whereas SMEs with size '1-50' and '51-250' agreed that they faced the inability to convert its traditional business to e-commerce, pay rent and pay salaries to their employees. The performance of a company is the same between the companies those are selling products and services and the same between those having employees at company and small business.

In a day-to-day life of an individual, technology plays an essential and crucial part. Technology also helps entrepreneurs in making marketing decisions remotely during the COVID-19 pandemic. Entrepreneurs should use technological advancements in designing strategic plans and visions for the process development in the business. This study investigates the entrepreneurship and e-commerce performance of SME businesses in Kuwait country. A sample of 119 questionnaires was used in this study and used the Likert scale measurements to record the answers to the survey questions. The respondents were provided questionnaires online and the demographic profile and the independent variables such as business funding source, employee's strength and primary activity in a company, marketing strategies of the company and the services they provide online were involved in the questionnaires. The study involved eight objectives. As a result, the study found that the i) company size has a positive effect on SME e-commerce performance where the bigger the company the greater the performance. ii) Company size is positively influenced by SME e-commerce implementation benefits where the greater the company the greater the benefits of e-commerce adoption. iii) Company size is negatively influenced by SME e-commerce implementation barriers (difficulties) where the smaller the company the greater the barriers of e-commerce adoption. iv) Marketing strategy has a positive effect on SME e-commerce performance where the greater the variety of marketing strategy the greater the SME performance. v) Performance is affected by the main activity of the company whether selling the products or services. vi) Average Performance difference is not there between those who are having small Businesses and 'Employees at the company'. vii) Average frequencies of online activities are not different between those who are having small Businesses and 'Employees at the company' and those who are selling products or services.

Implications

The study presents important theoretical and managerial implications that will build on existing literature involving Covid-19 and assist decision makers and small businesses to meet the rapidly changing user requirements in crisis situations. Anticipated research outcomes offer important facts and figures about user technology adoption trends during crisis situations.

Theoretical Implications

The study tests and present important empirical findings on the TAM model and SMEs performance of E-commerce during the Covid-19 pandemic. In addition, the study displays theoretical implications to build on existing TAM literature by testing the model in relation to SMEs e-commerce performance during the Coronavirus pandemic which has not been examined.

Managerial Implications

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The study offers practical recommendation to assist SMEs and decision makers on how to adapt their companies and change their business models to meet the fast-passed requirements of the changing environment in a crisis as the one we are currently witnessing. In addition, the study highlights key points of strengths that SMEs and key weaknesses to solve and avoid. The study will present users adoption rate of e-commerce and key benefits and barriers that can assist businesses and decision makers in rearranging priorities and restructuring their business models to meet users changes in shopping behavior.

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