Contents lists available at GrowingScience

International Journal of Data and Network Science

homepage: www.GrowingScience.com/ijds

Customer attitudes towards online shopping: A systematic review of the influencing factors

Ibrahim A. Abu-AlSondos^a, Abeer F. Alkhwaldi^b, Hanadi A. Salhab^c, Maha Shehadeh^{d*} and Basel J. A. Ali^e

CHRONICLE

ABSTRACT

Article history:
Received: May 2, 2022
Received in revised format: September 25, 2022
Accepted: December 8, 2022
Available online: December 8
2022

Keywords: Systematic review Customer Attitudes Online Shopping Customer attitude The primary goal of this study is to investigate the major elements that impact customer attitudes regarding internet purchasing in Jordan. This study employed a qualitative systematic literature review methodology, with 100 existing peer-reviewed articles completed in Jordan chosen for evaluation based on an inclusion/exclusion criterion. The findings of this study were collected utilizing a thematic method, which involved extracting previous researchers' findings from the literature, categorizing similar themes and findings, and drawing conclusions. According to the findings of this survey, the most important elements impacting customer attitudes about online buying in Jordan are trust, cultural hurdles such as uncertainty avoidance and a lack of understanding, security, perceived ease-of-use, and perceived utility. It was also discovered that Hofstede's cultural dimensions' theory and the technology acceptance model (TAM) can help online businesses identify what factors drive online shopping adoption in Jordan. This study discovered, through a review of available literature, that the online shopping sector in Jordan is currently undeveloped, necessitating more effective growth techniques. Finally, the outcomes of this study provide online merchants with insight into what has to be prioritized in order to entice Jordanian customers to make online purchases. From the findings of this investigation, three areas of inquiry were uncovered for further study. Findings from this study also include suggestions for online retailers and policymakers looking to boost Jordanians' comfort level with making purchases over the Internet. The findings of this study will be invaluable to international online retailers that are considering entering the Jordanian market. They will reveal not only the most important aspects affecting consumers' perceptions of online shopping in Jordan, but also the level of maturity of this sector.

© 2023 by the authors; licensee Growing Science, Canada.

1. Introduction

The internet plays a significant part in our lives; not only has it introduced new methods for us to stay connected, but it has also revolutionized the purchasing experience (Salameh, AlSondos, Ali, & Alsahali, 2020). Retailers are no longer reliant on physical storefronts to reach consumers, and consumers may purchase goods and services from the comfort of their homes or workplaces. Internet also enables customers to undertake product comparisons and have simple access to product prices in order to make educated purchase decisions (Alrabei, Al-Othman, Al-Dalabih, Taber, & Ali, 2022; Bonfrer, Chintagunta, & Dhar, 2022; Jawabreh, Jahmani, Shukri, & Ali, 2022). (Sari, Utama, & Zairina, 2021) argue that internet shopping offers

* Corresponding author.

E-mail address: mahashehadeh88@gmail.com (M. Shehadeh)

ISSN 2561-8156 (Online) - ISSN 2561-8148 (Print) © 2023 by the authors; licensee Growing Science, Canada. doi: 10.5267/j.ijdns.2022.12.013

^aCollege of Computer Information Technology, American University in the Emirates (AUE), Dubai 503000, United Arab Emirates

^bDepartment of Management Information Systems (MIS), College of Business, Mutah University, Karak 61710, Jordan

^cFaculty of Business, Middle East University (MEU), Amman, Jordan

^dDepartment of Finance and Banking Sciences, Faculty of Business, Applied Science Private University, Amman, Jordan

^eAccounting and Finance Department, Applied Science University, Kingdom of Bahrain

customers comfort and ease in relation to their buying desires. (Aryani et al., 2021) found that online shopping gives consumers quick access to their favorite brands and saves them time compared to purchasing in a physical store. E-commerce has gained popularity in recent years due to the transition away from conventional buying methods and toward online shopping, which has occurred in nearly all nations across the world (Jawabreh, Shniekat, Saleh, & Ali, 2022; Shniekat, AL_Abdallat, Al-Hussein, & Ali, 2022; Thuneibat, Ali, Alqaraleh, & Thneibat, 2022). Jordan is one of these nations that has recognized the potential of online buying, with businesses investigating the possibility; yet, it remains unclear how Jordanian consumers view online shopping platforms and what factors impact their perspective. The rapidly shifting market conditions caused by the recent Covid19 epidemic have made e-commerce a more viable option for businesses; consequently, it is now more necessary than ever to have a thorough awareness of the factors that impact customer perceptions of online buying (Alkhodary, Abu-AlSondos, Ali, Shehadeh, & Salhab, 2022). The purpose of this study is to investigate the dominant elements influencing customer attitudes regarding online shopping in Jordan. In light of the findings, suggestions will be made to online retailers and those in charge of running digital markets (Almajali & Hammouri, 2021).

According to a research conducted by (AlDebei, Akroush, & Ashouri, 2016), Jordan has one of the highest rates of online shopping adoption in the whole Middle Eastern area. Nevertheless, (Moh'd Al-Dwairi & Al Azzam, 2021) indicate that online shopping adoption in Jordan is limited, necessitating more study on the topic in order to devise suggestions for merchants and decision-makers (Alkhodary et al., 2022; AlNawaiseh et al., 2022; Alqaraleh, Almari, Ali, & Oudat, 2022). (Zeglat & Alzawahreh, 2012) suggest that online buying is hampered by a lack of security and trust. According to new research out of Jordan B. Ali and Omar (2016), shoppers' trust in e-commerce platforms is a key factor in determining their propensity to make purchases from such sites. In addition (Al-Adwan, Alrousan, Al-Soud, & Al-Yaseen, 2019; Alawamleh, AlShibly, Tommalieh, Al-Qaryouti, & Ali, 2021; B. J. Ali & Oudat, 2021; Harban, Ali, & Oudat, 2021) assert that when it comes to online buying, the two primary dangers that customers face are financial and security concerns. After studying the literature, numerous consumer attitudes were revealed. This research will investigate current literature to determine the most prominent elements impacting customers' attitudes about online shopping in Jordan, and suggestions will be made to businesses and decision-makers.

2. Literature Review

This section explains online shopping. The first section of the literature review will introduce online shopping, the internet, and online shopping in Jordan, as well as key theories used to investigate online shopping behavior. Part 2 of this section will evaluate the papers discovered and selected utilizing the inclusion/exclusion criterion in this analysis. The first portion of the systematic review identifies the most important elements impacting customer attitudes about online shopping. Other research will support the conclusions of those investigating Jordanian online shopping uptake. The second portion will examine online shopping in Jordan, according to scholars.

