

COVID-19 Pandemic and E-Commerce in Oman; A Systematic Literature Review

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Abstract

COVID-19 pandemic has strongly affected the living style of people and particularly their spending or purchasing style. Now the majority of customers in many countries, prefer to purchase any product or service online. Therefore, this research has conducted a systematic literature review of studies highlighting the role of the COVID-19 pandemic on e-commerce/ online purchasing in Oman. After the critical internet-based search, only 8 studies were matched with selected keywords, thus, all of them were considered for review. The results highlighted that the majority of studies considered for review were empirical in nature and not published by renowned publishers. The biggest limitation of this review is that only 8 articles were considered due to the limited availability of articles. Thus, future studies can either conduct empirical research or do a systematic literature review in the context of any other developed country.

Keywords: COVID- 19, E-Commerce, Online Shopping, Coronavirus.

1. INTRODUCTION

The history of the world revealed that many epidemics and pandemics affected human life and even changed it. In this era of technological advancement and globalization, it apparently looks very easy for scientists to overcome any pandemic or epidemic but actually, it's too much difficult as some epidemics caused due to spread of viruses are nearly impossible to stop. Similarly, the coronavirus is continuously affecting people and is considered a pandemic. This virus has the ability to infect the human body by causing bronchitis or pneumonia. The people who got infected by this deadly virus are also the carrier of the virus and can they can transmit it to others. Coronavirus originated from a seafood market located in Wuhan, China and from this market, it spread around the whole China within a week. Besides China, this virus spread around the globe (World Health Organization WHO, 2019). The doctors and scientists started working on this virus but in beginning, it was very difficult to make an effective vaccine against the coronavirus. Therefore, along with guidelines of doctors and WHO, the governments of almost every country restricted social life and economic activities (Koch et al., 2020). The emerging and developing countries were infected more with COVID-19 (The University of California, 2021). Among the list of badly affected territories, there were more than 205 countries. The virus not only infected the inhabitants but also stopped the economies of those countries. Moreover, this global epidemic created a challenging situation for businesses and particularly e-commerce (Nakhate & Jain, 2020; Whiteford, 2020).

The internet has changed thinking capacities and organizational capabilities. Therefore, due to numerous advantages, it is used in business, particularly in e-commerce which deals in selling or buying of products/ services. Vladimir (1996) highlighted that e-commerce is actually the internet based business of selling/ buying anything. The technology act as medium between the both parties (i.e. buyer and seller). Whereas, Yadav et al., (2021) explained the concept of e-commerce in detail and described that e-commerce is internet-based or online purchasing method in which the customers purchase their useful products which they found on any online store. The number of E-commerce platforms is increasing because they have a significant impact on how internet users shop for and purchase things. The COVID-19 also changed the perception of customers and tends them to prefer online shopping

(Roggeveen & Sethuraman, 2020). Moreover, it impacted the whole e-commerce of the world by changing the nature or setting of business (Bhatti et al., 2020). The pandemic caused by COVID-19 significantly effected the e-commerce of the whole world. In some cases, the impact of COVID-19 on e-commerce was negative but overall, the e-commerce sector shown rapid growth during pandemic. The restrictions by the government during COVID-19, compelled the customers to prefer the use of online shopping make habit of using the internet in their daily routine (Abiad, Arao & Dagli, 2020). Alike, Yadav et al., (2021) described that COVID-19 positively affected the e-commerce industry due to restrictions of social gathering or physical interaction of people in markets or open places. Furthermore, the pandemic changed the shopping habits of customers and increased the trend of internet shopping.

Andrienko (2020) observed that the effects of COVID-19 differ on the basis of the product's nature, some products were affected more and many were less affected. Whereas, the overall sale of e-commerce enhanced because of virus spread, as the people avoided going out and started to work from home, buy from home and maintained social distancing. During this era, the Walmart grocery e-commerce increases 74%. Moreover, the people confined to homes started to use social media more frequently, and to facilitate them, google launched updated version (Sarah Davis, 2020). Government restrictions and COVID-19, both were factors that influenced the customer behavior, they preferred to purchase goods or services online. Instead of a decrease, the e-commerce sector showed significant growth. Thus, the COVID-19 increased the digital spending of customers (Jilkova & Kralove, 2021) irrespective of the nature of the product. Sumarliah et al., (2021) expected tremendous growth in the online fashion retail business as everything moving into the 'new normal,' a period of opening specific social and economic activity but maintaining a physical distance. Therefore, there is a dire need for fashion business players for the expansion and improvement of e-commerce. Those players should formulate successful advertisement approaches for understanding the online fashion shopping motives of customers and encouraging their purchasing intention (Ali, Khalid, Javed, & Islam, 2021; Nguyen et al., 2020) especially in the era of COVID-19 which changed the consumer behavior (Harper et al., 2021).

