Survival strategies: Lessons Learned from Saudi Arabian firms during COVID-19 Pandemic Crisis

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Abstract

The COVID-19 crisis has been one of the challenges that faced many businesses in the world. leading many firms to make changes in their strategies while other firms switched towards applying new strategies to survive the impact of this crisis. This study attempts to shed light on the survival strategies that were most used to practically rescue firms during the COVID-19 crisis. The study conducted a survey questionnaire that was distributed to Saudi Arabian firms' owners, managers, and employees to explore which strategies have assisted businesses to overcome negative effects of the COVID-19 pandemic crisis. The results of analyzed data showed that e-commerce and online selling was the most used survival strategy, while digital transformation strategy was ranked second, and innovation strategy came third. In the context of Saudi study contributes firms, this to literature comprehending the impact of COVID-19 on Saudi Arabian firms and discovering the most used survival strategies to overcome COVID-19 crisis. This study can assist owners, managers to deal with future crises.

Keywords: COVID-19 Crisis, survival strategies, strategic planning, Saudi Arabia

استراتيجيات البقاء: الدروس المستفادة من الشركات السعودية خلال أزمة جائحة كوفيد-١٩

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ملخص البحث:

تعتبر أزمة فيروس كورونا (COVID-19) أحد التحديات التي واجهت العديد من الشركات في العالم. مما دفع العديد من الشركات إلى إجراء تغييرات في استراتيجياتها بينما تحولت شركات أخرى نحو تطبيق استراتيجيات جديدة التغلب على تأثير هذه الأزمة. تحاول هذه الدراسة تسليط الضوء على استراتيجيات البقاء التي كانت الأكثر استخدامًا لإنقاذ الشركات عمليًا خلال أزمة كوفيد-19. وأجرت الدراسة استبيانًا استقصائيًا تم توزيعه على أصحاب الشركات السعودية ومديريها وموظفيها لاستكشاف الاستراتيجيات التي ساعدت الشركات على التغلب على الآثار السلبية لأزمة جائحة كوفيد-19. وأظهرت نتائج البيانات التي تم تحليلها أن التجارة الإلكترونية والبيع عبر الإنترنت كانت أكثر استراتيجيات البقاء استراتيجية الابتكار في المرتبة الثالثة. في سياق الشركات السعودية، تساهم هذه الدراسة من فهم تأثير كوفيد-19 على الشركات السعودية واكتشاف استراتيجيات البقاء الأكثر استخدامًا للتغلب على أزمة كوفيد-19. يمكن لهذه الدراسة أن تساعد المالكين والمديرين على التعامل مع الأزمات المستقبلية.

Introduction

The COVID-19 pandemic affected the global economy in ways that were unimaginable. In 2020, the spread of COVID-19 worldwide impacted many businesses which led to border closures, restriction on movement of goods, decline of exports and imports and travel restrictions (Barber et al., 2021; Fabeil et al., 2020), disruption of supply chain (Thomas, 2021) and government restrictions on businesses. In fact, those firms depending on international demand and suppliers (Peng and Kathuria, 2021) were most impacted by the COVID -19 crisis. COVID-19 was a sudden threat to global and local economies and has resulted in huge damage to businesses (Akingbade, 2021; Fabeil et al., 2020). Therefore, many governments intervened and provided stimulus package to reduce the impact of COVID-19 on the private sector. For example, the Saudi Arabian government provided a fiscal support package of 61bn USD to minimize the sudden shock caused by the COVID-19 crisis (United Nations-Saudi Arabia, 2020).

On the other hand, some businesses saw this crisis as step towards change and implemented innovative approaches to overcome difficulties throughout the crisis (Fabeil et al., 2020). Particularly, Nucu (2020) points out that the COVID-19 crisis has driven important changes in the performance of SMEs. The pandemic has highlighted the importance of strategic management in times of crisis. Businesses that were able to quickly adapt to the changing environment were able to survive, while others struggled to keep up.

This paper aims to explore the most frequently used survival strategies during and after the crisis. It will discuss the COVID-19 crisis and its impact on businesses' strategies in the context of

Saudi Arabian firms. This study will identify the best practical survival strategies that helped firms to maintain their positions and survive during the crisis. Furthermore, the study may increase the awareness of firms around the globe with the best survival strategies during future crises.

