

# The Mediating Role of Online Purchases Intention Student Attitude and The E-Commerce Market in Iraqi Universities

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## Abstract

Despite the increased awareness of the need for trust and security, minimal consideration has been taken along with factors impact in these intentions of Iraqis to make internet purchases. This objective of this paper is to develop a conceptual framework for analyzing the impact on the basis of factors on online purchase intention. A quantitative methodology was used for the study in which survey questions were distributed to scholars from seven public universities in Baghdad, Iraq. Three hundred eighty-three Iraqi scholars took part in this actual survey. In reviewing the study data, it was also found that hypotheses H1, H2, H3, H4, H5, H6, H7 were all valid and significant. The results show that ease of use, perceived security,

perceived trust, and usefulness have a strong influence on users' opinions. The report asserts, attitude ultimately determines the likelihood that someone will complete an online purchase. The most important factor in predicting future online purchases is the Consumer's perception of online shopping. In addition, all these factors are independent: perceived trust, perceived security, ease of use, and usefulness. that get a big impact in attitude as mediating variables. Based on the findings of this study, online retailers and shop managers would pay great attention to online customers' opinions toward online shopping and work to ensure their attitude, security, and trust, ease of use, and usefulness through sound business practices, behaviors, and infrastructures.

## Introduction

The fast growth of Internet technology has resulted in contributed to emergence with widespread use of (e-commerce). It has altered the course of conventional commerce and customer behavior on its head and created a host of new advertising and marketing options for products. Network first came into commercial use in the early nineties. computer development and connectedness began for increase (Salim Abdulrahman, M. 2019). Numerous companies and Internet start-ups emerged due to the quick expansion among the Wide Web, as well as the development of electronic commerce competing software. The Internet Service Consortium's (ISC) 2019 report states there were over one million Internet domains as of January 2019. The estimated number of marketers from 2014 to 2021. According to a renowned global information and measurement organisation, more than 2.14 billion consumers will shop online in 2021, up from 1.66 billion in 2016. China (854 million) will continue to have the highest share of Internet users in 2021, followed by India (636 million) and Indonesia (144.2 million). The population of the (MENA) region is Middle East/North Africa predominantly young. It can be regarded advantageous to expansion of online shopping (Data Portal, 2021). According to, Morocco, Egypt, Saudi Arabia, Iraq, the UAE, and Kuwait possess a total with a population of 230 million and incredible as such an e-commerce platform industry, transactions, according to the Internet World Statistics 2021 report. Table 1.1 summarises the demographics, Internet users, and penetration rates of the MENA nations. The Countries collectively have a population of 449 million people, or 8% of the global total. These countries are increasing their Internet usage. (Web portal, 2021).

**Table 1.** Users of the Digital and Online Access in North Africa and Middle East

Nationality	POPULATION	INTERNET USERS	PENETRATION
United Arab Emirates	9.94 million	9.84 million	99%
SAUDI ARABIA	35.08 million	33.58 million	73%
KUWAIT	4.30 million	4.26 million	99%
EGYPT	103.3 million	59.19 million	57.3%
IRAQ	40.70 million	30.52 million	75%
Morocco	37.13 million	27.6 million	74%
TOTAL	230	161	

According to north Africa and the middle east. Iraq is ranked 3rd position in the Mena area when it comes to online users, after Egypt and Saudi Arabia, On the other hand, Iraq has the second highest internet growth rate in the MENA region following Saudi Arabia. This one was reported in the study from (Data Portal, 2021), online adoption with application in Saudi Arabia, Iraq, and Egypt they're developing more rapidly with worldwide estimate. Iraq currently has 18.70 million Internet subscribers, which is expected to increase to 29.82 million by 2020 and nearly 31 million by 2021. (Data Portal, 2021). It's particularly true for merchants who had invested heavily in online channels in order to expand their market reach both locally and globally. SMB Group Iraq, a major online retailer that began operations in 2018, is an outlier. Yet, several Iraqi businesses, especially small ones, people terrified of searching the internet (Y. A. Abdullah and Mansor, 2018). with study compiles the internet network and demographics statistics, information on mobile and