Baker et al., (2020) highlighted that the pandemic caused the sharp drop in retail spending, public transport spending, restaurant dining, and air travel. Whereas, the spending on online food delivery increased. This pandemic not only boosted e-commerce but also helped it in launching new firms or products for targeting a huge number of customers (OECD, 2020). According to Euromonitor (2020) coronavirus increased the demand for online groceries because it provided ease to customers for accessing a variety of products from the comfort of their home, with safety and convenience. Al Hawari et al., (2021) revealed that in Oman, the pandemic has played a significant role in changing consumer behavior, it helped many people in shifting their traditional grocery shopping style to online. Furthermore, they found great potential in the online grocery market of Oman due to COVID-19. Several studies in different contexts have supported the idea that COVID-19 pandemic has positively influenced the e-commerce or online shopping of food (Alaimo et al., 2020; Dannenberg et al., 2020; Candra et al., 2021; Chang & Meyerhoefer, 2021), grocery (Hao et al., 2020; Jensen et al., 2021; Habib & Hamadneh, 2021) and fashion products (Sumarliah et al., 2021; Kannappan, 2020). Moreover, many researchers have highlighted the increase in e-commerce due to COVID-19 in different countries including China (Gao et al., 2020), Pakistan (Ali et al., 2021), Qatar (Mohammed et al., 2020), Saudi Arabia (Salem & Nor, 2020) and Oman (Al Hawari et al., 2021). Since the beginning of this pandemic, researchers are making efforts to conduct studies on changes in human behavior due to COVID-19, particularly the behaviors which enhanced e-commerce (i.e. B2C) or online shopping. The search on google scholar highlighted that more than 1400 research articles have been published during the era of COVID-19 which highlighted its influence on e-commerce. These articles were having COVID-19 and e-commerce in their titles. Its complex to analyze all these articles on one single platform, so this research aimed to do research by doing a systematic review of articles highlighting the influence of COVID-19 pandemic on e-commerce and online shopping in Oman. In addition, this study has explored many different things from these studies, including, types of articles, data collection approaches and themes.

2. RESEARCH METHODOLOGY

Since the spread of COVID-19, researchers are making efforts to quantitatively and qualitatively examine consumer behavior and trading trends. This research is qualitative in nature as its emphasizing the specific concept (Duffy and Chenail, 2009) of analyzing e-commerce trends during COVID-19 in Oman. In the field of social sciences, there are many approaches to compile the literature review based methodology, these approaches include, systematic literature analysis, integrative literature review and semi-systematic literature review. The integrative literature review helps in analyzing the previous publications and proposing new framework on the basis of critical analysis conducted on them (Synder, 2019). Whereas, the systematic literature review highlights that the subjectivist or interpretivist paradigm is well-supported by research paradigms (Campbell, 2014). These methodologies are based on the literature evidences and significantly differ from methodologies used in empirical studies. The empirical studies are mainly based on testing the hypothesis but the systematic literature review is written by focusing the concepts or evidences provided by literature. The systematic review has been discussed by many studies by Vuori & Vaisanen (2009) highlighted its importance and quoted that “it is the valuable strategy, when the aim is to identify, evaluate, and synthesize all of the important research on a certain topic to acquire a complete picture of the studies and their findings”. This research has dully adopted different steps and procedures for ensuring the validity and reliability of systematic literature review. These steps and procedures are given below:

- 1- The development of a perfect and comprehensive systematic review framework for structuring the underlying procedures.
- 2- Ensuring the access to data and content.
- 3- Adoption of efficient systematic data management.
- 4- Application of reliable procedure
- 5- Comprehensive re-examination of every step and content.

The figure 1, given below indicate the general process of conducting a systematic literature review. This process is based on 5 steps, the first steps starts form sorting of databases.