Literature Review

COVID-19 Pandemic Crisis

The Coronavirus (COVID-19) was first declared in December 2019 (Gashi et al., 2021), which affected countries and businesses. COVID-19 was defined as "a highly transmittable and pathogenic viral infection caused by severe acute respiratory syndrome" (Akingbade, 2021). It caused death the death of many people and created challenges to many sectors (Irvan and Karmagatri, 2021) and posed threats not only to human life and health, but also to the global economy (Wu and Kong, 2021). According to the World Bank (2020) the pandemic entered the global economy into deepest recession in eight decades. Many governments issued specific regulations, stimuli, and policies to deal with this crisis. However, despite this, some businesses collapsed (Irvan and Karmagatri, 2021) while others attempted to introduce new ways of doing their business (Mattera et al., 2020). Thus, the impact of COVID-19 was considered as presenting the greatest global challenges to firms, enforcing them to change or to adapt with it.

The Impact of COVID-19 on Firms' Strategies

Firms faced many challenges while adapting to the pandemic, Some of the main challenges included significant economic uncertainty, with many businesses struggling to operate and some of them collapsing (Barber et al., 2021; Akingbade, 2021; Wu &

Kong, 2021), while COVID-19 led to layoffs (Gashi et al., 2021; Namatovu and Larsen, 2021) and reduced hours for many workers. Moreover, the COVID-19 crisis disrupted global supply chains and reduced demand and operations (Akingbade, 2021; Dwivedi et al., 2020), making it difficult for businesses to obtain the materials and products they needed to operate, which reduced sales (Nucu, 2020). As a result, firms shifted to remote work which posed many challenges for businesses, including ensuring that employees had the necessary technology and infrastructure to work from home, and maintaining productivity and communication. However, some firms struggled to adapt to digital solutions and remote work (Namatovu and Larsen, 2021). Regarding health and safety concerns, businesses had to implement new health and safety measures to protect their employees and customers from the virus. This included social distancing measures, increased cleaning, and the use of personal protective equipment. Therefore, businesses looked for digital solutions to survive and some were forced to make serious transformations and use new technology (Dwivedi et al., 2020).

Another impact of COVID-19 was that it shifted consumers' behavior and needs (Ting et al., 2020), so that many consumers now prefer online shopping and contactless payments. Additionally, the crisis forced businesses to adapt their marketing and sales strategies accordingly. For example, COVID -19 was a chance for some firms to lead change (Mattera et al., 2020). However, this situation also made it difficult for businesses to plan for the future and led to uncertainty and anxiety among business owners and employees.

In the Saudi Arabian context, local firms also faced the same challenges. The crisis negatively affected many sectors in

Saudi Arabia, for example, the airlines sector, tourism, and retail as well as the wholesale, food and restaurant and health sectors. The closure and restrictions caused reduction of sales and profits of businesses. Therefore, the Saudi government stepped in to rescue the private sector by announcing financial aid. The General Authority of Small and Medium enterprises (Monshaat, 2020) advised small and medium enterprises to apply new and innovative strategies to recover from the pandemic crisis. As a result, some firms adopted technology, e-business, working from home, online meetings and means of reducing cost (Parveen, 2020). This study attempts to explore the best survival and practical strategies that assisted Saudi Arabian firms to overcome and recover from the COVID-19 crisis.

Survival theory and strategies

Survival theory assumes that a firm will survive if its profit is above zero (Assefa, 2021). However, many firms were shocked by the suddenness of the COVID-19 crisis and were not prepared for lockdown and the pandemic's restrictions. They had to pay fixed costs and wages while their sales were low, and profit was zero or negative. This indicated that businesses could not survive unless they applied survival strategies during COVID-19. Therefore, some scholars suggested survival strategies. For example, Nivetha & Sudhamathi (2021) suggested strategies such as: planning a short-term policy, tracking expenses and revenues, reviewing its business model, and maintaining a healthy relationship with contracted parties (2021). Moreover, Gomes & Gomes (2021) advised firms to communicate with clients and seek ideas from partners (2021). Additionally, focusing on improvement of their dynamic capabilities can assist firms to survive. Mehrotra &

Kaveri (2020) stated that a survival strategy can help firms to survive by gaining more skills and diversifying resources towards a new business line. Other survival strategies were suggested by Akingbade (2021), including crisis management and quick response, digital transformation, e-business and seeking government support.