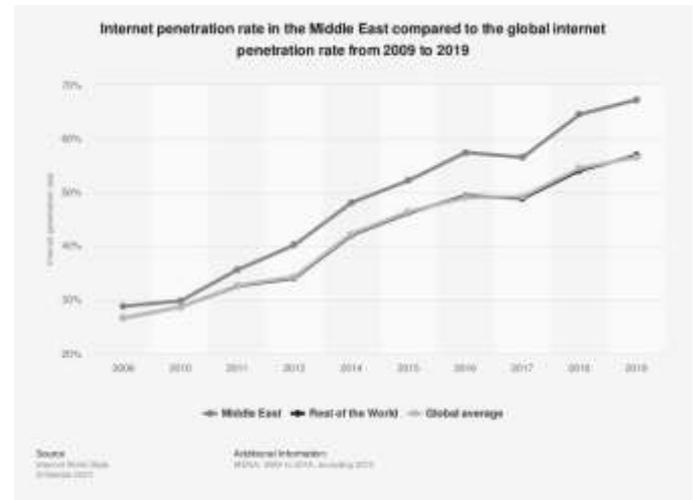
social media usage in the Countries in (MENA). They show that Iraq has overtaken Egypt, Iran, Turkey, and Saudi Arabia We rank fifth when it comes to online shoppers with 30.52 million.

**Table 1.** Users worldwide and demographics in the Middle East and North Africa, social media platforms, and smartphones

Nationality	current demographic present	Online visitor	Social media sites	Smartphone and tablet users
IRAQ	41.70 million	31.52 million	26.00 million	41.31 million
SYRIA	18.88 million	9.41 million		14.43 million
YEMEN	30.16 million	8.06 million	3.20 million	18.21 million
KUWAIT	5.25 million	5.33 million	4.50 million	7.15 million
JORDAN	11.22 million	7.66 million	7.25 million	8.52 million
SAUDI ARABIA	36.28 million	34.60 million	28.70 million	40.20 million
UAE	10.38 million	10.10 million	9.30 million	18.79 million
SUDAN	45.5 million	14.8 million		34.2 million
BAHRAIN	1.88 million	1.65 million	1.44 million	2.36 million
ISRAEL	9.21 million	8.33 million	7.43 million	11.09 million
IRAN	85.09 million	60.74 million	37.30 million	132.28 million
PALESTINE	6.43 million	4.55 million	3.65 million	5.76 million
ALGERIA	45 million	27.7 million	26.30 million	47.08 million
TURKEY	85.70 million	66.40 million	60.06 million	77.93 million
OMAN	6.23 million	5.33 million	5.23 million	6.03 million
QATAR	3.40 million	3.10 million	2.98 million	5.23 million
TUNISIA	12.32 million	7.66 million	9.34 million	18.03 million
EGYPT	104.55 million	60.22 million	50.20 million	56.80 million
LIBYA	7.40 million	4.20 million	7.03 million	12.88 million
Total	449	299		

This data point compares adoption of the world wide web in (MENA) from 2009 and 2019 with all majority of the world's population and the worldwide mean. As of 67.2 points of the Middle East in April 2019 The majority of citizens had Internet  
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connection. FIGURE 1.2 Middle East as a percentage of the world's population that has Data services



