

**The effect of e-payment and online shopping on sales growth: Evidence from banking industry****Haitham M. Alzoubi<sup>a</sup>, Muhammad Turki Alshurideh<sup>b,c\*</sup>, Barween Al Kurdi<sup>d</sup>, Khaled M.K. Alhyasat<sup>e</sup> and Taher M. Ghazal<sup>f,g</sup>**<sup>a</sup>*School of Business, Skyline University College, Sharjah, UAE.*<sup>b</sup>*Department of Marketing, School of Business, The University of Jordan, Amman 11942, Jordan*<sup>c</sup>*Department of Management, College of Business, University of Sharjah, Sharjah 27272, United Arab Emirates*<sup>d</sup>*Department of Marketing, Faculty of Economics and Administrative Sciences, The Hashemite University, Zarqa, Jordan.*<sup>e</sup>*Abu Dhabi University, Abu Dhabi, UAE.*<sup>f</sup>*Center for Cyber Security, Faculty of Information Science and Technology, Universiti Kebangsaan Malaysia (UKM), 43600 Bangi, Selangor, Malaysia*<sup>g</sup>*School of Information Technology, Skyline University College, University City Sharjah, 1797, Sharjah, UAE.***CHRONICLE****ABSTRACT***Article history:*

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Transforming from digitalization to digitization brings many new technologies to restructure our life and life routines. In today's competitive world, internet infrastructures and banking industries are counted as integral components for online shopping and commercial transactions. As because, disclosure of online transactions has been allowed through internet media, that would enhance the availability of electronic payment systems. Further, this study aims to explore and investigate the relationship and impact of electronic payment methods on the sales growth with the mediating role of online shopping by targeting UAE banking Industry. This study followed the quantitative approach and a correlational design. The empirical data were collected through a survey designed on a 5-point Likert scale, 217 valid questionnaires were sent to all participants (i.e., top managers, middle managers and technicians) via emails. Different statistical analyses were performed in this study. The results of the study showed high internal consistency among the study variables as Cronbach's Alpha values ranged from .873 to .855. Further, this study highlighted the significant relationship and direct impact between online shopping and sales growth. Meanwhile, indirect impact was confirmed by the results between online shopping and sales growth through e-payment. In this regard, results can help to identify the impact of e-payment on sales growth through online shopping and also provide advantage for this and many other similar organizational studies.

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**1. Introduction**

In recent years, the increasing development of communication as well as information technology has changed human life (Alshurideh et al., 2014). These technologies have a great impact on human society and also influence on social events and behaviors (Roozbahani, Hojjati, & Azad, 2015). One of the most crucial achievements is online shopping that has been opted widely across the globe (Mashaqi et al., 2020; Shi, Shao, De Vos, & Witlox, 2021). In these perspectives, the way of shopping in the markets has been changed in online shopping. According to a literature survey, e-retail sales reached approximately US \$3 trillion in 2018. Many People up-raise the dependence on E-shopping and become E-shopper as well due to widespread of the COVID-19 pandemic across the globe (Rothengatter et al., 2021). For this means, the banking industry is counted as one of the most fundamental industries that recruit e-payment for financial transactions, as a convenience and fast transaction. Hence, e-payment is recognized as the important part of e-commerce without which ecommerce cannot be completed (Chavosh, Halimi, & Espahbodi, 2011). E-commerce is an E-payment method that buys and sells products. It transfers the

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information, data and money regarding the commercial payments via the internet. Essentially e-commerce allows the purchasing and selling of physical goods via online platforms, which makes payment easy for businessmen and customers. Who can buy and sell anywhere at any time (Neger & Uddin, 2020; Al-Khayyal et al., 2021). However, it does not matter what they have in stores that they are offering. All of them should follow the same rule that makes customers feel safe while they shop online, because related to the goods quality, e-commerce would not exist without customers trust (Strzelecki & Rizun, 2020). The extensively used e-payment technologies for e-payment are Point of Sale (POS) Technology, Automatic Teller Machine (ATM), Online Money Payment (WEB) and Mobile Money Transfer (MMT) Technology (Alshurideh, 2016; Mustapha, 2018; Alshurideh et al., 2020).

Apart from the huge benefit, online payment systems are facing some challenges, which measures security countermeasures in a preliminary stage regarding all the issues that are faced during the payment method. There are various effective and efficient payment systems that are declining the cost of exchange products and services. Increase in the procedure of online payment for the purpose of online shopping is increasing the rate of sales as this method is very effective for the people to save time and is the convenient way of making any payment and shopping.