The literature above provides firms with a range of survival strategies, which include emphasizing e-commerce and online sales, digital transformation, adapting to remote work, diversifying product offerings, applying resilience and risk management, highlighting the importance of flexibility and agility, while fostering a culture of agility and innovation and encouraging employees to think creatively and adapt quickly to changing circumstances.

Research problem and framework

This research is an exploratory study. Therefore, it aims to explore the most frequent and most successful practical survival strategies that were used to deal with COVID-19 crisis and identify these strategies as practical lessons that can be learned from the COVID-19 crisis. Many firms have changed their strategies based on dynamic changes and new circumstances. These changes spanned many dimensions. For example, some firms changed their goals, and business models; other firms shifted towards digital transformation and e-commerce to a achieve their visions and goals. These changes and lessons were necessary to stay competitive and to maintain the organization's position in the market. However, some firms suffered through the crisis and could not survive. Therefore, this research will explore the most effective survival strategies that assisted firms to succeed in coping with the

COVID-19 crisis and can help firms in the future. This study will focus on determining the best practice of three main survival strategies: digital transformation (DT), innovation, and ecommerce and online sales. Therefore, the research framework is designed as following:

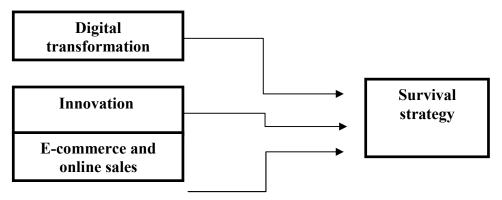


Figure 1: Research framework

Digital transformation

Digital transformation (DT) is defined as "a process that aims to improve an entity by triggering significant changes to its properties through combinations of information, computing, communication, and connectivity technologies" (Vial, 2021). Firms were forced to apply digital transformation during the -COVID-19 crisis in order to save their businesses and to be prepared for the next pandemic crisis (Dwivedi et al., 2020) and also to reduce the impact on their business (Akingbade, 2021; Rakshit and Paul, 2020; Thomas, 2021). Digital transformation can include many things, including production, operations, communication, meetings, remote-work, marketing, and methods of payment (Rakshit and Paul, 2020). Thus, the COVID-19 crisis has been a wake-up call for firms to change their conventional way of doing business through digital

transformation (Ting et al., 2020). Digital transformation has many benefits for firms. For example, it can reduce expenses, increase the firm's flexibility and to be more efficient (Berawi et al., 2020). However, it was difficult for some firms to apply digital transformation (Namatovu and Larsen, 2021). The challenges of applying this strategy may include ICT infrastructure, experience, resistance to change, cost and cyber security.

Innovation

Innovation is "the multi-stage process whereby organizations transform ideas into new/improved products, services or processes, in order to advance, compete and differentiate themselves successfully in their marketplace" (Baregheh et al., 2009). Another definition is "the ability of a firm to introduce new products and features in the market place" (Sachitra, 2016). Innovation is not only related to technology, but it is related to many other aspects, such as supply chain, knowledge, organizational culture, business model, products, and service. Innovation is considered as one of the survival strategies required to deal with the COVID-19 pandemic (Irvan and Karmagatri, 2021). It was argued that COVID-19 led to change which encouraged innovation in many sectors (Gashi et al., 2021; Namatovu and Larsen, 2021). Thus, Innovation has become one of the key sources of firms' success, especially during crises.

E-commerce and online sales

E-commerce is defined as "buying and selling products and services over the internet and the use of computer systems to

improve overall company efficiencies" (Oudan, 2010), or, more generally, "the application of information technology solutions to help define and develop new strategies for addressing business problems" (Ofori et al., 2002). Many firms applied use of the ecommerce and online sales because of the COVID-19 restrictions. For example, some firms closed their face-face sales and depended on the use of online sales. Other firms used telephone applications to provide services and products to customers. In contrast, 79 percent of MSMEs (Micro Small and Medium Enterprises) had not used e-commerce before COVID-19 (Parveen, 2020), while the use of e-commerce has increased during and after the crisis, which has benefited many MSMEs, assisting in them in reducing cost and expenses and to communicate with customers (Ibidunni et al., 2022). Thus, e-commerce and online sales helped firms to maintain their sales. Overall, the COVID-19 pandemic crisis has shifted firms from traditional ways to online operation, which has increased their online sales (Alflayyeh et al., 2020). Firms have acknowledged the importance of e-commerce and online sales during COVID-19 which was an opportunity for some firms to apply change to their way of doing business.