2.1 An Overview of Online Shopping

The act of buying goods or services through the Internet is often known as "online shopping". (Alawamleh et al., 2021; B. J. Ali et al., 2022; Melović, Šehović, Karadžić, Dabić, & Ćirović, 2021; Salameh et al., 2020; Shibly et al., 2021). It entails going to a seller's website, selecting an item, and setting up a delivery over the Internet. Online shopping as a concept really predates the Internet's invention. Michael Aldrich of the United Kingdom is credited with being the pioneer in the development of the concept of online purchasing services in 1979. Michael did so by bringing an enhanced television with a telephone connection, which allowed for various transactions (Nawaz & Alajmi, 2014). Amazon was the first firm to sell things on the Internet in 1995 (Bidkar, 2019). In recent years, online shopping has been more online, according to (AlDebei et al., 2016), since it allows customers to make purchases from the shopping of their own home or workplace, with no time restrictions. (Shanthi & Desti, 2015) note that in addition to the convenience that online shopping provides, customers have access to a vast selection of items, can acquire necessary information without difficulty, and can quickly compare prices across online shopping platforms. It has been reported that internet shopping has generated revenues in excess of \$2.8 trillion USD, with further growth reaching an astounding \$4.8 trillion USD by 2021 (Walmsley, Rose, & Wei, 2021). According to research that was conducted and published by Deloitte in 2018, it was found that fewer than 2% of global revenues from online purchasing come from transactions that take place in the Middle East. In addition, the percentage of companies operating in the Middle East that have an internet presence does not exceed 15 percent (Lukonga, 2021), Additionally, 90% of all regional internet sales were made via non-regional websites. Although Middle Easterners aren't as likely to purchase online as those in other parts of the world, the region's internet penetration rate is expected to reach 70% this year. This is up from an expected global average of roughly 50%. Because of the widespread availability of high-speed internet in the region, businesses both online and offline have a great potential to grow and modernize(Makhitha, 2017).

2.2 Factors influencing attitudes towards online shopping

Several researchers have conducted research on the elements that influence online shopping in Jordan. (Chetioui, Lebdaoui, & Chetioui, 2020) examined the elements that determine attitudes about online shopping. Utilizing empirical data acquired from 378 Moroccan online buyers, a partial least squares test was conducted on the predicted model (PLS). Trust has a

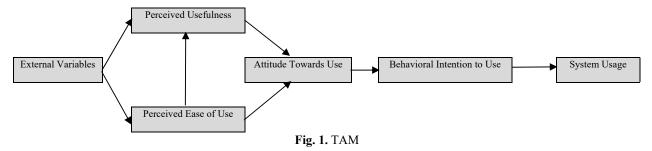
substantial impact on customer attitudes regarding online shopping; concurrently, relative advantage and eWOM influence trust. Second, the data demonstrate that trust mediates the relationship between relative advantage and eWOM and attitudes regarding online shopping. In addition, (Kahttab, Al-Manasra, Zaid, & Qutaishat, 2012) investigated individualist and collectivist gender variations in online shopping intentions. 241 Jordanian students filled out surveys to provide information. According to the findings of this study, there was a substantial difference between male and female buying intentions online. Individualist, mixed, and collectivist cultural characteristics were found to have significantly different effects on the propensity to purchase online. In addition, the connection between gender and individualist, mixed, and collectivist groupings was important in terms of online purchasing intent. (K. M. Makhitha & Ngobeni, 2021) identified the risk variables that impact customers' attitudes towards online shopping in South Africa. In addition, the purpose of the study was to establish if demographic characteristics impact customers' attitudes regarding online shopping in South Africa. Privacy and security threats have a greater impact on customers' attitudes towards online shopping, according to the survey. In addition, the study showed no moderating influence of gender on the association between online shopping risks and attitudes. Age was shown to moderate the relationships between product, security, and privacy risks and attitudes toward online shopping, but not between product risk and attitudes toward online shopping. In addition, (Alhaimer, 2022) explored the numerous risk factors that impact Kuwaitis' online shopping habits. Various social media sites were used to disseminate surveys. The data indicate that risk susceptibility, risk severity, and risk of formal penalties have a favorable influence on customers' online purchasing behavior in Kuwait, but product risk, financial risk, and non-delivery risk had no effect. The only element that negatively influences attitudes is risk associated with convenience. In addition, we identify a unique avenue via which formal fines placed on individuals who violate the lockdown restrictions might directly and favorably alter the online shopping behavior of consumers during the pandemic. We demonstrate that factors that influence the attitude and behavior of online shoppers during regular, non-emergency periods differ from those that influence their attitudes and behaviors during times of emergency. (Warganegara & Babolian Hendijani, 2022) investigated internet grocery shopping behavior. This study extends the technological acceptance model to incorporate pricing, health risk, and a reference group in order to better understand the components and their effect on online grocery shopping.

A questionnaire was prepared and sent via internet channels to 300 responders. Ease of use, usefulness, attitude, and reference group were found to have a statistically significant link with intention and actual usage of online grocery shopping platforms in Indonesia. However, neither health risk nor price was shown to correspond substantially with respondents' propensity to purchase. (Yaseen, Dingley, & Adams, 2016) emphasized the impact of trust and culture on the online shopping intentions of Jordanian customers. The authors determined that a lack of confidence in online shopping platforms was the primary factor preventing Jordanian consumers from adopting online shopping This is because people aren't aware of the benefits of online shopping and related laws. This is similar to the cultural outcomes mentioned by a number of other authors (Alrabei et al., 2022; AlSondos & Salameh, 2020; Saleh, 2015) investigates the challenges to e-commerce development in Jordan, emphasizing the significance of trust. According to the author's study, the major reason Jordanians do not shop online is because they are concerned about the security of their financial information. In a research conducted by Altarifi, Al-Hawary, and Al Sakkal (2015) found that consumers' purchase intentions toward online shopping were unaffected by marketing factors but were affected by technology determinants and cultural determinants. Customers' perspectives on internet buying were significantly influenced by both cultural aspects (language, religion, and philosophy) and technological considerations. (Abu-Shamaa, Abu-Shanab, & Khasawneh, 2016) investigated the variables impacting the electronica purchase intentions of Jordanian customers and found that perceived ease-of-use, perceived utility, payment methods, and trust had a substantial influence on the desire to buy online among Jordanian consumers. Similar to the findings of (Halaweh, 2011) As the authors pointed out, Jordanians are more used to making in-store purchases, and when making an online purchase, they prefer the "payment in cash" payment choice. In addition, AlSondos and Salameh (2020) found that concern for one's personal safety ranks high among the variables impacting interest in making an online purchase. (Abbad, Abbad, & Saleh, 2011; AlSondos & Salameh, 2020; Masoud, 2013) Everyone agrees that people's fear of purchasing online due to security concerns is a real issue. In a research conducted by Nabot, Omar, and Almousa (2021) It was found that both cultural and technological factors influenced the acceptance of mobile purchasing among smartphone users in Jordan. Similar to the results of (Akroush & Al-Debei, 2015; Al Kailani & Kumar, 2011), The authors identified uncertainty aversion as a cultural factor influencing the adoption of internet buying. In addition, the observed technical factors were perceived ease-of-use and perceived utility, as previously reported by (Abbad et al., 2011; Abu-Shamaa et al., 2016; Masoud, 2013). Although the usage of the internet in Jordan is increasing, adoption rates for online shopping remain low. It is evident from the discussion that Jordanians' online retail spending is falling. The review then addressed the chosen research. The study collected information about the factors affecting Jordanian consumers' views toward internet shopping. The data was also used to examine the Jordanian online shopping sector.