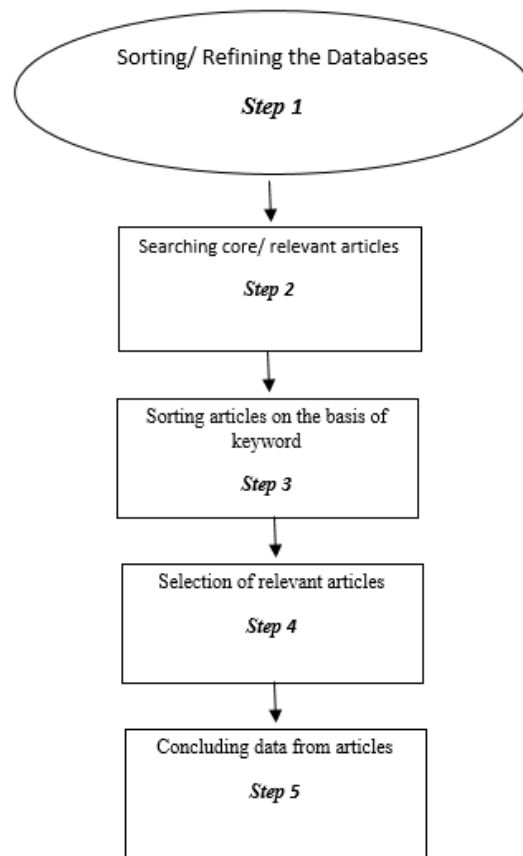


Fig. 1: Universal/ General process of systematic review

The systematic literature review is considered as an effective and efficient way for the identification, assessment and synthesis of all related studies on a specific subjective to gain the broader view of the findings of studies or their core emphasis. The process of conducting this review for current research is comprehensively highlighted in Table 1 (See, table 1).

Table 1: Systematic Literature Review Process for current research

Process of Systematic Literature Review		
Sr #	Topic definition	<i>Journal Articles on “role of social media in generating business information in region of Nigeria” published between 2014 and 2021.</i>
1	Identify the research questions	<i>1-What is journals’ publishing country? 2- What type of articles are included (i-e- conceptual or empirical)? 3- What were the main data collection methods adopted?</i>
2	Determining the search criteria “keywords”	<i>COVID-19, E-Commerce, Oman, Online Shopping</i>
3	Identification of databases	<i>Google Scholar, Web of Science (WoS), Scopus (SJR) and many others</i>
4	Selection of articles	<i>This study only considered the articles published in English language and in reputed journals.</i>
5	Synthesize articles	<i>Critically assessment articles included in study</i>
6	Publicize review findings	<i>The finding are based on the current evidence.</i>

The systematic review is aimed at evaluation of research articles published on the area of COVID-19 and highlighted its influence on e-commerce in Oman. COVID-19 pandemic started in 2019, thus, only the latest research articles published within 2019 to 2021 were considered. These articles were systematically reviewed by using the widely accepted technique called SQAT (Systematic Quantitative Assessment Technique). It was developed by Pickering and Bryne (2014) and helped the researchers in investigating the different types of information from studies, including data collection approaches, types of studies and time distribution (Zhu et al., 2018). The 5-step procedure of SQAT is given below (See, figure 2):

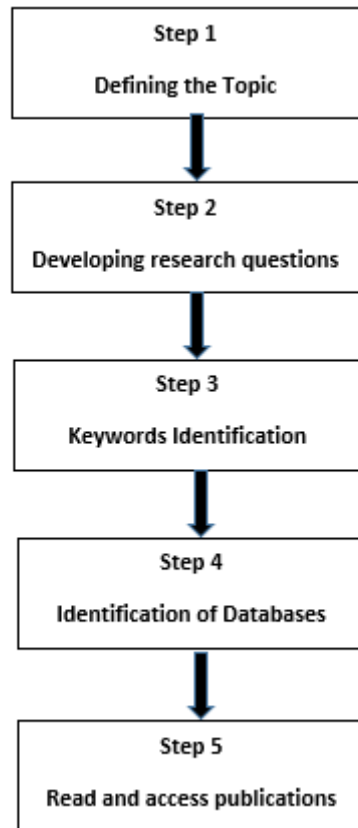


Fig 2: 5-steps procedure of SQAT

2.1. Selection of Study

First of all, the list of studies was developed and from this list, all the duplicate studies were removed. In addition, to check the relevancy, the titles and abstracts of studies were checked. To get more relevant studies, the bibliography of selected article was analysed.

2.2. Inclusion Criteria of Articles

- The latest research articles published within 2019 to 2021 were considered.
- The articles emphasizing the Oman were only selected.
- The studies published in English were considered for review.
- The research articles highlighting the role of COVID-19 on e-commerce and online purchasing were considered.