## **2. Literature review and theoretical conceptualization**

The online transaction has been coming towards light due to availability of e-payment systems and internet media. Moreover, the theoretical constructs and conceptualization provides the opportunity for the information and services on the internet and to buy and sell products. Many theoretical conceptualizations i.e., Commerce and online payment systems, Technology acceptance Model (TAM), Theory of reasoned action (TRA) etc. (Özkan, Bindusara, & Hackney, 2010). In this context the theory of reasoned action (TRA) model has been reported to highlight the adoption of e-payment systems in more effective ways. While the Technology acceptance model (TAM) was a secondary model and derived from the primary TRA model. In addition, TAM predicts and identifies user acceptance credit in advance before the dealings. It is confirmed from literature and analysis that the adoption of e-payment systems has a note-able effect to facilitate online transactions. Further, some research findings suggest that the e-payment system is a main e-commerce activity. These can also be categorized according to the customer requirements. However, the online transaction methods i.e. debit/credit cards seem to be the most approved and suite-able ways (Khosrow-Pour, 2008). Theoretically, biometrics and credit card authentication provide evidence for the importance of the customers' concerns, beliefs and perceptions in the use of biometrics for e-payment (Ogbanufe & Kim, 2018). In this context different research studies revealed that consumers have mostly used e-payment systems to carry out banking and online shopping. In this regard many critical factors that customers recognize as important for e-payment modifications including trust, perceived advantage, assurance seals, security, usability and perceived risk were counted most important (Featherman & Pavlou, 2003).

### *2.1 Effective e-Payment Transactions*

E-payment plays an effective role in the transaction process in today's world business. It is because of its timeliness, efficiency and convenience (Kabir, Saidin, & Ahmi, 2015). Moreover, the e-payment system includes different electronic modes of payments by which financial institutions offer many e-payment services and opportunities to their customers such as the debit cards, mobile banking, credit cards and on-line banking system (Premchand & Choudhry, 2015). In addition, many verifiable studies have also revealed the e-payment systems with some investigating factors that affect its uses and adoption. The lack of an efficient way may hinder the success rate of e-commerce development. However, the rapid changing growth of the internet has activated the need for e-payment processes which are more pertinent for the web over conventional payment processes. In this regard e-payment are coming towards light to be a crucial component that contributed towards the success of e-commerce transactions. Moreover, for effective e-payment transactions, biometrics authentication is recognized as a convenient, secure way to identify and fastest way to authenticate users for payment (Ogbanufe & Kim, 2018). Although, in literature it has also been reported that novel e-payment have not been more effective in taking over totally traditional payments due to some kind of flaws. Consequently, traditional payments are still recognized to be standard. In order to minimize these issues, e-payment designers have to pay attention towards some critical factors, which consumers recognize as fundamental to be included in such types of transactions. Such factors are included as usability of the websites, perceived risk, usage of web assurance seals, trust, security and perceived advantage (Özkan et al., 2010).

### *2.2 Effective Online Shopping Process*

The Internet is recognized as a new marketing channel to understand the needs and desires of online customers or avoid undesired outcomes. The modest role of online shopping is to avoid risks and pursue benefits in the online shopping process. Further, the increasing demand of online shopping depends more on post-adoption processes for purchasing a wide range of products over initial adoption. The internet usage for online shopping is not a one time decision or neither need it include all processes of the decision process (Liu & Forsythe, 2010; Al-Dmour et al., 2021a). Online customers make use of the internet and search vehicles because of its power as an information. Customers looking for the value through the shopping process. Consequently, usefulness is a remarkable criterion for consumers to pursue the shopping channel. In view of this, these beliefs reflect shopping benefits from an online channel over other alternative shopping channels that may not be available on them. In online channels customers select different retail channels which meet their desires and expectations on shopping motives and has strong usefulness over local channels in terms of obtaining alternative product comparisons and product

information. Purchasing online may also provide authentic and original products that may not be available from other channels. Further some other benefits may also be achieved in online shopping including broad product selection, availability, less physical efforts and convenience (Liu, 2004).

### *2.3 Sales Growth*

Sales growth has been increased by the online purchasing system. In the context of online shopping Customers might choose a specific service or product because it may express their social status or personality to satisfy their psychological needs. Sales growth may be affected from these major concerns that improves the sale growth including greater opportunity to cross sell and increased higher consumer conversion rates, customer loyalty and trust (Cao & Li, 2015; Alshurideh et al., 2020; Alzoubi et al., 2020). By taking into consideration these concerns retailers can minimize the deficiencies and find the benefits of safe shopping experience and to create an appeal for consumers. The cross-channel integration may enable the customers to collect huge information as they want or desire in a more convenient way. However, it effectively reduces the suitable information as perceived by consumers. For instance, consumers can access broad assortments and compare rates among all retailer's website, and then after decision making use "click-to-call" services to attain more interactive advice from its call center (Zhang et al., 2010). Then after, coordinated marketing programs would reduce the confusions of consumers and may lead to increased sales growth.