- 2.3 theorizing about the practice of purchasing online
- 2.3.1 Begin with The Technology Acceptance Model (TAM)

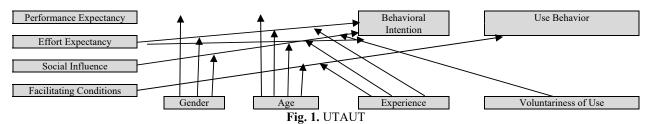
Davis (1989) model of technological acceptability is commonly used in this field. According to the model's central tenet, an individual's first impressions of a new piece of technology are shaped by their estimations of its value and simplicity of use (PU). PEOU is defined by Taufan and Magnadi (2017) as the degree to which a person believes a new innovative technology

to be simple to learn, grasp correctly, and use fluently. According to (Tahar, Riyadh, Sofyani, & Purnomo, 2020), ease-of-use is the outcome of discovering novel technologies such as online purchasing, which are simple to understand and navigate. According to (Suleman & Zuniarti, 2019) perceived ease-of-use had a beneficial influence on a consumer's attitude toward online buying. (Davis, 1989) One definition of "perceived utility" is "the extent to which an individual believes that using a certain technique would improve his or her performance on the job..(Cho & Sagynov, 2015) reflected on the topic of perceived utility in relation to electronic retail. They also noted that consumers are more likely to choose online buying over more conventional channels if they have positive expectations about how utilizing the internet to purchase would affect their overall purchasing experience.



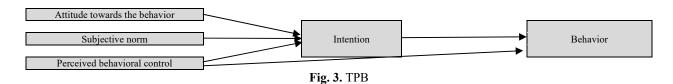
2.3.2 The second theory is The Unified Theory of Acceptance and Utilization of Technology (UTAUT)

UTAUT are direct predictors of behavioral intention and, ultimately, behavior, and they are influenced by gender, age, experience, and voluntariness of usage(Ayaz & Yanartaş, 2020; Celik, 2016; Williams, Rana, & Dwivedi, 2015). According to (Williams et al., 2015), performance expectation is the degree to which employing technology such as the internet would help the person. When opposed to buying at a physical store, The benefits include receiving an item at a lower price and saving time and effort (Ratten, 2014). In addition, customers' perceptions of the amount of effort required to learn how to use new technologies are related to their likelihood of adopting those technologies. For example, if a customer believes that making purchases online is easy to do, then the likelihood of that customer using the new technology is increased (B. J. Ali & Oudat, 2021; Ayaz & Yanartaş, 2020). Furthermore, social influence refers to how essential a person considers the opinion of a friend or family member concerning new technology (Celik, 2016). If a person's social influencer thinks that a certain piece of technology will be advantageous to them, they could encourage them to use it. For instance, if a friend or family of the social influencer was able to purchase an item online, and the item was delivered on time and lived up to the initial expectations, the social influencer is likely to promote online purchases. Last but not least, enabling conditions relate to the extent to which individuals think they have sufficient information and assistance to embrace new technology (Alawamleh et al., 2021; Alkhodary et al., 2022; Ayaz & Yanartas, 2020). In the context of online buying, examples of enabling conditions include having access to essential information that will assist in the process of making online purchases, a computer that is in working order, and a connection to the internet that is of a sufficient quality.



2.3.3 The third theory is Theory of Planned Behavior (TPB)

The theory of planned behavior (TPB) is a prominent concept for explaining and predicting people's behavior in a variety of scenarios (Conner, 2020). The TPB is a useful hypothesis for understanding people's intentions when it comes to using new technology, such as making purchases online. Intentions are described as "indications of how hard people are willing to try, of how much work they are ready to spend in order to accomplish the behavior". In other words, intentions are "indications of how much effort persons are prepared to expend in order to achieve the behavior". The desire to adopt new technology is influenced by three factors: attitudes toward a given behavior, subjective norms about the behavior, and perceived behavioral control. Attitudes toward a certain behavior are defined as the degree to which a customer views the behavior to be favorable or bad (Conner & Armitage, 1998; Almajali, 2022). Subjective norms, which are also a component of TPB, are a measurement of the degree to which a customer is influenced by the opinion of his or her family, friends, or colleagues, and they may be either objective or subjective (Conner & Armitage, 1998). Finally, perceived behavioral control is regarded as the most important aspect when examining consumer intentions toward new technologies such as online purchasing. In a nutshell, perceived behavioral control is whether a customer feels that creating the new behavior would be difficult or not.



3. Methodology

The relevant literature will be evaluated to develop conclusions based on the study goals. Literature from a pre-defined time period will help acquire the newest knowledge. Data from trustworthy published publications will help achieve the study goals. The data will be analyzed by creating a table highlighting the most recurrent elements. This section lists the settings utilized to get the desired outcomes. Saunders' research onion helps analyze methodological adoption (Melnikovas, 2018). (Bougie & Sekaran, 2019) argues that developing an acceptable research route helps the researcher go on with the study.

3.1 Techniques and Procedures

3.1.1 Review Plan

Tsafnat et al. (2014) stressed that doing a systematic review of the literature requires the formation of a protocol or strategy from the very beginning. This provides the researcher with the ability to prevent the emergence of any bias throughout the process of conducting the study. In light of the fact that this research depends significantly on already published papers that explain the present state of knowledge on internet shopping in Jordan, the following method will be utilized to filter studies that are already in existence.

- The author will evaluate data containing at least one keyword in relation to the defined objectives, such as online shopping in Jordan, e-commerce in Jordan, and factors influencing online shopping adoption in Jordan, to support the objectives of this study. Since the purpose of this research is to comprehend the factors that influence consumer attitudes toward online shopping, the author will evaluate data containing at least one keyword in relation to the defined objectives.
- The author will first choose databases in order to conduct a search for research papers that are pertinent to the topic.
- Only publications that can be verified as being real and credible are utilized in the research, which helps to ensure that the outcomes of the study can be relied upon. The specific inclusion and exclusion criteria that were used in this investigation are outlined in Table 2.1. The development of patterns based on the findings of study conducted by a variety of specialists.
- In order to accomplish the objectives of this research project, we will be developing a table that will highlight the most important takeaways from the existing research.

The chosen articles gave insight on the adoption of internet shopping in Jordan.

3.1.2 Data Collection and selection

Accessing Scopus, ResearchGate, Google scholar, and Emerald insight journals will be used to gather data. Their reputation and accessibility led to their selection. "shopping online in Jordan", "e-commerce in Amman", "factors impacting internet purchases in Jordan", and "online buying adoption in Jordan" are among the research and article selection keywords. Table 1 shows how the researcher combined keywords to find results.

Collecting Information Through the Use of Keywords

Keyword Selection				
Topics are Focus on:	Mod:	Keywords are used:		
Attitudes of consumers as affected by several factors		Behaviors of consumers		
		Perceptions held by customers		
	OR	Acquisition by purchasers		
		Shoppers in Jordan		
Online Shopping in Jordan		Jordan's electronic commerce		
		Online purchasing in Jordan		
	OR	Electronic commerce		
		Jordan's online shopping		
		Internet purchases in Jordan		

The PRISMA flowchart explains how different types of papers were considered for inclusion in this study. Researchers that are performing systematic reviews and meta-analyses make use of PRISMA flow diagrams in order to give a transparent and

unambiguous procedure for presenting their findings (Tsafnat et al., 2014). From searching for relevant publications in databases to adding existing studies, all of the details are provided below.