**Figure 2.** Internet Penetration Rate in T Middle East 2019

The global electronic commerce market will be worth more than \$2 trillion by 2020. With e-commerce sales of US\$1,343.5 billion in 2020, China is undoubtedly the market leader, and the study shows that China will hold this position until 2025. A shift in terms of sales volume away from the United States and Europe to China and Southeast Asia has begun. This is fueled by more Asian shoppers having access to the online market place as their buying power and a Web browser usage evolves, particularly through smart phones. every one of the following research projects has examined the relationship between trust and online shopping: Ali, B. J., & Anwar, G. (2021); Yadgar Taha M, 2020; Othman, B. A (2020); and K.-C. Chang et al, 2019. In addition, several research, including those on felt security, have been done. by B. Ali (2020),, Azeez and Al-Khafaji (2014), Thabit et al. (2016). As a result, this is necessary to undertake investigation and evaluate purchase intentions in terms of trust, security, attitude, perceived ease of use, and perceived usefulness in order to ascertain Iraqi youths' plans to buy. Like a consequence, it's necessary to investigate potential connection among perceived trust, perceived security, and attitudes toward digital retailing. These articles will examine the connection among perceived trust and security, ease of use, and usefulness on Iraqi consumers' opinions about online purchasing.

The focus of this research was to evaluate the validity of online e-commerce online Purchase intentions influenced by trust and security, attitude, usefulness and ease of use. All aims and goals must be met:

- determine in impact of attitude on Iraqi students' intention to make online purchases in Baghdad.
- To assess the impact of perceived security, perceived ease of use, perceived trust, and perceived usefulness on e-commerce.

- To examine of effect between security and trust of e-commerce and an individual's attitude toward online shopping.
- To create a conceptual model of online purchase intention among Iraqi students that includes the required independent, mediating, and dependent variables.

## Research background

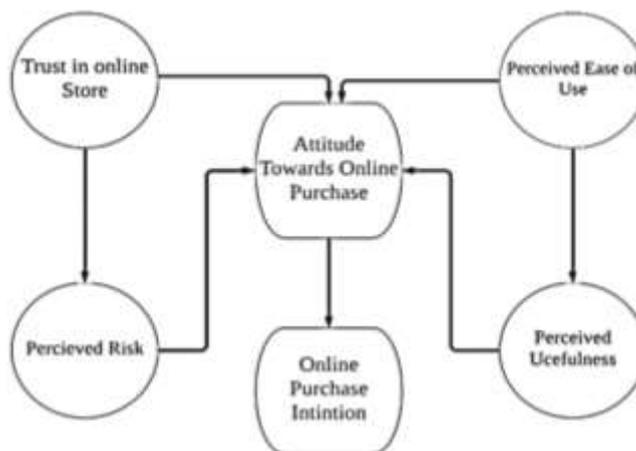
### Online Purchase Intention

the increasing prevalence of electronic devices as a strategy for increasing online sales, researching customers' online purchase intentions has become critical. Online purchase intention is defined by (Armilawati et al., 2020) as the state of readiness and intention to conduct online purchase (Pavlou, 2003). Based on the available evidence, online purchase intention is an important component in predicting the influence of online stimuli. See (Shaouf et al., 2016). (Rehman et al., 2019). Moreover, it shows that online intention has a positive influence on online purchase and encourages further research on this intention. For example, (Y. J. Lim et al., 2016), companies need to study their online purchase intentions to ensure that they match online shoppers' desires in order to succeed as a critical player in a global and dynamic business (Dastane, 2020). Consumer buying behaviour has been widely studied extensively in consumer research as a primary framework across social disciplines and has been found to be related to external factors such as perceived trust (Hasan and Suciarto, 2020), attitude (Hidayat and Diwasasri, 2013), perceived security, usefulness, and ease of use (Faqih, 2013). For example, (S.-H. Liao et al., 2021) investigated the predictors of purchase intention in the online context and discovered over 80 characteristics. Since it is not possible to investigate all possible factors that influence customers' purchase intention, we investigated the effects of online brand loyalty and brand trust on purchase intention. Consumers have become more informed in their purchase decisions due to the ease of communication and collection of brand and product-related information through social media platforms. As a result, this trend underscores the critical importance of proprietary marketing activities and consumer interaction in disseminating information from users and, consequently, increasing their interest in and purchase of the brand. (2017) (Husnain and Toor). The correlation between intention to shop online and the technology acceptance model is often considered a clear description of how people make conscious decisions (Y. J. Lim et al., 2016). People generally think about the consequences of their behaviour before engaging in a particular activity (Fishbein and Ajzen, 1981). The technology acceptance model is used to predict an individual's intention to act in a certain way. This is done by examining the individual's attitude toward a particular activity and the subjective norms of significant individuals and groups that may affect the individual's attitude (Fishbein and Ajzen, 1981). Personal criteria are influenced by our assessment of the perceptions of people in our immediate environment, such as parents, friends, and colleagues (P.-J. Lin, 2010). Subjective standards affect us because we make certain assumptions about how others would react to and accept our actions (Fishbein and Ajzen, 1981). Through their attitudes toward online shopping, subjective norms influence customers' online purchase intentions (Ahmad et al., 2020). Attitudes influence consumers' online purchase decisions (Oghazi et al., 2018; Zhang et al., 2019) argued for the latter, suggesting that customers' attitudes