Methodology

The research used a quantitative methodology to explore the most frequent survival strategies that have been learned from the experience of the COVID -19 crisis. A questionnaire was conducted and distributed among Saudi Arabian firms to understand the impact of the COVID -19 crisis and explore the most frequently used survival strategies that Saudi Arabian firms have applied from the suggested survival strategies to overcome

the crisis and maintain their business and market position. To analyze the collected data, the study used the SPSS tool and descriptive analysis.

Data collection

The data was collected through a survey. The survey was designed in three parts: demographic information, business information, and the three survival strategies (e-commerce and online sales, digital transformation, innovation). The survey used a Likert scale with five levels (1-5) to explore the most frequent strategies that learned from the COVID-19 experience. The survey was distributed over two months to receive maximum responses from Saudi Arabian firms. A pilot survey was also previously sent to some academic peers and experts to give feedback and the survey was redesigned based on their beneficial feedback. Additionally, Cronbach's alpha was used to measure the reliability of the survey. The alpha coefficient showed that the internal consistency was 0.703, which is acceptable.

Reliability Statistics					
Cronbach's Alpha	N of Items				
.703	23				

Sample size

The research aimed to explore the most frequent survival strategy that firms applied during COVID-19 crisis; therefore, the target sample size of the study was determined by the overall number of Saudi Arabian firms. According to the Saudi Ministry of commerce (2023) the total number of registered firms is 1.3 million.

According to Krejci and Morgan's table (1970), the population of the study is N=1.3 million firms in Saudi Arabia and the representative sample size is S=384. However, 700 questionaries were sent to different firms in the study. The total retrieved questionnaires were 557, with a total response rate of 79 percent. There were 25 defective responses, which were excluded from the total response. Finally, a total of 532 responses was considered valid and analyzed.

Data analysis and Findings

The analysis of data collected was conducted via SPSS to illustrate and describe the features of the data (frequency, mean, percent, and other statistics). The descriptive analysis was used to rank the most frequent and important strategies implemented during COVID-19 crisis by businesses in Saudi Arabia.

The study classified the most frequent strategies that assisted firms to survive during COVID-19 crisis and found them to be: E-commerce and online sales, digital transformation, and innovation, respectively.

Profile of respondents

The analyzed data shows that 63 percent of respondents were male, and 36 percent were females. The age of most respondents was below 40 years old, with 69 percent of respondents falling into that age group. Regarding education, the data indicates that about 44.9 percent of them have a bachelor's degree while 32 of respondent have only high school qualifications. Over half of respondents (54 percent) are employees while the remaining 44.3 percent were managers and owners (Tables 1, 2,3,4).

Table 1: Frequency and percentage by gender

Gender										
		Frequency	Percent	Valid Percent	Cumulative Percent					
Valid	Male	337	63.3	63.3	63.3					
	Female	195	36.7	36.7	100.0					
	Total	532	100.0	100.0						

Table 2: Frequency and percentage by age

	Age									
		Frequency	Percent	Valid Percent	Cumulative Percent					
Valid	Under 30 years	180	33.8	33.8	33.8					
	30 – 39 years	189	35.5	35.5	69.4					
	40 – 49 years	110	20.7	20.7	90.0					
	50 years or over	53	10.0	10.0	100.0					
	Total	532	100.0	100.0						

Table 3: Frequency and percentage by education

	Education									
Frequency Percent Valid Percent Cumula										
Valid	High School	170	32.0	32.0	32.0					
	Bachelor	239	44.9	44.9	76.9					
	Master	80	15.0	15.0	91.9					
	Doctorate	43	8.1	8.1	100.0					
	Total	532	100.0	100.0						