3.1.3 Reliability and Relevancy Assessment

The ultimate number of studies collected by the researcher after they were screened for relevance and credibility is shown in the table included in Appendix 8.1. The dependability relies on the inclusion/exclusion criteria, whereas the relevance is determined by how well the article fits the research question.

3.1.4 Data Analysis

The study will analyze data utilizing a review of internet shopping in Jordan-related literature. The chosen papers were extensively reviewed, and an excel file was developed to describe the articles' authors, publication year, journal name, research purpose, research design, research location, and research results. Data will be examined by collecting current literature using inclusion/exclusion criteria, categorizing results using a thematic approach, and reporting findings. The first subject will identify the primary elements impacting customer attitudes about online buying in Jordan. The expansion of the online shopping market in Jordan will be the focus of the second topic, which will investigate the current state of the market. The researcher will have a better chance of reaching the investigation's goals and objectives with the help of the activities that have been specified. The researcher creates a conceptual framework to assist the reader grasp the connections between variables. Technological, cultural, demographic, and sociocultural aspects are independent variables in the chart above. The researcher wants to determine whether these variables affect the dependent variable, online purchasing intent. Attitudes are a behavioral characteristic that modulates independent and dependent factors. After examining current literature on internet buying in Jordan, the researcher will be able to determine the primary variables impacting consumer attitudes in Jordan.

In conclusion, this section addressed the study design that would be used. The author uses interpretivism to learn what past research said about Jordan internet buying. A researcher uses an inductive research technique to uncover patterns in existing literature and present results to fulfill study goals. Cross-sectional time is optimal for the study. The researcher also outlined the inclusion/exclusion criteria that would be used to select papers for this study. Finally, the filtered studies' relevance and reliability were assessed.

4. Findings & Analysis

In this part, study 'll extract findings from the systematic literature review. Data will be given based on available literature. The first section of the study will identify the most significant elements impacting customer attitudes about online buying in Jordan. The second portion examines Jordan's internet retail market.

4.1 Determining major factors or keywords

Table 2 highlights the factors that have been identified as having an impact on consumer attitudes regarding online buying, as well as the authors whose research has made reference to these factors and the frequency with which they have been identified. The author developed an Excel spreadsheet that details the conclusions obtained by each of the studies that were chosen for evaluation. This was done to verify that the results could be trusted and to reduce the likelihood of making errors in the reporting. A systematic review of the literature reveals various variables that impact customer attitudes regarding internet buying in Jordan. Factors/themes include trust, culture, security, perceived ease-of-use, perceived utility, lack of understanding, financial risks, product risks, delivery risks, and demography.

Table 2An Overview of Recurring Elements

Keywords/Factors	Author/s
Trust	(Abbad et al., 2011; Abu-Shamaa et al., 2016; Akroush & Al-Debei, 2015; Al-Ma'aitah & Al-Hashem, 2019; Al
	Kailani & Kumar, 2011; Giao, Vuong, & Quan, 2020; Yaseen et al., 2016)
Security	(Abbad et al., 2011; Alsoud & bin Lebai Othman, 2018; Halaweh, 2011; Masoud, 2013; Saleh, 2015; Taufan & Mag-
	nadi, 2017; Zeglat & Alzawahreh, 2012; Almajali & AL-Sous, 2021)
Perceived ease of use	(Abbad et al., 2011; Abu-Shamaa et al., 2016; Davis, 1989; Nabot et al., 2021; Saleh, 2015; Tahar et al., 2020; Taufan
	& Magnadi, 2017; Abu-AlSondos & Salameh, 2020)
Perceived usefulness	(Abbad et al., 2011; Abu-Shamaa et al., 2016; Davis, 1989; Nabot et al., 2021; Saleh, 2015; Tahar et al., 2020; Taufan
	& Magnadi, 2017)
Culture	(Al Kailani & Kumar, 2011; B. J. Ali & Oudat, 2021; Belkhamza & Wafa, 2014)
Demographics	(Kahttab et al., 2012)
Risks	(Alawadhi, AlJanabi, Khder, Ali, & Al-Shalabi, 2022; Harban et al., 2021; Masoud, 2013)

- Cultural variables were found in 55 of 100 investigations, or 55% of the total. So, they influence customer sentiments regarding internet purchasing in Jordan.
- Perceived trust appears in 45 out of 100 studies, or 45% of the total.

- Security issues were highlighted in 30 of 100 studies, making them noteworthy. This factor recurs in 30% of the reviews.
- Perceived ease-of-use appeared in 25 out of 100 studies, making it significant. This factor occurs in 25% of all studies evaluated.
- Perceived usefulness was a factor in 25 of 100 trials, making it significant. This factor recurs in 25% of the reviews.
- Product and financial risks were discovered in 10 out of 100 trials, or 10% of the total, making them minor.
- Jordanian consumer demographics were cited in just 10 out of 100 research, or 10% of the total, making them an unimportant influence.

From the data above, it can be inferred that perceived trust, cultural characteristics, security, ease-of-use, and usefulness influence customer views regarding online purchasing in Jordan. By reaching this result, the author met her goal of identifying the elements most impacting customer attitudes regarding online buying in Jordan.

5. Discussion, Limitations and Recommendations

5.1 Discussion

This study intended to investigate the elements that influence Jordanian consumers' attitudes toward internet buying. It was discovered that cultural hurdles such as uncertainty avoidance and lack of awareness, perceived trust, security, perceived ease of use, and perceived utility are the most influential factors on customer attitudes regarding internet buying. As a result of the low client acceptance rate, it has been found that the online shopping domain is undeveloped. This is because firms are hesitant to engage in the creation of e-commerce platforms. Or online shopping platforms. In addition, given this study employs a TAM, the discussion part will focus on relating the most pertinent theories indicated in section 2.5 to the findings of this study, along with a proposed extension to the technology acceptance model. In addition, the researcher will explain the ramifications of this study and provide implementation suggestions for decision-makers and online businesses. The researcher will conclude with a discussion of the constraints observed during this investigation, as well as suggestions for future researchers interested in studying the same issue.

5.1.1 Culture

According to the conceptual model, cultural variables influence Jordanians' views regarding internet buying. This study demonstrated that culture influences Jordanian consumers' internet buying attitudes. Cultural limitations including uncertainty avoidance and lack of information about the advantages of online purchasing influence The views of Jordanian customers about internet shopping impede its growth. Jordan ranks well in uncertainty avoidance according to Hofstede's theory of cultural dimensions. The author suggests that internet firms should use Hofstede's concept of cultural dimensions to comprehend Jordanian attitudes about online shopping. Countermeasures must be made to overcome the systematic review's cultural hurdles and promote internet buying in Jordan. First, Jordanians are hesitant to use credit cards online, and some haven't obtained one. Online shops should vary their online payment choices, such as cash on delivery, bank wire transfer, or western union. Retailers could also provide an exchange and return program to reduce uncertainty avoidance. (Alsoud & bin Lebai Othman, 2018). An exchange and return policy help consumers feel at rest if they get a faulty or unsatisfactory item. Online businesses may provide a lengthier "warranty policy" than conventional stores, promising that faulty products will be replaced or serviced free of charge. Interactive 360-degree product views are being introduced to online buying platforms. If online businesses in Jordan used this new technology, it would provide shoppers a crisper, more complete image of the item they're viewing. The above would reduce buyer uncertainty, as they can't see or test the item before buying it.