toward online shopping determine whether or not consumers intend to make an online purchase. Customers' attitudes toward online purchases are predictors of online purchasing behaviour (M. L. Korzaan, 2003). Consumer attitudes toward online purchases play a role in influencing behaviour and intention (Rajamma et al., 2007). In order to cultivate an online purchase intention, shoppers must first understand the advantages of buying online over buying from a brick-and-mortar shop (Rajamma et al., 2007).

### Trust in the Online Purchase Intention Model

Due to the unique characteristics of online purchasing and other factors such as the inability to see and touch a product up close or the lack of face-to-face contact, trust is critical to reduce uncertainty and provide a sense of security. (Pillai et al., 2009) Three TAM -based models are used to assess perceived trust in an online purchase concept: (Van van Heijden et al., 2003), (Van van Heijden et al., 2003), and (Van van Heijden et al., 2003). (Ha and Stoel, 2009). (2013) (Renny) This section describes each model in detail. The model created by (Albayrak et al., 2020; Hew et al., 2019) examines, through a technology- and trust-focused lens, the elements that influence a person's desire to buy online. The model is based on the relationship predicted by TAM between online shopping attitudes and purchase intentions. The model is shown in Figure 2.12.



**Figure 3.** Model for Trust and Online for Information (Van Der Heijden, 2004) (Shi Et Al., 2020 Shi, S., Gong, Y., & Gursoy, D. 2021)

### Models for Online Purchase Intentions

#### 1. TRA

Hale, J. L., Householder (2002) having established model TRA, basic theory can explain consumer behaviour. Customers exhibit different behaviours by their buying behaviour, which is influenced by either objective or subjective norms. Personal criteria result from considering the views of others who may have an influence on a person's attitude. Some persons may be family members, friends, or coworkers. In this study, subjective norms were found to influence clients' online buying intentions via their attitudes toward online purchases. Salisbury, Pearson, and colleagues found that customers' Internet use and attitudes toward online shopping were significant predictors of their

propensity to purchase products or services online (Salisbury et al., 2001). Consequently, this theory assumes that buyers make logical decisions based on accessible data. Their actual behaviour indicates whether or not they intend to behave correctly. were created to gain a better understanding of the relationships between consumers' views, attitudes, and behaviours and their intentions to make an online purchase.

## 2. *Theory of Planned Behaviour*

Over the past three decades, marketers and researchers have embraced and tested the theory of planned behaviour (Cop, S., Alola, 2020), (Ajzen, 1991) claims that behaviour is driven by motivated subjective norms, attitudes, and perceived behaviour are under control. Each construct is formed by a collection of beliefs and judgments. The more favourable the attitude and subjective norms are to behaviour, the better. And the greater a person's perceived behavioural control, the greater their plans to perform the action at hand (Ajzen, 1991). Theory of planned behaviour (TPB) is a commonly used model to analyse consumer behaviour. The consumer behaviour underlying online grocery shopping. The TPB is a subset of the Theory of Reasoned Action (TRA) (W. M. Lim and Weissmann, 2021) that allows programme managers to design interventions that effectively target a specific behaviour (Ajzen, 1991). The TPB illustrates the relationship between beliefs and behaviour by using three types of terms: Attitude toward Behaviour, Subjective Norm, and Perceived Behavioural Control to influence the purchase intention and behaviour of end users.