3. RESULTS & FINDINGS

The study considered only 8 peer-reviewed research articles that actually met the criteria of database quality. The limited number of publications was considered because of the least research on e-commerce

in the context of COVID-19 in Oman. Table 2 (see table 2) given below has highlighted the number of publications along with names of publishers.

Table 2: Articles reviewed by publishers

Publisher	Number of relevant articles
Wiley	1
MDPI	1
Others publishers	6

The table shown above highlights that the majority of research articles were published by less recognized publishers. One article each was founded published in journals of MDPI and Wiley publishers.

3.1. Time & Geographical distribution of articles

In this review, the initial research was conducted to sort the articles published from 2019 to 2021 on the influence of COVID-19 on e-commerce in Oman. Figure 3, (See figure 3) has shown the time distribution analysis of articles considered for review. It was analyzed that among 8 research articles, six were published in 2021 and 2 in 2020. The majority of studies were published in 2021.

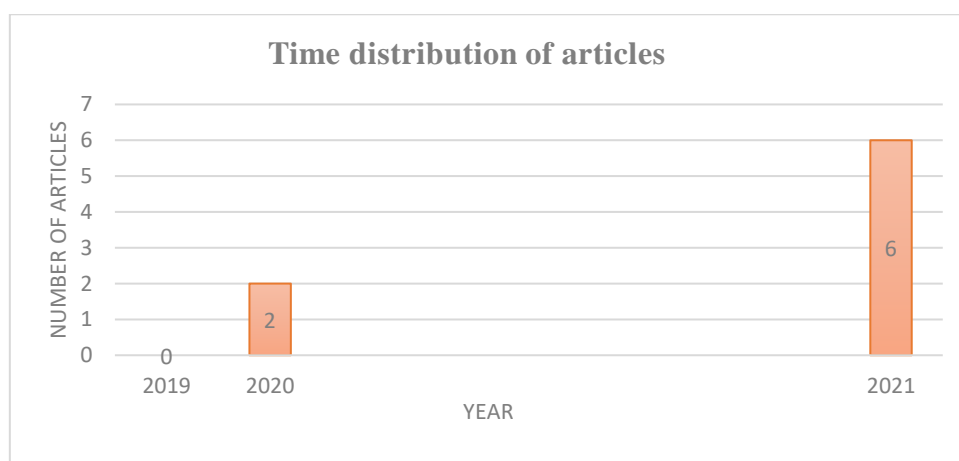


Fig 3: Time Distribution of Articles

The main emphasis of review was on Oman instead of focusing on all Arab or gulf countries. Therefore, every study considered for this review was based on e-commerce or online shopping in Oman during era of COVID-19. The figure 4 (See, figure 4) given below also highlight that all the research articles focused on same country (i.e. Oman).

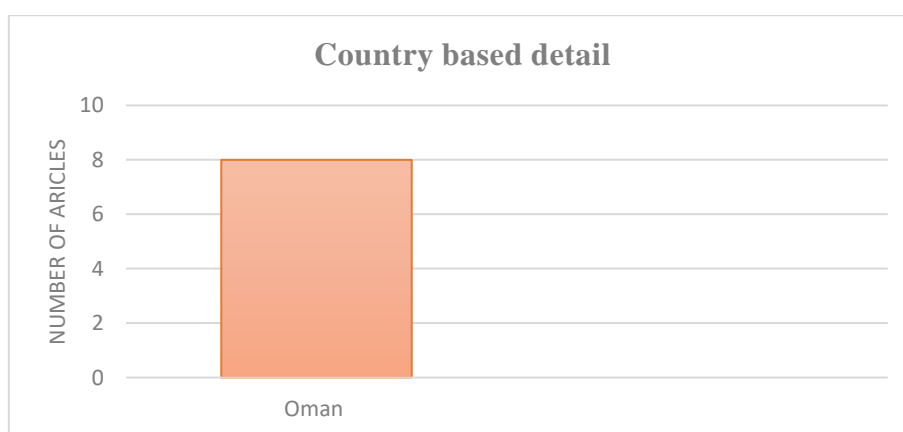


Fig 4: Country-based analysis

Many studies have claimed that COVID-19 pandemic increased the online shopping of grocery items but according to Al Hawari et al., (2021) the situation is different in Oman as people feel uncomfortable while shopping the grocery products online and the majority of people do not have a credit card to do online payment. In addition, there is a possibility of a change in the online buying behavior of customers after the pandemic.