### *2.4 Relationship and Impact of E-payment in Improving Sales Growth*

As opined by Gupta and Yadav (2017), Electronic payment method in the retail sector is increasing in the recent years and it objectifies promoting of electronic payments proactively. The formation of the online payment corporation in recent years is developing the opportunity in increasing cashless transactions and anonymously increases the access in contributing to NCPI. Check, Huiskamp, & Malinowski (2014), illustrated that driving various forces are developing the national payment systems and are developing various steps for the safe, efficient and authorized payment system across the world. Some initiatives are taken by banks that focus on the technological based solutions and improving settling of advancements through checks and various cost effective alternative systems (Goswami & Sinha, 2019).

#### *Online payment analysis on E-commerce*

According to Yang (2017), this analysis reveals the rapid development of the network technology with respect to the increase in the business of E-commerce. Making online payment is becoming a routine part of the daily lives of the customers in paying the bills and ordering some important things from the online sites (Pencarelli, Škerháčková, Ali Taha, & Valentiny, 2018), stated that E-Commerce and online payment system is the important part of the lives, these systems are contributing convenience in purchasing and billing of any requirements. This also increases the cybercrime with the environment of the online payment procedures. There are various methods of making online payments such as net banking, Google wallet, Amazon payment, IMPS and NEFT all these are providing secured payment gateways that are user friendly and are consuming less time that are helping the expansion of business in market reach.

#### *Challenges and security aspects in surveying about E payment systems*

As opined by Wong (2019), this research analysis is determining the increase in awareness regarding the concepts of the electronic payment systems that are the advantageous and adoption of these is impacting on the economy of the nation. From the analysis it is elucidated that despite various issues and challenges faced by the customers on behalf of the electronic payment system, they identified some of the positive steps in the developmental aspects of the economic market. Kurup and Jain (2018) illustrated that rising of awareness among various people will realize the potentiality in the advancement of the technological aspect and gaining of popularity in the internet in gaining of momentum. Electronic payment methods are providing various offers in recent times, and it will reduce its trend and its benefit in the future prospects (Alahurideh et al., 2021). Globalizations in today's world technological endeavors are expanding the skyline payments in accessing faster transfers of the funds. This carries the execution of e payment framework and dealing with all the financial transactions and blurring out of the cashless economy (Masihuddin, Khan, Mattoo, & Olanrewaju, 2017).

#### *Development of the online payment system in present and in future consideration*

As opined by Khan et al. (2017), the growth of E-Commerce and online payments are increasing by promoting the digitalization factors such as electronic cash, contactless payments, debit cards, credit cards, mobile wallets and many more factors. All these frameworks of the electronic payment methods and E-commerce are gaining popularity on a daily basis and are also improving the future speculations. As opined by Xena and Rahadi (2019), these effective procedures represent customer satisfaction with respect to purchasing of any products and services from the various online sites and choosing the best among various options and making instant payments (Alshurideh, 2022; Alzoubi et al., 2021; Alzoubi et al., 2022). Paying various billing items such as phone bills, electricity bills, paying of rent and many more aspects are beneficial aspects for each and every individual (Al-Dmour et al., 2021b).

### *E-Commerce trend and payment challenges*

This analysis determines all the commercial transactions in order to encompass exchange information regarding payments and transferring of funds to the other parties. Enabling e-commerce transactions on the international basis detects the payments beyond the web front end and also considers the back-office operations. Security is one of the main concerns regarding the with respect to any new invention of the technological aspect. This security is based on the present scenario regarding sharing of various data and information through any of the technological aspects. Exposure of these information's and data theft are some of the important concerns that can be stolen and can be used for any fraud purposes. This is the growing concern of the people regarding the online transactions from the online enforcers (Check et al., 2014; Obeidat et al., 2019).

Based on the above arguments, we develop the following supporting hypothesis

**H<sub>01</sub>:** *e-Payment has no statistical impact on Sales Growth at Banking Industry in UAE at ( $\alpha \leq 0.05$ ) level.*

### *2.5 Relationship and Impact of Online Shopping in Improving Sales Growth*

The emerging economy from retailers, recession, increased challenges by customers, fragment markets and intensified competition day by day on a global level. With the concern of all these problems online retailing has a fundamental effect to take a leading role in the increasingly digitized marketplace at global level by providing information-rich retail service, customer-controlled and also location-free. Further, e-payment plays a major role, to increase the customer experiences by online shopping and also to enhance the interactions with e-commerce technology (Bilgihan, Kandampully, & Zhang, 2016). The winning and strategic decision related to customer experience with an online retailer comprises multiple factors such as social environment, and involvement of consumer level and online retail atmosphere. To attain an experience-based differentiation and to determine experiential dimensions are basics constituents for improving web site features and tailer's bottom-line functions that should also enhance these experiences. Further, from literature we concluded that different steps by which cross-channel enhance sales growth of online shopping is to improve i.e., trust, the loss of special channel features higher consumer conversion rates and increased customer loyalty and greater opportunities to crosssell recruitment. Based on the above arguments, we develop the following supporting hypothesis