## 3. *Technology Acceptance Model*

According to a thorough analysis to According to the paradigm, consumer attitudes toward a new piece of evidence (IS) can influence its success technology acceptance model. (Alalwan, Ali Abdallah., 2018; Athapthu and Kulathunga, 2018; Benbasat and Venkatesh, V., & Bala, H. 2008; Koçolu, 2021). People's adoption of digital technologies (IT) has been studied to increase their use. Various conceptual models have been developed in the fields of information systems, psychology, and sociology in response to research in these areas (Venkatesh et al., 2003). This acceptance and use of technology (TAM) is applied in this study to determine which factors have a significant impact on influence the acceptance of online banking.

## 4. *The Extended Technology Acceptance Model*

While numerous previous While several research papers have demonstrated the fitness of TAM as a frugal model in a variety of novel contexts (Kim, H. Y., Lee, 2017; Davis, 1989; Ha and Stoel, 2009; Tong, 2010), others can found being economical of Extended Technology Acceptance Model a significant constraint (Ha and Stoel, 2009; Tong, 2010; Vijayasathy, 2004).TAM components may not adequately represent the core assumptions that influence consumers' purchase intentions when it comes to cooperative shopping over the Internet (Ha and Stoel, 2009; Tong, 2010). Previous studies got that price validity (Lazaroiu, G., Andronie, 2019), trust in the Internet (Lee, M. K., & Turban, E. 2001; Pi et al., 2011), customers (WoM), and the effectiveness of a homepage (Bhatnagar et al., 2000; H.-H. Cheng and Huang, 2013), and privacy (Giovanis, A. N., Binioris, S.2012) are important understand for group buyers' Internet purchase intentions.

## *Online Purchase Intention Factors*

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Why some consumers buy certain items online but not others remain a mystery, although Internet use and popularity continue to grow. According to (Mariani et al., 2021), Internet use in the 28 EU member states will peak in 2020. During the survey period, 69% of Europeans aged 15 and older reported using the Internet daily or almost daily. However, they emphasised that little is known about what inspires customers to shop online or whether these numbers could improve if more visually appealing online stores were developed. Burke (2002) found that important customer characteristics such as age, gender, education level, money, and personality have a significant impact on consumers' online purchasing decisions. Menon and Kahn (2002) found that motivation for a website and liking a website have an impact on online purchasing behaviour.

## *Attitude*

According to (Ajzen 1991; Seufert et al., 2021), attitude toward a behaviour refers to how positively or negatively the performance of the behaviour is evaluated. Thus, it depends on behaviours and beliefs that convey favourable or unfavourable attitudes toward a variety of possible pleasant or terrible situations. In the TRA model, the attitude (A) factor is used to predict a person's attitude toward an activity. In this usage, the term "attitude" refers exclusively to a person's positive or negative evaluation of an object (Fishbein, 1975). Attitudes are derived within the conceptual framework of beliefs because when a person holds a belief, he or she establishes an attitude toward an object (Fishbein, 1975). (2018) (Scherer et al.) Here, belief is defined as knowledge that an individual believes to be true; thus, it is the individual's subjective reflection (a verbal expression of attitude) (Eagly and Chaiken, 1993) via (Marcketti and Shelley, 2009); (Thurstone, 1931) via (Marcketti and Shelley, 2009); (Thurstone, 1931) via (Marcketti and Shelley, 2009); (Fishbein and Ajzen, 1977) According to (Fishbein and Ajzen, 1977), attitudes refer to a person's experience of him/herself and his/her environment; they are subjective and involve a person's senses (Chu et al. 2020).

## *Perceived usefulness*

The extent to which a person believes that implementing a particular method would improve his or her job performance is referred to as PU (Phillips, 2017). Thus, it is related to the belief that technology can help a person perform better (Salloum et al., 2019). The TAM and other researchers' extended models show that PU promotes a person's goal in both forced and voluntary contexts (Verkasalo et al., 2010).