It's also important to provide suggestions to raise Jordanians' understanding of internet shopping's advantages. (Issa et al., 2021) reported that Jordan has 5.7 million social media users in January 2020. Online shops may create awareness about online purchasing and its restrictions by using social media. A comprehensive marketing approach that makes use of important social media sites in Jordan like Facebook, Instagram, and Snapchat to convey information about the benefits of online purchase will most surely boost positive awareness among Jordanian buyers. Marketing messaging should also educate customers about online shopping regulations and policies.

5.1.2 Trust & Security

According to the conceptual model given, the researcher aimed to determine if sociocultural and technical aspects influence Jordanian customers' propensity to buy online. It was determined that trust (a socio-cultural factor) and security (a technical component) influence Jordanian consumers' desire to make an online transaction. Numerous scholars have observed that a customer's perception of the level of security provided by a website has a positive impact on their level of trust in online purchasing platforms. (AlDebei et al., 2016; AlSondos & Salameh, 2020; Altarifi et al., 2015; Giao et al., 2020). Accordingly, the author will combine trust and security. Numerous researchers have used the TAM to examine online buying behavior,

thus it will be used to incorporate the data. In addition, its primary components, perceived ease-of-use and perceived usefulness, were shown to influence Jordanian consumers' opinions regarding online buying. The author advocates including perceived trust as a construct into the TAM theory. The characteristics that have been found to influence consumers' perceptions of online shopping are highlighted in the table above, along with the authors whose studies have cited these aspects and the frequency with which they have been recognized.

Developing trust is a challenging endeavor. To increase awareness of the benefits of online shopping, a comprehensive marketing plan using many marketing channels would be necessary. Online firms and decision-makers must convince Jordanians that online shopping is more convenient and safer than traditional purchase methods. Approximately 6 million Jordanians use social media sites including Facebook, Instagram, and Snapchat. On their social media pages, online retailers should gather and sell testimonials from existing online consumers. Most social media platforms now provide a centralized advertising management system that allows brands to easily allocate their advertising money, boost their posts, and choose their desired demographic. It's conceivable that an increase in trust from Jordanian customers will arise from positive online word of mouth.

5.1.3 Perceived ease-of-use and perceived usefulness

Perceived Consumers' perspectives on online shopping in Jordan are heavily influenced by the PEOU and PU of websites, two important tenets of the technology acceptance model TAM. This research's conceptual framework suggests that PEOU and PU, two forms of technology, influence Jordanian customers' propensity to make purchases online. Therefore, the TAM has been validated as a viable notion that assists in forecasting end-user adoption of new technologies. Figure in the study shows how the author expanded the TAM to account for perceived trust as a construct that affects attitudes about online shopping based on the results of this study. Online merchants should think about PU (a TAM component) while constructing their websites. Since customers are always on the lookout for bargains, it stands to reason that providing these items at a cheaper price than conventional businesses will lead to increased PU. Moreover, companies having both online and brickand-mortar stores, the latter of which would want to expand their online presence, may provide special discounts for purchases made via the former. To take this idea even further, several online retailers provide "online-exclusive" products to boost the prestige of their service. Furthermore, it is anticipated that reducing the amount of clicks required to complete an online purchase would boost PU. It's possible that e-commerce companies in Jordan may lobby the government there to improve people's impressions of online buying. A positive PU may be achieved, for instance, by lobbying the Jordanian government to lower taxes on items available only online. Last but not least, the author suggests that online stores create a FAQs page that addresses any and all issues and concerns a customer could have. Also, given that the customer lacks the ability to try out the product for themselves, comprehensive product descriptions are needed. Below is a graphic that summarizes the study's suggestions for online stores to implement.

Important theoretical and practical ramifications of this investigation are discussed. It has potentially aided the investigation of consumer habits in relation to e-commerce in Jordan. One hundred academic articles from peer-reviewed publications were analyzed in depth. In addition, this study revealed three research gaps that should be investigated by future researchers; these are addressed in the article's final section on recommendations. Based on an analysis of the variables found to have the most impact on consumers' views of online shopping in Jordan, this research offered suggestions to businesses operating in this sector on how they might best encourage a more favorable public perception of their products and services. In addition, it gives foreign online merchants essential data about the evolution of the e-commerce sector in Jordan and the considerations they should make before entering the market. 5.2 Limitations of the Study

A few qualifiers should be made about this research. For starters, there seems to be a dearth of scholarly work dedicated to the issue of internet shopping in Jordan. The bulk of the papers included in this review were published between 2011 and 2022, which may reduce the validity and trustworthiness of the results when compared to studies done between 2017 and 2022. Due to its under-development and slow pace of acceptance, this field of research does not seem to have sparked the interest of many academics. The author relied on scholarly publications to learn about the evolution of the online shopping domain since she could not find any government-conducted research or an up-to-date plan describing the government's growth aim for the industry. Secondary sources were employed to compile the data for this study, therefore it too is based on research. The author thus heavily used the results of prior studies in order to get the intended effects. While it's apparent that secondary data may save time and effort, it's also unprovable how accurate the information it contains really is. The Arabic language also hosts the vast majority of publications on the subject of e-commerce in Jordan. The researcher did not have enough time to examine the research that was only accessible in Arabic since doing so would have required translating all the publications into English. The researcher was able to overcome this obstacle, nevertheless, by making strategic use of high-quality studies published in peer-reviewed publications.

5.2 Suggestions for Future Study

In this piece, the author makes a number of suggestions to potential academics in Jordan who could be interested in investigating e-commerce. One possible improvement would be to include Arabic-language studies, as they may provide light on issues that have not been well investigated in English-language research. Additionally, the purpose of this research was exploratory, with the end goal of illuminating the elements affecting Jordanian consumers' perspectives on internet retail. In the

future, researchers may reduce their emphasis by selecting only one or two factors. Also, owing to time restrictions, primary data gathering was not a part of this study. Future researchers, however, should try to collect primary data if they want to bring anything new to the field of study of internet shopping in Jordan, where there is now a dearth of ground-breaking studies. When researchers collect primary data, they have greater say over the information collected, which may improve the accuracy of their conclusions. Researchers may get a clearer understanding of Jordan's online shopping adoption by conducting indepth interviews with online retailers to collect statistics on the number of website visits, conversion rates, and abandonment rates. Understanding the causes behind the decline of online shopping in Jordan would benefit greatly from the use of primary data. Other characteristics, such as convenience, service quality, accuracy, and reasonable prices, may be employed in future study to get a deeper understanding of the online grocery shopping behavior of customers in emerging nations. In order to discover external elements, qualitative research is also recommended to identify unknown variables.