3.2. Types of Articles

Generally, there are several types and sub-types of research articles, but this review has only emphasized on two main categories, one conceptual and other is empirical. The findings highlighted that 7 articles were empirical in nature and 1 emphasized on qualitative approach (i.e. case study). Figure 5 (See, figure 5) presented the pie chart to show the distribution.

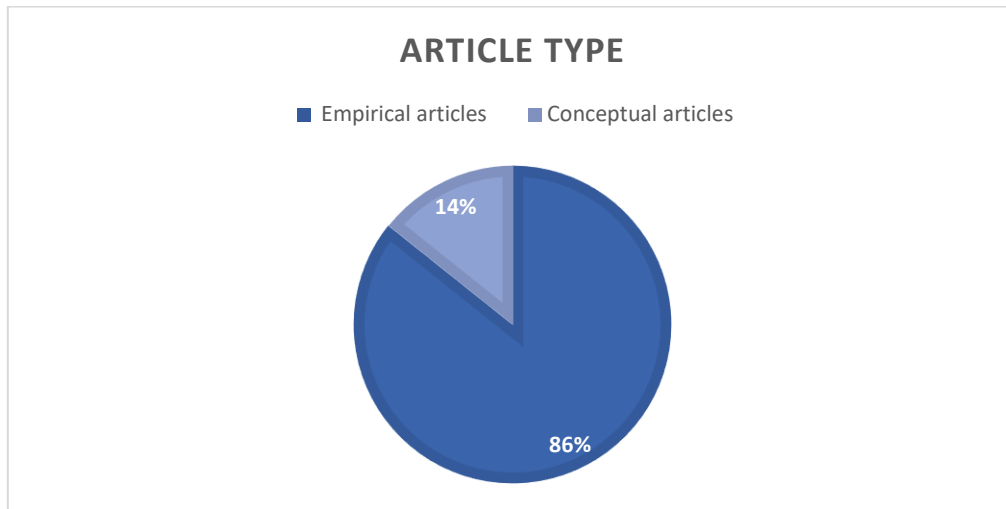


Fig 5: Article Type

4. CONCLUSION

COVID-19 has not only affected the living style of people but it also changed customers' purchasing behavior. People now prefer to visit e-commerce stores and purchase products or services online. Therefore, this research adopted the approach of systematic literature review to highlight the studies focusing on e-commerce/ online purchase during COVID-19 in Oman. The findings showed that COVID-19 boosted the online sales, which is a significant cause of the boom in e-commerce in Oman. Now even after COVID-19, e-commerce will keep growing. Moreover, in the context of Oman, there is a scarcity of literature highlighting the role of COVID-19 on e-commerce/online purchases. Therefore, only 8 research articles were considered for this research after a critical internet-based search.

5. IMPLICATIONS

The emphasis of this review is on evaluating the studies showing the role of the COVID-19 pandemic on e-commerce/ online purchasing in Oman. Therefore, it has several implications for researchers and practitioners. In terms of theoretical implications, the review has expanded the literature on change in consumer buying behavior due to COVID-19 and the role of the COVID-19 pandemic on e-commerce/ online purchasing. E-commerce might not have been grown to this extent if COVID-19 was not there. Thus, this research directed the attention of researchers towards conducting more studies on COVID-19 pandemic and e-commerce, and formulating strategies that can help to increase the trend of online purchasing. A part from other studies, this review is significantly different as prior studies conducted the empirical investigation on increase in e-commerce/ online purchase due to COVID-19. Thus, the researchers can quote the results of this research as a reference while highlighting the role of COVID-19 or any such pandemics on e-commerce/ online purchasing patterns. In terms of practical implications, this research is useful for practitioners, managers, or owners of e-commerce stores can

develop strategies based on the findings of this research to facilitate online customers during such pandemics.

6. LIMITATIONS & RECOMMENDATIONS

The researchers nowadays are keen to highlight the role of COVID-19 on consumer behavior. Similarly, this review-based research has identified the studies which highlighted the role of COVID-19 pandemic on e-commerce/online purchasing in Oman. Thus, besides highlighting the significant implications, it also has some limitations which can be considered by future researchers. First, to conduct the systematic literature review, this research used the SQAT, the future studies can focus on adopting any other method. Secondly, only 8 research articles were considered for review, because of the limited number of studies on the COVID-19 pandemic and e-commerce/online purchasing in the context of Oman. Therefore, the researchers can conduct more empirical or conceptual studies on e-commerce in Oman. Moreover, future studies can conduct a systematic literature review by focusing on any other developed country, as there could be the possibility of a significant number of research articles.

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