**H<sub>02</sub>:** *Online Shopping has no statistical impact on Sales Growth Banking Industry in UAE at ( $\alpha \leq 0.05$ ) level.*

### *2.6 Relationship and Impact of e-Payment in Enhancing Online Shopping Process*

The impulsive purchase, behavior control effect and e-payment affect the payment in E-commerce (Halim, Januardin, & Hebrard, 2020). The customer can find which product is ascribed to trade off, by searching on the Internet media, and can purchase more firstly the right product (Alshurideh et al., 2021; Hanaysha et al., 2021). It is a very convenient way for the individual to purchase desired things online by paying through E-cards i.e., debit cards etc. (Pentina et al., 2011; Alshurideh et al., 2021). The Impact of e-payment in enhancing online shopping process also enhances multi-channel shopping experience like the online shopping experience is involve as consumers that increasingly rely on technology enablers, online recommendation engines, their opinion leaders, social connections, to drive their purchase decisions and to use digital devices to enhance and to effective their shopping activities. Through various online shopping experiences customers expect great service on a consistent level, wherever and whenever regardless of the medium they are using for shopping. Furthermore, Online shopping process is shifting to a level where consumers are buying and researching whatever device is best or wherever they may be suited for them (Bilgihan et al., 2016).

Based on the above arguments, we develop the following supporting hypothesis

**H<sub>03</sub>:** *e-Payment has no statistical impact on Online Shopping in the Banking Industry in UAE at ( $\alpha \leq 0.05$ ) level.*

### *2.7 Relationship and Impact of e-Payment in Improving Sales Growth through the mediating role of Online Shopping*

The wave of innovative e-payment adoption in the banking system at global level gave a chance to the introduction of credit and debit cards which provides an opportunity for customers to pay shopping bills through e-payment. Moreover, e-payment is recognized as one of the most significant factors by which e-commerce can be done on a global level. Therefore, for implementing different monetary policies payment systems are crucial using the transactions of the money and its influences on economic activities and financial activities (Oyelami, Adebisi, & Adekunle, 2020). In addition, the noticeable sales growth of e-commerce has been noticed by the way that the internet represents a new environment for online shopping by overcoming the ethical issues. In such manners, different respondents acknowledge the online means of payment (e-payment by debit cards) as an important factor for online trading and online retailing activities (Freestone & Mitchell, 2004). This is because e-payment services help the customers by promoting and providing the card acceptance services and also perform other tasks i.e., the acceptance commitment of the customers, and to grant permissions for transactions by requesting and also to provide receipts to customers for online shopping. E-Payment systems gain significant importance especially when monetary transport goods in order by several financial institutes. For that reason, the development of commercial and business deals mainly relies on the effective and efficient means of payment and their infrastructures settlements. From the previous decades the emergence of e-payment is considered as an important technological evolution, on the one side, have created online businesses and social

procedures by extending the e-payment system. Their proper performance in timely and securely transferring money has a great impact on the overall performance of the economic system at country level (Roозbahani et al., 2015).

Based on the above arguments, we develop the following supporting hypothesis

**H<sub>04</sub>:** *e-Payment has no statistical impact on Sales Growth with the mediating effect of Online Shopping at Banking Industry in UAE at ( $\alpha \leq 0.05$ ) level.*

### 2.8 Problem Statement and Research Gap

Recently, a noticeable focus to e-payment on purchasing of online products and services is henceforth increasing the sales growth and it is also helpful in consuming less time. The major factor that is causing the gap among the online shopping or online transaction is the trust. In spite of an increase in the technological aspect in the emerging telecommunication devices there are various risks, and this risk can be fraud, which is the basic problem in the business. Money laundering is another critical area that is disguised as various illegally gained funds. These funds are appearing to be legitimate that are obtained from all the illegal activity that are caused to the customers. Privacy and anonymity, technical problems and cultural problems are also one of the problems that are causing malfunctions, frauds and unavailability of devices at the time of need.

In order to improve the problem of online payment in the aspect of the online shopping perspective, it will increase the sale growth and this requires hindering of the security problems, and increasing the interest on the business, it declines the usage of traditional payment methods. This study is based on the customer's experiences; the study determines the survey of 400 people across the huge population of UAE. It determines the impact that is faced through the online payment methods and online shopping from various sites. In spite of detecting the negative impacts there are some positive responses as well that states it is the easy way of purchasing things and making payments on a timely basis.