6. Conclusion

In conclusion, the goal of this analysis was to pinpoint the variables that most significantly affect Jordanian customers' perceptions of the advantages and disadvantages of online shopping. In addition, the researcher sought to understand how the online shopping industry in Jordan was developing at the time and provide online retailers advice on how to get more Jordanians to use the internet for shopping. The internet shopping industry would flourish as a result of this. The study set out to comprehend Jordan's existing level of internet shopping development. The primary driving force for choosing this subject is the current COVID19 epidemic. This pandemic is prompting consumers to switch from conventional shopping methods to internet shopping. While the pandemic is still going on, many companies without an internet presence cannot contact their customers. They are suffering quite serious financial losses as a direct consequence of this. If businesses want to survive these remarkable times and be prepared for whatever the future may hold, they must have a strong online presence. But for this to happen, a thorough analysis of the factors influencing consumers' views about online shopping is required. To accomplish the goals and objectives of this study, the author also conducted a thorough literature review. Using an inclusion/exclusion criteria, 100 recent, relevant, and reputable papers were selected for this review, which was followed by data extraction and analysis. The results of earlier studies were collated and organized into topics; in this instance, the themes related to the present stage of growth of the online shopping domain in Jordan as well as recurrent elements impacting consumer attitudes about online shopping. In addition, the topics were organized into groups based on the conclusions of earlier studies. The main elements that affect people's views regarding internet shopping in Jordan were found by this research. These include perceived trust, a sociocultural factor that was strongly related to security (technological factors); cultural barriers specific to Jordanian culture, such as uncertainty avoidance and a lack of knowledge about the advantages of online shopping platforms and consumer protection laws; and perceived website usability (technological factors). Additionally, despite the fact that more and more individuals in Jordan have access to the internet, research shows that the country's online retail business is still developing. The author also offered other helpful tips for online stores. These items of advice included, but weren't limited to, the following: offering a range of payment choices; creating a straightforward and user-friendly website; marketing "online-exclusive" goods; and having a clear privacy policy. Existing online retailers may use this research to increase their online presence, conventional stores may use it to make the switch to digitalization, and foreign retailers may use it to diversify their market position in Jordan. The results of this study also highlighted a number of gaps in prior research, including the dearth of studies examining the influence of demographic variations on opinions about online shopping in Jordan and the role of the Jordanian government in promoting online retail platforms.

Acknowledgements

The authors are grateful to American University in the Emirates (AUE), Mutah University, Middle East University (MEU), Amman, Jordan, Applied Science Private University, Jordan, Applied Science University (ASU), Bahrain for the financial support granted to cover the publication fee of this article.

References

- Abu-AlSondos, I. A., & Salameh, A. (2020). The effect of system quality and service quality toward using m-commerce service, based on consumer perspective. *Management Science Letters*, 10(11), 2589-2596.
- Abbad, M., Abbad, R., & Saleh, M. (2011). Limitations of e-commerce in developing countries: Jordan case. *Education, Business and Society: Contemporary Middle Eastern Issues*.
- Abu-Shamaa, R., Abu-Shanab, E., & Khasawneh, R. (2016). Payment methods and purchase intention from online stores: An empirical study in Jordan. *International Journal of E-Business Research (IJEBR)*, 12(2), 31-44.
- Akroush, M. N., & Al-Debei, M. M. (2015). An integrated model of factors affecting consumer attitudes towards online shopping. *Business Process Management Journal*, 21(6), 1353-1376.
- Al-Adwan, A. S., Alrousan, M., Al-Soud, A., & Al-Yaseen, H. (2019). Revealing the black box of shifting from electronic commerce to mobile commerce: The case of Jordan. *Journal of Theoretical and Applied Electronic Commerce Research*, 14(1), 51-67.
- Almajali, D. A. (2022). Determinants of Online Behavior Among Jordanian Consumers: An Empirical Study of OpenSooq. *Interdisciplinary Journal of Information, Knowledge, and Management, 17*, 339-359.