However, an earlier study showed the opposite effect of PU on a person's behaviour when interacting with a new technology system (Verkasalo et al., 2010). This discrepancy in results raises concerns about the extent to which a person accepts social media, as PU and social media acceptance are still a new area of research. Below are some of the ways PU is associated with social media: It reflects a person's belief that social media will help them achieve their goal of engaging them in the innovation process (Rauniar et al., 2014). Thus, PU of social media is expected to have an impact on a manager's decision to incorporate this technology into innovation processes.

## *ease of use*

(PEU) is the second most important construct of TAM (F. D. Davis, 1989). The proposed definition is the extent to which technology consumers believe that using technology would be effortless. Self-efficacy is a contributing factor to this component (Bandura, 1982). Adaptability, ease of use, control, and an individual's ability to become an expert in the use of technology are the terms used (F. D. Davis, 1989). On the other hand, the ease with which an information technology system can be used has a favourable effect on its perceived usefulness (Mehar and Agarwal, 2013; (Alqurashi, 2019) (2017). (Xu and Du, 2018). PEOU is a positive predictor of attitude toward use in this study (online luxury shopping). We extend this point by examining how easy it is for people to buy luxury goods online through websites.

*Trust*

There is a wide range of interpretations when it comes to consumer trust in online s. "Trust" is the belief and certainty that another person has one or more good qualities, even if there is a possibility of negative outcomes, according to (N. Pappas, 2016). 'Trust beliefs' refers to a customer's confidence in a provider's ability to offer products or services in a reliable and trustworthy manner. Predictors of a buyer's trust in an online vendor have been identified in numerous previous studies: Capability (the provider's ability to meet the buyer's needs), Generosity (the provider's care for the buyer's interests).

*the trustor's greatest advantage and motivation to act for the trustor's greatest advantage), and Truthfulness (the reviewer's friendliness with a strong connotation to the trustor's greatest advantage) (Bauman and Bachmann, 2017).*

*Perceived Security*

*Security threats maybe affect online users' attitudes. The concept of "privacy variables" return to the various showing to influence a person's general*

*perception personal confidentiality when network. Purchase online Concerns about privacy an important factor that causes online shoppers to postpone completing transactions. Security is usually highlighted as a major barrier to online commerce because the Internet is inherently open (Zorkadis and Karras, 2000). Unauthorized use of a corporate network, interception of data packets, data tampering, unregistered transactions, eavesdropping, repudiation, and spoofing are all examples of insecurity. In addition, buyers are wary of online network information privacy to concerns (Udo, 2001; Grandinetti, 1996). Udo (2001) emphasizes the importance of the relationship between security and privacy.*

*Contributing to factors of online purchase*

*Nine factors most important criteria for purchase intentions are attitude, trust, security, ease of use, usefulness, self-efficacy, familiarity, personalization, and risk. this majority of the studies reviewed recognise the critical role of a person's attitude more toward the world wide web purchase intentions. As can be seen in Table 2.3, considering share of studies among 2001 and 2021 indicates that attitude plays a significant role in determining intend to buy online (Tahir and Arije, 2021). Each previous factors are believed to have an impact on online purchase intention and should be considered when developing an online shopping model: Sentiment, Trust, Security, and Perceived ease of use perceived usefulness. Although supposed security has gotten less attention in research on internet purchases, (Greco, G., & Mitran, P. C. 2020), (C. Huang, 2011), and (A. Hartono et al., 2013), Findings suggest to reliable predictor for behavioural online.*

**Table 3. Factors Influencing Online Purchase Intention**

No	researchers	Survey	Conclusions	variables									
				PEOU	PUS	AT	PT	PS	PE	SE	FM	PR	
1	(S. Y. Ahmed et al., 2021)	Iraq: 300 university students.	Individuals' Subjective norms, technology, and confidence all have an effect on their decision to create an online business.e transaction.				*						*
2	Rathore et al. (2017) and Ismail, Z. (2014).	264 first-year students	Security is the most crucial issue influencing an online shopper's decision.	*	*			*					
3	Hsiao et al. (2010),	140 students from the United States of America who volunteered	The primary characteristic that improves online purchasing intention is trust.				*						