### 2.9 UAE Banking Industry

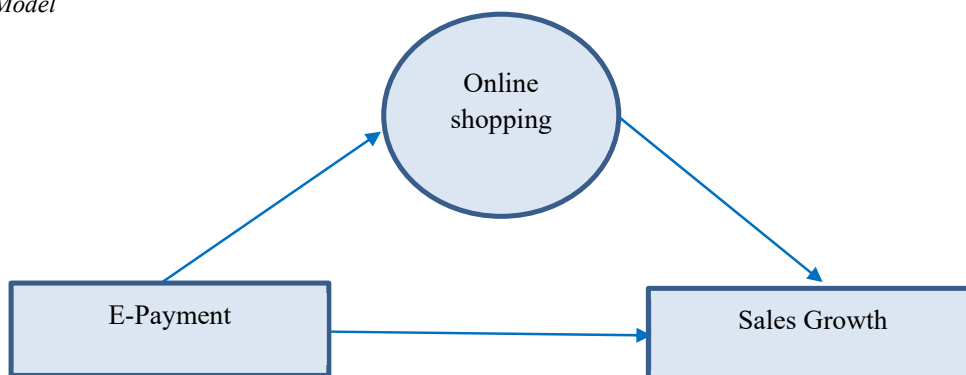
UAE is considered as one of the most emerging economies in west Asia and counted as 35th largest economy in the world. The Internet has become a widely used method in the banking sector for developing and providing services. From a deep literature survey, it is found that in the UAE the number of Internet users is approximately more than 3.78 million in recent decades which represented 76 per cent of the population of the country. The concentration of Internet services in UAE is increasing in banking transactions (Al-Hawari, 2011). There is a lack of the number of studies in the online services context in the UAE and other developing countries. Moreover, Banks are not only competing in the banking context, but have also expanded competition to include the e-environment through Internet banking services. Currently banks are offering online opportunities regarding banking services to gain a competitive advantage and to hold stronger relationships with their customers (Al-Hawari, 2013; Al-Hawari, 2014). The literature survey reveals the evidence for the relationship between e-loyalty, e-satisfaction and e-quality in the context of different services (Al-Hawari, 2014).

## 3. Study design

### 3.1 Construct of the Study

The research analysis focuses on three variables that are proposed to be connecting with each other. e-payment is the independent variable and online shopping is considered to be as a mediating variable, while the dependent variable is the sales growth.

### 3.2 Study Model



**Fig. 1>** Study model proposition

### 3.3 Methodology of the Study

The authors have considered the positivism research philosophy for this topic. Since Positivism philosophy is considered in or to conduct the research effectively. This deals with various models, background information and theories related to the

topic (Sekaran & Bougie, 2016). The study followed the quantitative approach as data has been collected empirically. Statistical tools have been used to analyze the structured survey in order to prove the model validation. The methodology nature follows the deductive approach since we aim to expand the knowledge about the study variables by utilizing all the opportunities and incorporating new models and theories that are completely related to the research topic (Agarwal, 2019). The authors have considered the descriptive and explanatory research design, since; it deals with the descriptions and interpretation of the investigation of the relationship and impact of e-payment on sales growth with the mediating role of online shopping. On the other hand, the research strategy will be the Correlational/Causal strategy because we attempt to establish cause-effect relationships among the variables. A questionnaire has been designed on a 5-points Likert scale to measure the variables and dimensions of the study.

### *3.4 Study Population and Sample*

The Population of the Study is the Banking Industry in the UAE. There are (52) commercial banks, a (22) National, and (30) International working in the UAE. The sampling type is divided into two stages. The first phase the population is divided into two clusters: national banks and international banks. The International banks have chosen to make the population size controllable, and to control the surveying process. The second phase branches divided on cities-base, and the branches of international banks which are located in Dubai have been chosen as the more convenient to the authors. The sample is all branches of the (30) International banks in UAE, which have been chosen as cluster convenience samples. The Unit of analysis considered as the participants were the Top Managers, Middle Managers, and Technicians. The survey was sent to all participants by e-mail. Out of the returned questionnaires, a (217) valid questionnaires were used in the analysis.

## **4. Data analysis**

An e-payment system is the method of making transactions or making payment against any services or goods by certain electronic medium and without engaging cash or checks. This method has been increasingly growing over past decades since the enhanced usage of internet and online-based shopping and banking. The advancement of information technology has enabled people to perform their daily activities in an easy and faster way. Information technology has enabled people to devote less effort and gain more advantages from it. Shopping a few decades earlier; people only used the traditional way of it. However, with the advancement of the internet technology and online banking the businesses are changing their ways and transforming into electronic businesses. In this approach the businesses sell their products and services through websites and receive payment through online payment modes. One such payment mode is the e-payment where people do not need physical cash or checks and need to transact their money through digital means from their bank to merchants. The modern era has been changing its ways and providing ease of processes that human beings perform in their regular life. Traditional purchasing is continued by most of the older people as they are less exposed to the modern technology and modern facilities of these technologies such as online shopping and online banking.