- Almajali, D. A., & Hammouri, Q. (2021). Predictors of Online Shopping During Covid-19 Pandemic in Developing Country: Qualitative Analysis. *Annals of the Romanian Society for Cell Biology*, 25(6), 12970-12977.
- Almajali, D., & AL-Sous, N. (2021). Antecedents of online shopping behavior amidst fear of Covid-19 Pandemic in Jordan: An Empirical study. *International Journal of Data and Network Science*, 5(4), 837-846.
- Al-Ma'aitah, M. A., & Al-Hashem, A. O. (2019). The role of e-trust in achieving e-loyalty: an exploratory study on Jordanian customers using shopping websites. *Journal of Theoretical and Applied Information Technology*, 97(5).
- Al Kailani, M., & Kumar, R. (2011). Investigating uncertainty avoidance and perceived risk for impacting Internet buying: A study in three national cultures. *International Journal of Business and Management*, 6(5), 76.
- Alawadhi, J., AlJanabi, A. M., Khder, M. A., Ali, B. J., & Al-Shalabi, R. F. (2022). *Internet of Things (IoT) Security Risks: Challenges for Business*. Paper presented at the 2022 ASU International Conference in Emerging Technologies for Sustainability and Intelligent Systems (ICETSIS).
- Alawamleh, H. A., ALShibly, M. H. A.-a., Tommalieh, A. F. A., Al-Qaryouti, M. Q. H., & Ali, B. J. (2021). The Challenges, Barriers And Advantages Of Management Information System Development: Comprehensive Review. Academy of Strategic Management Journal, 20(5), 1-8.
- AlDebei, M. M., Akroush, M. N., & Ashouri, M. I. (2016). Consumer attitudes towards online shopping: The effects of trust, perceived benefits, and perceived web quality. *Internet Research*, 25(5), 707-733.
- Alhaimer, R. (2022). Fluctuating attitudes and behaviors of customers toward online shopping in times of emergency: The case of Kuwait during the COVID-19 pandemic. *Journal of Internet Commerce*, 21(1), 26-50.
- Ali, B., & Omar, W. (2016). Relationship between E-Banking Service Quality and Customer Satisfaction in Commercial Banks in Jordan. *American Based Research Journal, December*, 5(12), 34-42.
- Ali, B. J., Alawamleh, H. A., Allahham, M. I. O., Alsaraireh, J. M., AL-Zyadat, A., & badadwa, A. a. h. (2022). Integration of Supply Chains and Operational Performance: The Moderating Effects of Knowledge. *Information Sciences Letters*, 11(04), 1069-1076.
- Ali, B. J., & Oudat, M. S. (2021). Accounting Information System And Financial Sustainability Of Commercial And Islamic Banks: A Review Of The Literature. *Journal of Management Information & Decision Sciences*, 24(5), 1-17.
- Alkhodary, D., Abu-AlSondos, I. A., Ali, B. J., Shehadeh, M., & Salhab, H. A. (2022). Visitor Management System Design and Implementation during the Covid-19 Pandemic. *Information Sciences Letters*, 11(04).
- ALNawaiseh, K. H., Hamzeh, A. A., Al Shibly, M., Almari, M. O., AbuOrabi, T. G. A. O., Jerisat, R. R. a. A., Basel J. A., & badadwa, A. a. (2022). The Relationship Between the Enterprise Resource Planning System and Maintenance Planning System: An Empirical Study. *Information Sciences Letters*, 11(5), 1-11
- Alqaraleh, M. H., Almari, M. O. S., Ali, B. J., & Oudat, M. S. (2022). The Mediating Role of Organizational Culture On the Relationship Between Information Technology and Internal Audit Effectiveness. *Corporate Governance and Organizational Behavior Review*, 6(1).
- Alrabei, A. M., Al-Othman, L. N., Al-Dalabih, F. A., Taber, T. A., & Ali, B. J. (2022). The Impact of Mobile Payment on the Financial Inclusion Rates. *Information Sciences Letters*, 11(4), 1033-1044.
- Alsmadi, S. (2002). Consumer attitudes towards online shopping in Jordan: Opportunities and challenges. Paper presented at the The 1st Marketing Conference, UAE.
- AlSondos, I., & Salameh, A. (2020). The effect of system quality and service quality toward using m-commerce service, based on consumer perspective. *Management Science Letters*, 10(11), 2589-2596.
- Alsoud, M. A., & bin Lebai Othman, I. (2018). Factors influencing online shopping intention in Jordan: an empirical study based on the Tam model. *International Journal of Current Innovations in Advanced Research*, 1(6), 1-13.
- Altarifi, S., Al-Hawary, S. I. S., & Al Sakkal, M. E. E. (2015). Determinants of E-Shopping and its effect on consumer purchasing decision in Jordan. *International Journal of Business and Social Science*, 6(1).
- Aryani, D. N., Nair, R. K., Hoo, D. X. Y., Hung, D. K. M., Lim, D. H. R., Chew, W. P., & Desai, A. (2021). A study on consumer behaviour: Transition from traditional shopping to online shopping during the COVID-19 pandemic. *International Journal of Applied Business and International Management (IJABIM)*, 6(2), 81-95.
- Ayaz, A., & Yanartaş, M. (2020). An analysis on the unified theory of acceptance and use of technology theory (UTAUT): Acceptance of electronic document management system (EDMS). *Computers in Human Behavior Reports*, 2, 100032.
- Belkhamza, Z., & Wafa, S. A. (2014). The role of uncertainty avoidance on e-commerce acceptance across cultures. *International Business Research*, 7(5), 166.
- Bidkar, S. (2019). Paradigm shift in e-commerce-a case study of amazon. Sumedha Journal of Management, 8(3), 445-452.
- Bonfrer, A., Chintagunta, P., & Dhar, S. (2022). Retail store formats, competition and shopper behavior: A Systematic review. *Journal of Retailing*.
- Bougie, R., & Sekaran, U. (2019). Research methods for business: A skill building approach: John Wiley & Sons.
- Celik, H. (2016). Customer online shopping anxiety within the Unified Theory of Acceptance and Use Technology (UTAUT) framework. *Asia Pacific journal of Marketing and logistics*, 28(2).
- Chetioui, Y., Lebdaoui, H., & Chetioui, H. (2020). Factors influencing consumer attitudes toward online shopping: the mediating effect of trust. *EuroMed Journal of Business*.
- Cho, Y. C., & Sagynov, E. (2015). Exploring factors that affect usefulness, ease of use, trust, and purchase intention in the online environment. *International journal of management & information systems*, 19(1), 21-36.
- Conner, M. (2020). Theory of planned behavior. *Handbook of sport psychology*, 1-18.

- Conner, M., & Armitage, C. J. (1998). Extending the theory of planned behavior: A review and avenues for further research. *Journal of applied social psychology*, 28(15), 1429-1464.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 13(3), 319-340.
- Erkan, I., & Evans, C. (2018). Social media or shopping websites? The influence of eWOM on consumers' online purchase intentions. *Journal of Marketing Communications*, 24(6), 617-632.
- Giao, H., Vuong, B., & Quan, T. (2020). The influence of website quality on consumer's e-loyalty through the mediating role of e-trust and e-satisfaction: An evidence from online shopping in Vietnam. *Uncertain Supply Chain Management*, 8(2), 351-370
- Halaweh, M. (2011). Adoption of e-commerce in Jordan: Understanding the security challenge. *The Electronic Journal of Information Systems in Developing Countries*, 47(1), 1-13.
- Harban, F. J. M. J., Ali, B. J. A., & Oudat, M. S. (2021). The Effect of Financial Risks on the Financial Performance of Banks listed on Bahrain Bourse: An Empirical Study. *Information Sciences Letters*, 10(S1), 71-89.
- Issa, T., Alqahtani, S. G. B., Al-Oqily, I., Goktalay, S. B., Köse, U., Issa, T., . . . Almufaraj, W. K. (2021). Use of social networking in the Middle East: student perspectives in higher education. *Heliyon*, 7(4), e06676.
- Jawabreh, O., Jahmani, A., Shukri, M. B., & Ali, B. J. A. (2022). Evaluation of The Contents of the Five Stars Hotel Website and Customer Orientation. *Information Sciences Letters*, 11(4), 1077-1085.
- Jawabreh, O., Shniekat, N., Saleh, M. M. A., & Ali, B. J. (2022). The Strategic Deployment of Information Systems Attributes and Financial Performance in The Hospitality Industry. *Information Sciences Letters*, 11(5).
- Kahttab, S. A., Al-Manasra, E. A., Zaid, M. K. S. A., & Qutaishat, F. T. (2012). Individualist, collectivist and gender moderated differences toward online purchase intentions in Jordan. *International Business Research*, 5(8), 85.
- Lukonga, I. (2021). Fintech and the real economy: Lessons from the Middle East, North Africa, Afghanistan, and Pakistan (MENAP) region *The Palgrave Handbook of FinTech and Blockchain* (pp. 187-214): Springer.
- Ma, Q., & Liu, L. (2004). The technology acceptance model: A meta-analysis of empirical findings. *Journal of Organizational and End User Computing (JOEUC)*, 16(1), 59-72.
- Makhitha. (2017). Challenges affecting small craft producer business growth and survival in South Africa. *Journal of Business and Retail Management Research*, 11(3).
- Makhitha, K. M., & Ngobeni, K. (2021). The influence of demographic factors on perceived risks affecting attitude towards online shopping. *South African Journal of Information Management*, 23(1), 1-9.
- Masoud, E. Y. (2013). The effect of perceived risk on online shopping in Jordan. European Journal of Business and Management, 5(6), 76-87.
- Melnikovas, A. (2018). Towards an explicit research methodology: Adapting research onion model for futures studies. *Journal of futures Studies*, 23(2), 29-44.
- Melović, B., Šehović, D., Karadžić, V., Dabić, M., & Ćirović, D. (2021). Determinants of Millennials' behavior in online shopping–Implications on consumers' satisfaction and e-business development. *Technology in society, 65*, 101561.
- Moh'd Al-Dwairi, R., & Al Azzam, M. (2021). Influences and Intention of Consumer's Online Shopping Decision: Jordan as a Case Research Anthology on E-Commerce Adoption, Models, and Applications for Modern Business (pp. 143-158): IGI Global.
- Nabot, A., Omar, F., & Almousa, M. (2021). Perceptions of Smartphone Users Acceptance and Adoption of Mobile Commerce (MC) The Case of Jordan. *arXiv* preprint arXiv:2101.01401.
- Nawaz, N., & Alajmi, W. Y. A. (2014). A study on Consumer preferences for E shopping with reference to Bahraini Consumers. *European Journal of Business and Management ISSN*, 6(29), 2222-1905.
- Ratten, V. (2014). A US-China comparative study of cloud computing adoption behavior: The role of consumer innovativeness, performance expectations and social influence. *Journal of Entrepreneurship in Emerging Economies*, 6(1), 53-71.
- Salameh, A., AlSondos, I. A., Ali, B., & Alsahali, A. (2020). From Citizens Overview: Which Antecedents' Can Assist to Increase Their Satisfaction Towards the Ubiquity of Mobile Commerce Applications? *International Journal of Interactive Mobile Technologies*, 14(17), 45-55.
- Saleh, Z. I. (2015). Factors Affecting the Growth of E-Commerce in Jordan. International Journal in Management & Social Science, 3(5), 104-117.
- Sari, R. K., Utama, S. P., & Zairina, A. (2021). The Effect of Online Shopping and E-Wallet on Consumer Impulse Buying. APMBA (Asia Pacific Management and Business Application), 9(3), 231-242.
- Shanthi, R., & Desti, K. (2015). Consumers' perception on online shopping. *Journal of Marketing and Consumer Research*, 13, 14-21.
- Shibly, M., Alawamleh, H. A., Nawaiseh, K. A., Ali, B. J., Almasri, A., & Alshibly, E. (2021). The Relationship between Administrative Empowerment and Continuous Improvement: An Empirical Study. *Revista Geintec-Gestao Inovacao E Tecnologias*, 11(2), 1681-1699.
- Shniekat, N., AL_Abdallat, W., Al-Hussein, M., & Ali, B. (2022). Influence of Management Information System Dimensions on Institutional Performance. *Information Sciences Letters*, 11(5), 435-1443.
- Stafford, T. F., Turan, A. H., & Khasawneh, A. M. (2006). Middle-East. Com: diffusion of the internet and online shopping in Jordan and Turkey. *Journal of Global Information Technology Management*, 9(3), 43-61.