Table 4: Frequency and percentage by position

Position									
		Frequency	Percent	Valid Percent	Cumulative Percent				
Valid	Employees	291	54.7	55.2	55.2				
	Managers	98	18.4	18.6	73.8				
	Owners	138	25.9	26.2	100.0				
	Total	527	99.1	100.0					
Missing	System	5	.9						
Total		532	100.0						

Characteristics of Businesses

As shown in Table 5, 47.4 percent of the respondents were from the commercial sector, while 35.5 percent and 16.7 percent were from the service and industrial sectors respectively. The majority of firms, 16.7 percent, were engaged in transformative industry. followed by health care with 14.1 percent and education and training (13.3%) (Table 6). Table 7 indicated that respondents from firms that have 50-100 employees were 36.5, while respondents from firms that have 10 -50 employees represented 31.4 of respondents.

Table 5: Frequency and percentage by business sector

	Business Sector										
		Frequency	Percent	Valid Percent	Cumulative Percent						
Valid	Commercial	254	47.7	47.7	47.7						
	Service	189	35.5	35.5	83.3						
	Industrial	89	16.7	16.7	100.0						
	Total	532	100.0	100.0							

Table 6: Frequency and percentage by business type

	Business Type									
		Frequency	Percent	Valid Percent	Cumulative Percent					
Valid	Retail & wholesale	64	12.0	12.0	12.0					
	Education & Training	71	13.3	13.3	25.4					
	Agriculture	46	8.6	8.6	34.0					
	Health care	75	14.1	14.1	48.1					
	Transformative industry	89	16.7	16.7	64.8					
	Real estates	57	10.7	10.7	75.6					
	Telecommunication	52	9.8	9.8	85.3					
	Construction	41	7.7	7.7	93.0					
	Food & accommodation	37	7.0	7.0	100.0					
	Total	532	100.0	100.0						

Table 7: Frequency and percentage by no. of employees

	No. of Employees									
		Frequency	Percent	Valid Percent	Cumulative Percent					
Valid	Fewer than 10 employees	39	7.3	7.3	7.3					
	10 to 49 employees	167	31.4	31.4	46.8					
	50 to 99 employees	194	36.5	36.5	100.0					
	100 to 499 employees	89	16.7	16.7	63.5					
	More than 500 employees	43	8.1	8.1	15.4					
	Total	532	100.0	100.0						

Descriptive statistics

The analysis of the data demonstrates that the dependence on e-commerce and online sale was ranked the most useful strategic survival strategy during COVID-19 crisis. The analysis of the data showed that 95 percent off respondents agreed that e-commerce and online sales were very important survival strategies (Table, 8) while 82.6 percent of respondents agreed that digital transformation assists firms during COVID-19 crisis (Table, 9). Moreover,71.1 of respondents agreed that innovation played a significant a role during COVID-19 crisis (Table 10).

To describe the most and the least frequent survival strategies, descriptive statistics for the three survival strategies (Table, 11) were employed by using the mean and standard deviation. The results indicated that E-commerce and online sale strategies (M=4.37, SD=0.287) were reported as the most frequently-used from the suggested survival strategies while digital transformation strategies were the second most-frequently-used (M=4.24, SD=0.36), followed by innovation strategies (M=4.23, SD=0.281).

Table 8: Descriptive statistics for e-commerce and online sales strategy

	E-commerce & online sales										
		Frequency	Percent	Valid Percent	Cumulative Percent						
Valid	3	25	4.7	4.7	4.7						
	4	287	53.9	53.9	58.6						
	5	220	41.4	41.4	100.0						
	Total	532	100.0	100.0							

Table 9: Descriptive statistics for digital transformation strategy

	Digital transformation									
		Frequency	Percent	Valid Percent	Cumulative Percent					
Valid	3	93	17.5	17.5	17.5					
	4	385	72.4	72.4	89.8					
	5	54	10.2	10.2	100.0					
	Total	532	100.0	100.0						

Table 10: Descriptive statistics for innovation strategies

	Innovation									
		Frequency	Percent	Valid Percent	Cumulative Percent					
Valid	3	154	28.9	28.9	28.9					
	4	244	45.9	45.9	74.8					
	5	134	25.2	25.2	100.0					
	Total	532	100.0	100.0						