From the quantitative data the result found that mostly the young people are exposed towards modern technology and moved digitally in their regular activities. Most of the young people are engaged in online purchasing. They use the e-payment facilities and online banking facilities. The online shopping and e-payment making trend have been increasing regularly and it further increases the sales growth for the businesses. The businesses of different kinds are moving their trends from traditional approaches towards e-business. Both male and female are the purchaser from online shopping websites and make e-payment along with other options such as credit/ debit cards and traditional cash on delivery methods. The rising trends of online shopping and digitization is increasing the online shopping and e-payment, and this has been increasing the sales growth for the businesses which were not at a higher level during the traditional approach of shopping being used by the people. There are certain issues with online shopping and e-payment. There are no Internet of Things (IoT) devices absolutely free from online threats. This is the only area which is considered while making e-payment. There are other issues related to online shopping such as people have no option to examine the products physically and need to rely on the image representation and the reviews from other customers. Often there are wrong or false reviews given on the websites and people do not trust them at greater manners. Thus, this hinders sales growth. However, things are changing and people are engaging in online shopping and online payments. Electronic payment also enabled people to purchase faster and without much hassle such as devoting time and effort that is required for a traditional shopping. Thus, the e-payment and online shopping facilities are enhancing the sales growth for the businesses. There is a secured payment gateway used for e-payment and people are using this mode as modernization and digitization in the developing and developed countries and by the spread of internet technology.

### *4.1 Demographic Analysis*

The frequencies and percentage of the demographic variables of the study participants are given in the above Table 1. According to the results of this table, 6 participants of the study were male, whereas 211 females participated in this study. The frequency of the age group of the participants below 30 years was 31, 42 number of the participants belonged to the age group of 30-40 years, whereas 63 were marked in the age group of 40-50 years and 81 number of the participants were above 50 years old. In the same way, 64 participants in the current study were supervisors, while 84 were middle managers, and 69 participants reported positions in the company as managers. On the other hand, determining the experience of the participants, it was shown that 89 of the participants had below 5 years of working experience, while 72 had 5-14 years of work experience,

43 had 15-20 years of work experience and just 13 of the total participants reported more than 20 years of work experience. 21% of the participants were diploma holders, 62% of the participants were undergraduate, while just 15% were graduated participants in this study.

**Table 1**  
Respondents Demographic Analysis

<b>Gender</b>				
	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Male	6	2.8	2.8	2.8
Female	211	97.2	97.2	100.0
Total	217	100.0	100.0	
<b>Position</b>				
Supervisor	64	29.5	29.5	29.5
middle manager	84	38.7	38.7	68.2
Manager	69	31.8	31.8	100.0
Total	217	100.0	100.0	
<b>Age</b>				
below 30	31	14.3	14.3	14.3
30 to 40	42	19.4	19.4	33.6
40 to 50	63	29.0	29.0	62.7
above 50	81	37.3	37.3	100.0
Total	217	100.0	100.0	
<b>Experience</b>				
below 5	89	41.0	41.0	41.0
5-14	72	33.2	33.2	74.2
15-20	43	19.8	19.8	94.0
above 20	13	6.0	6.0	100.0
Total	217	100.0	100.0	
<b>Education</b>				
Diploma	47	21.7	21.7	21.7
Under graduate	135	62.2	62.2	83.9
Post graduate	34	15.7	15.7	99.5
Post	1	.5	.5	100.0
Total	217	100.0	100.0	

#### 4.2 Validity and Reliability

The above table shows psychometric properties, reliability check of the measures of the study. According to the results of the above table, the Cronbach's Alpha value ranged from .873 to .855, which described that the E payment has high internal consistency. Similarly, the Cronbach's Alpha value of sales growth is observed .824 and the measure of online shopping given reliability value at .855 in the current study.

**Table 2**  
Reliability of the Measures of the Study (N=217)

<b>Measures</b>	<b>Cronbach's Alpha</b>	<b>Reliability Statistics</b>	
		<b>Cronbach's Alpha Based on Standardized Items</b>	<b>No. of Items</b>
<b>E payment</b>	.873	.879	9
<b>Sales Growth</b>	.824	.833	9
<b>Online Shopping</b>	.855	.855	9

#### 4.3 Descriptive analysis

Table 3 presents details of some basic statistics on demographics of the participants in our survey.

**Table 3**  
Descriptive Analysis of Demographics (N= 217)

	<b>N</b>	<b>Descriptive Statistics</b>			
		<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>Gender</b>	217	1	2	1.97	.164
<b>Position</b>	217	1	3	2.02	.784
<b>Age</b>	217	1	4	2.89	1.064
<b>Experience</b>	217	1	4	1.91	.918
<b>Education</b>	217	1	4	1.95	.625
<b>Valid N</b>	217				

#### 4.4 Hypotheses Testing

The first hypothesis tries to investigate if E-Payment has a statistical impact on Sales Growth in the Banking Industry in UAE at ( $\alpha=0.05$ ) level.