- Suleman, D., & Zuniarti, I. (2019). Consumer decisions toward fashion product shopping in Indonesia: The effects of attitude, perception of ease of use, usefulness, and trust. *Management Dynamics in the Knowledge Economy*, 7(2), 133-146.
- Tahar, A., Riyadh, H. A., Sofyani, H., & Purnomo, W. E. (2020). Perceived ease of use, perceived usefulness, perceived security and intention to use e-filing: The role of technology readiness. *The Journal of Asian Finance, Economics and Business*, 7(9), 537-547.
- Taufan, Y. A., & Magnadi, R. H. (2017). Pengaruh Perceived Usefulness, Perceived Ease of Use, Security and Privacy, Dan Information Quality Terhadap Intention to Use Kartu Semarang Hebat Tapcash (Studi Kasus Di BRT Trans Semarang). UNDIP: Fakultas Ekonomika dan Bisnis.
- Thuneibat, N. S. M., Ali, B. J., Alqaraleh, M. H., & Thneibat, H. (2022). The Mediating Role of Innovation On the Relationship Between Information Technologies and Reducing Tax Evasion. *Information Sciences Letters*, 11(2), 13-23.
- Tsafnat, G., Glasziou, P., Choong, M. K., Dunn, A., Galgani, F., & Coiera, E. (2014). Systematic review automation technologies. *Systematic reviews*, 3(1), 1-15.
- Walmsley, T., Rose, A., & Wei, D. (2021). The Impacts of the Coronavirus on the Economy of the United States. *Economics of disasters and climate change*, 5(1), 1-52.
- Warganegara, D. L., & Babolian Hendijani, R. (2022). Factors that drive actual purchasing of groceries through e-commerce platforms during COVID-19 in Indonesia. *Sustainability*, 14(6), 3235.
- Williams, M. D., Rana, N. P., & Dwivedi, Y. K. (2015). The unified theory of acceptance and use of technology (UTAUT): a literature review. *Journal of enterprise information management*.
- Yaseen, H., Dingley, K., & Adams, C. (2016). Capturing the growth of e-commerce in Jordan using a novel research approach. *International Journal of Management and Commerce Innovations*, 3(2), 811-827.
- Zeglat, D., & Alzawahreh, A. (2012). The importance of trust and security issues in e-commerce adoption in the Arab World. European Journal of Economics, Finance and Administrative Sciences, 52, 172-178.

Appendix

Relevancy/reliability assessments were done on studies:

Table A1Appraisal of the relevance and reliability of the existing literature

Authors' studies	Relevancy	Reliability	In the scope of this study?
(Alsmadi, 2002)	Relevant	Unreliable	No
(Stafford, Turan, & Khasawneh, 2006)	Relevant	Unreliable	No
(Altarifi et al., 2015)	Relevant	Reliable	Yes
(Giao et al., 2020)	Relevant	Unreliable	No
(Akroush & Al-Debei, 2015)	Relevant	Reliable	Yes
(AlDebei et al., 2016)	Relevant	Reliable	Yes
(Masoud, 2013)	Relevant	Reliable	Yes
(Saleh, 2015)	Relevant	Reliable	Yes
(Nabot et al., 2021)	Relevant	Reliable	Yes
(Abu-Shamaa et al., 2016)	Relevant	Unreliable	No
(Yaseen et al., 2016)	Relevant	Unreliable	No
(Yaseen et al., 2016)	Relevant	Reliable	Yes
(AlSondos & Salameh, 2020)	Relevant	Reliable	Yes
(Ma & Liu, 2004)	Relevant	Reliable	Yes
(Alsmadi, 2002)	Relevant	Reliable	Yes
(Moh'd Al-Dwairi & Al Azzam, 2021)	Relevant	Reliable	Yes
(Ayaz & Yanartaş, 2020)	Relevant	Unreliable	No
(Alsoud & bin Lebai Othman, 2018)	Relevant	Reliable	Yes
(Abbad et al., 2011)	Relevant	Reliable	Yes
(Al Kailani & Kumar, 2011)	Relevant	Reliable	Yes
(Kahttab et al., 2012)	Relevant	Reliable	Yes
(Yaseen et al., 2016)	Relevant	Reliable	Yes
(Halaweh, 2011)	Relevant	Reliable	Yes
(Nabot et al., 2021)	Relevant	Reliable	Yes
(Abu-Shamaa et al., 2016)	Relevant	Reliable	Yes
(Erkan & Evans, 2018)	Relevant	Reliable	Yes



© 2023 by the authors; licensee Growing Science, Canada. This is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY). license (http://creativecommons.org/licenses/by/4.0/).