Table 11: Descriptive statistics for most frequently-used survival strategies

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Rank		
E-commerce & online	532	2.73	5.00	4.3701	.28760	.083	1		
sales									
Digital transformation	532	2.83	5.00	4.2475	.36429	.133	2		
Innovation	532	3.50	4.83	4.2320	.28136	.079	3		
Valid N (listwise)	532								

Discussion

The results of this study indicate that companies shifted towards three main survival strategies during and after the COVID-19 crisis and that the most frequently used survival strategies during were e-commerce and online sales, digital transformation, and innovation (respectively). The data analysis confirms that e-commerce and online sale strategy was ranked the most used during COVID-19 crisis. Many researchers (Akingbade, 2021; Dwivedi et al., 2020; Parveen, 2020) have confirmed that the e-commerce and online sale was one of the technology survivals strategies that was frequently used during COVID -19 crisis. Therefore, it has been clear that e-commerce and online sale is the most survival strategy that was used by Saudi Arabian firms during the COVID-19 crisis. Moreover, it is expected that the use of e-commerce will increase in the future as it satisfies the new switch of consumer behaviors.

Digital transformation was used as a second survival strategy for firms to overcome the negative impact of the COVID-19 crisis. It was obvious that the digital transformation was one of strategies that could help firms to overcome COVID-19 crisis and become more efficient (Assefa, 2021). Additionally, adopting digital transformation may save firms and assist them to be prepared for next pandemic crisis (Dwivedi et al., 2020) and reduce the impact on their business (Akingbade, 2021; Rakshit and Paul, 2020; Thomas, 2021).

Innovation was found to be the third most common survival strategy that was applied by firms in the context of Saudi Arabia. The study confirmed that innovation is necessary for firms to survive by introducing new business models, products, services, and forms of organizational culture. Several researchers (Gashi et al., 2021; Irvan and Karmagatri, 2021; Namatovu and Larsen,

2021) agree that innovation is considered one of the best survival strategies. Thus, many firms have applied some aspects of innovation to confront the pandemic crisis. Figure 2 shows the rank of the most frequently used survival strategies during COVID-19 by firms in Saudi Arabia.

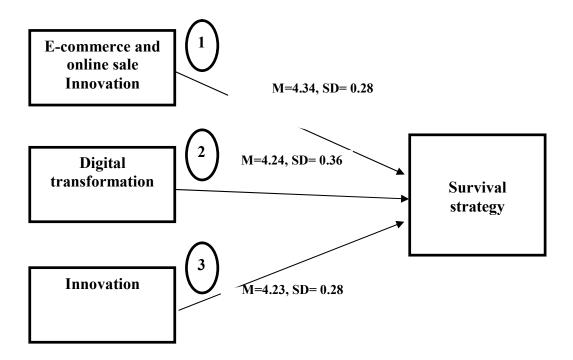


Figure 2: The most frequently used survival strategies during COVID-19 by firms in Saudi Arabia

Recommendations and limitations

The study indicates that many firms suffered during the COVID-19 pandemic crisis and therefore attempted to look for strategies that might assist them to survive and maintain their businesses. The study concludes that most of the firms applied different strategies that suited their internal and external circumstances. Firms applied new changes and strategies because of COVID-19 crisis. Thus, this

research can assist managers and executives to learn from this experience in the future. The study provides firms with the most frequently used strategies during the crisis. It recommends owners and managers of firms to apply one of these three strategies, which can help them to overcome the challenges of future crises.

The study has some limitations. First, the study was conducted in the context of Saudi Arabia. Therefore, future studies can explore survival strategies in different contexts. Secondly, this research focused only on three strategies: e-commerce, digital transformation, and innovation. As a result, it is recommended for future research should be expanded to include other strategies. Third, the study did not test the correlation and relationships between variables, which can be investigated by future researchers.

Conclusion

The purpose of this study was to explore the most frequently used survival of the three suggested survival strategies. The major finding of this research was that most of firms used e-commerce and online sales strategies to survive during the COVID-19 crisis. The second most frequently used survival strategy in the context of Saudi Arabian firms was digital transformation, while innovation came third. These frequently used strategies employed by firms during the COVID-19 crisis can be developed to be used in the future, particularly in crisis situations.

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