**Table 4**

Regression Analysis Test of Independent and Dependent Variables (N=217)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.667 <sup>a</sup>	.446	.443	4.07117

a. Predictors: (Constant), Payment

**Table 5**

Regression Analysis Test of Independent and Dependent Variables (N=217)

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.901	1.928		5.655	.000
	Payment	.678	.052	.667	13.144	.000

a. Dependent Variable: Sales

Note: \* $p < 0.05$  \*\* $p < 0.01$  \*\*\* $p < 0.001$ , ns=non-significant

According to the results of the above Table 4 and 5, it is revealed that there is a significant relationship between e-payment and sales growth, giving the p value is positively found to be significant at .000\*\*\*. Thus, the hypothesis is accepted.

The second hypothesis attempts to find out whether or not online shopping has a statistical impact on sales growth of the banking industry in UAE at ( $\alpha \leq 0.05$ ) level.

**Table 6**

Regression Analysis Test of Independent and Dependent Variables (N=217)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.629 <sup>a</sup>	.396	.393	4.24856

a. Predictors: (Constant), Shopping

**Table 7**

Regression Analysis Test of Independent and Dependent Variables (N=217)

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.611	1.739		8.978	.000
	Shopping	.579	.049	.629	11.877	.000

a. Dependent Variable: Sales

Note: \* $p < 0.05$  \*\* $p < 0.01$  \*\*\* $p < 0.001$ , ns=non-significant

According to the results of the above Table 6 and Table 7, it is revealed that there is a significant relationship between sales growth and online shopping, giving the p value is positively found to be significant at .000\*\*\*. Thus, the hypothesis is accepted.

The third hypothesis examines whether or not e-payment has a statistical impact on online shopping in the banking industry in UAE at ( $\alpha \leq 0.05$ ) level.

**Table 8**

Regression Analysis Test of Independent and Dependent Variables (N=217)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.669 <sup>a</sup>	.448	.445	4.41576

a. Predictors: (Constant), Payment

**Table 9**

Regression Analysis Test of Independent and Dependent Variables (N=217)

Co-efficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.848	2.091		3.754	.000
	Payment	.739	.056	.669	13.199	.000

a. Dependent Variable: Shopping

Note: \* $p < 0.05$  \*\* $p < 0.01$  \*\*\* $p < 0.001$ , ns=non-significant

According to the results of the above table 8 and 9, it is revealed that there is a significant relationship between e-payment and online shopping, giving the p value is positively found to be significant at .000\*\*\*. Thus, our hypothesis is accepted.



The fourth hypothesis investigates whether or not e-payment has a statistical impact on Sales Growth with the mediating effect of Online Shopping at Banking Industry in UAE at ( $\alpha \leq 0.05$ ) level.

**Table 10**  
Standardized Estimates of Direct Effects of the Pathway Analysis (n=217)

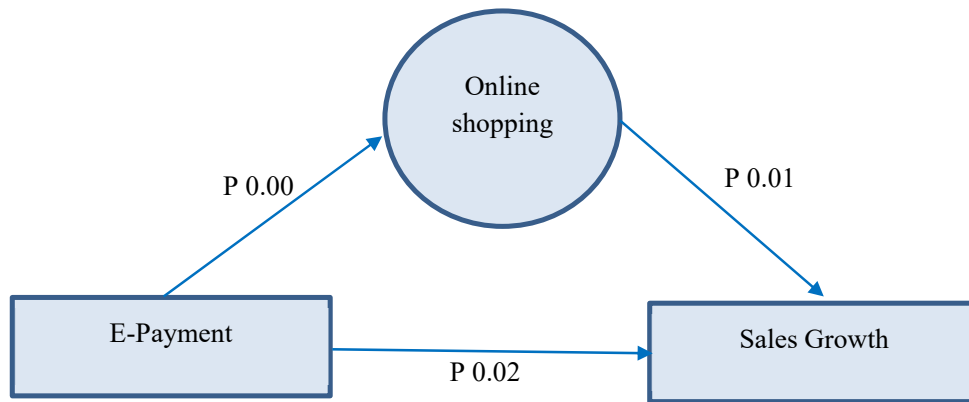
Predictors	E-Payment		Online Shopping	
	B	SE	$\beta$	SE
E-Payment	.19*	.07*	.27*	.07*
Sales Growth	.25*	.09*	.19*	.07*
R <sup>2</sup>	.09			

\*p < .05, \*\*p < .01, \*\*\*p < .001 Note:  $\beta$  = Standardized coefficient, SE = Standardized error

**Table 11**  
Standardized Estimates of Indirect Effect through Online Shopping (n=217)

Predictors	Sales Growth	
	B	SE
E-Payment	.08*	.03*

\*p < .05, \*\*p < .01, \*\*\*p < .001 Note:  $\beta$  = Standardized coefficient, SE = Standardized error



**Fig. 1.** Mediation Pathway between E-Payment, Online Shopping and Sales Growth.

4.5 Results and discussions

To check the measures of the study and reliability Cronbach's Alpha value was performed having the sample size is N=217. The result showed (Table 2) that the E payment has high internal consistency, and the measure of online shopping has given the reliability value at .855. Similarly in literature (Rozebahani et al., 2015) have used Cronbach's Alpha and found the reliability value at .901. In order to analyze our data, we have done descriptive analysis as well. In addition, different hypotheses were performed to test the significance of E-payment on sales growth of UAE banking system and found positive p value at ( $\alpha \leq 0.05$ ), (Table no 4 and 5). The result indicates that E-payment has a significant impact on sales growth of the UAE banking system. Further another hypothesis is also accepted at ( $\alpha \leq 0.05$ ) with positive p value that online shopping has also influenced the sales growth (Table 6 and 7). From the study conducted, it came into the consideration that the increase in the E-commerce industry with respect to e-payment is increasing at a higher rate in the youth. The results of the present study also found that the e-payment has widely influenced online shopping and increased the sale growth as well (Garrouch, 2021) Majority of the business men are looking forward to increasing their business in promoting the online stores by selling a wide range of products and services. These aspects are creating a lot of benefits for the customers as well as for the businesses. Increasing the demand of online purchases is developing various online stores and is also developing various payment methods as well (Kim, Tao, Shin, & Kim, 2010).

In the same manner our present study has great impact with reference to E-payment and online shopping (Lai, 2016). We tested this factor also and found positive results and significant is at .000\*\*\* (Table 8 and 9). It means E-payment making the purchase very effective and efficient because the online stores are providing various significant options as demanded by the customers. Keeping this preference in mind all the businesses and the retail stores are initiating various technological aspects through which they can filter their choice and demand (Halim et al., 2020). Considering the demand from E-stores to the mortar stores the E-commerce business is increasing in the positive direction and expanding tremendously among users and creating new users as they are benefited from all these technological aspects. Furthermore, we have also estimated the direct and indirect effects of the pathway analysis (n=217) between E-payment and sales growth with standardized error ( $\beta$ ) and standardized coefficient (SE) (Garrouch, 2021). It also comprises warranty and guarantee information, decreasing the inventory cost, following the customer's habit and being available with 24\*7 support service and lastly boosting the brand awareness. However, Fig. 1 illustrated that E-payment has a direct impact on online shopping and sales growth. It is also found that online shopping has also influenced the sales growth in positive manners. Another modern concept of the E-

payment is increasing the convenience by increasing the speed of making payment; it is also increasing the sales with respect to online shopping in becoming a preferred method of payment option. It is also reducing the transactional cost.

## 5. Conclusion

This present study has been done mainly on the “impact of e-payment and online shopping on sales growth”. The study has been conducted using the deductive and descriptive study method and positivism study philosophy. The authors have considered, as primary and as well as secondary data sources. The secondary data have been used in the literature review and primarily used in the data analysis. The primary data have been obtained from the survey. Cronbach’s Alpha values ranged from .873 to .855, which described that the e-payment has. Similarly, the Cronbach’s Alpha value of sales growth is observed .824 and the measure of online shopping given reliability value at .855 in the current study. This study found that there were different ways of payment among which the e-payment was used by a huge population, and it has been increasing in faster ways. People engage in online shopping however proper security makes this growth a bit slower than expected. Online shopping can be enhanced through different ways. Present study has targeted the UAE banking systems with 217 sample sizes. Statistics analysis like SSP software were used on data. Through various hypotheses and correlations that were done in our study we have found that e-commerce and e-payment methods have significant importance in online shopping and sales growth etc. From the results it has been concluded that e-payment has a significant impact on online shopping and sales growth.

## 6. Recommendation

The advantages of information technology are coming towards light for online shopping as e-payment. However, some dark sides of e-payment are also included i.e., trust, security and some other challenges that this study is trying to explore. In this regard, organizations in general, and banks are proposed to develop their information technology infrastructure, and to improve its information systems capabilities, as well as to update its ERP systems continuously. Keeping up with the latest technologies is required to stay in the market, as competitors would never wait to take the lead if they can. Training the staff on the new systems and technologies would increase the chances of successful implementation of those technologies. The key factor here is the integration between the business strategies and models with systems and humans to offer the customers safe and secure online shopping solutions. Once trust is gained by customers, the sales would grow.

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