4	Guritno et al. (2013).	228 College students	confidents has a crucial role in determining one's chance to make an online purchase. The most powerful component in determining attitude is the potential for gain.			*						
5	Gefen, 2003	Three hundred seventy-six customers of the leading internet service provider (ISP) in Taiwan.	When it comes to online shopping intentions, both males and females are influenced by usefulness and attitudes. Males' internet purchase preferences are more influenced by concerns about cybersecurity.	*	*	*	*	*			*	
6	Renny et al. (2013).	544 internet users in the United States, 1381 in Singapore, and 988 in China	Attitude has a huge impact on one's purchasing proclivity. Trust is built on two critical components: security and reputation.			*						*
7	Kim, (2008)	Students of 468 undergraduates	Clients' faith in the internet and their perception of danger have a huge impact on their purchasing decisions.				*				*	*
8	Chiang, H. S et al. (2013), Renny et al. (2013)	In the United States, there are 300 female adults.	Acceptance of customization in online buying is conditional on its usefulness, attitude, and trustworthiness.			*	*					
9	Huang et al. (2011) and Hartono et al. (2013)	298 university students having previous experience surfing and purchasing online.	Consumers' value and attitude assessments influence their decision to shop online. Additionally, purchasers' adoption of online shopping is influenced by their shopping experience and reliability.		*	*						
10	(Martínez-González and Álvarez-Albelo, 2021)	609 young consumers were chosen as a sample.	Customization has an effect on consumers' buying intention and loyalty when they shop online.			*			*			
<b>Total</b>				5	6	9	8	6	6	1	3	3

### Conceptual Model and Hypotheses Development

The hypotheses are used to create a conceptual model. It consists of six dependent and independent variables and seven related hypotheses. The proposed conceptual model is presented in conjunction with its hypotheses in (Figure 2.).

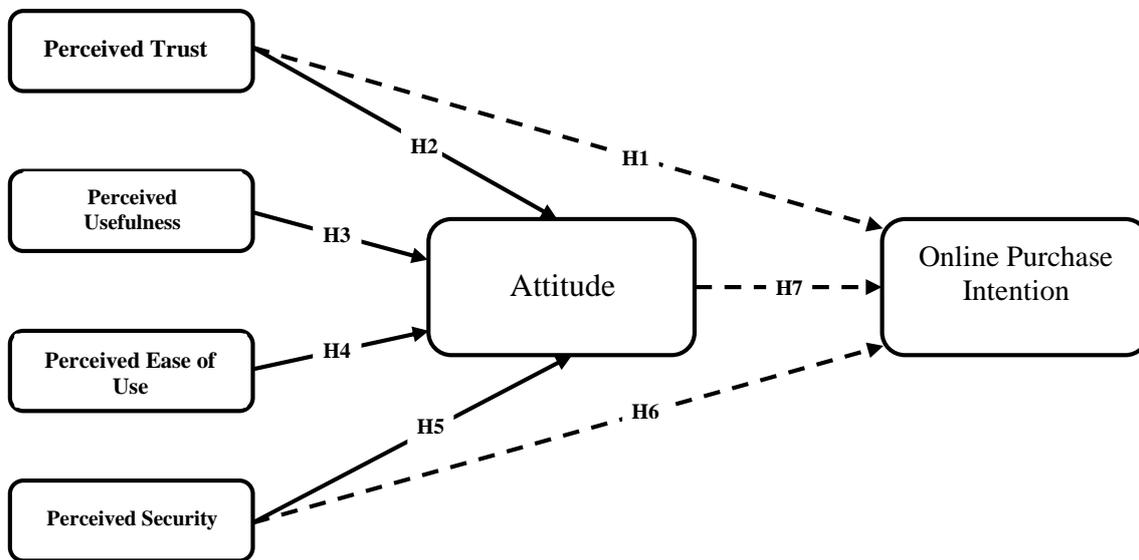


Figure 4. Conceptual Model

### Hypotheses Development:

The following subsections explain the development of research hypotheses based on previous literature to explore the relationships that will achieve the study's objectives and answer its questions. In addition, there are factors, stable attitudes, preferences, or habitual strategies that determine the way people perceive, remember, think, and solve problems. Results from previous studies have shown that:

- H1: Perceived Factors of trust have a big impact on online purchase. (Teigland, 2017).
- H2: Perceived Factor of trust make a significant to attitude. (S. Jarvenpaa and Teigland, 2017).
- H3: Usefulness factors have a strong influence on online attitude. (Dwivedi et al., 2019).
- H4: Perceived ease of use factors have a positive effect on attitude. (Davis, 1989).
- H5: Factors of perceived security have a positive effect on online purchase intention. (Chiu et al., 2005).
- H6: Perceived security factors have a beneficial effect on one's attitude. (Chiu et al., 2005).
- H7: Attitude significantly mediates the association between perceived trust, usefulness, perceived ease of use, and perceived security characteristics and the desire to make an online purchase (S. Jarvenpaa and Teigland, 2017, Chiu et al., 2005, Davis, 1989, Dwivedi et al., 2019).

### Methodology

Our research is considered a chronology describing the project's progress. It is advantageous for the development and validation of study (Cash, 2018; Hussaini et al., 2019). In other words, a plan for conducting research is series the choices to the research purpose, strategy, setting, kind of study, unit of analysis, sample design, data collection methods, and data analysis. (2017) (Yeo et al.). Exploratory research demonstrates and defines the subjects under debate through the collection of data (Holtrop et al., 2018). They also defined descriptive research as an investigation of the relationship between a collection of variables. The present study is exploratory in nature as it investigates the factors that influence the use of the

internet for shopping in Iraq. Exploratory research methods are used to determine the effect of independent variables on the dependent variable. The current study is exploratory and quantitative in nature. Due to the enormous number of potential customers (university students) and the volume of data, the study will be quantitative. In addition, this type of study may provide insight into previously unknown relationships. A detailed survey will be conducted to obtain information and empirical data. Theoretical underpinning is required for the use of the structured questionnaire. Demonstrates that a systematic survey is deductive rather than inductive. When faced with an unclear research problem, it is better to use an exploratory research technique (Benera et al., 2015). Experimental research requires the acquisition of a unique set of skills. The ability to observe, infer facts, and make explanations or hypotheses is essential for a study with an exploratory research design. The questionnaire used in this study is based on previous research and published material on this topic.

The research design is a detailed description of the framework of the study that will be used to determine the answers to the research questions. It is a comprehensive research plan that details the processes for establishing research hypotheses and implementing the research framework for data analysis (Foroudi, 2019; Evelyne et al., 2018). The fundamental goal of the research design is to create all the conditions necessary for data collection and analysis that are consistent with the objectives of the study. Selltiz and associates (Selltiz et al., 1976). It is also called the first step of the study design because it includes all the following actions (Handavu et al., 2019).

#### Data Collection

The questionnaire was distributed to students of public institutions in Iraq and Baghdad, both directly and through friendly universities and professors. Thus, graduate and doctoral students from different faculties and universities fill out the questionnaire and return it to the faculty representative or administrator, who distributes the questionnaires to the students and collects the completed questionnaires the same day. The questionnaire was accompanied by a brief note explaining the purpose of the survey. A total of 420 questionnaires were distributed. Personal responses were collected by physically handing over the questionnaires. A total of 383 responses were received, for a 91% response rate.

**Instrument Development**

Based on the discovery of perceived trust, security, and attitude in the online purchasing environment, we present a conceptual model for online purchase intention that integrates the observed aspects. A questionnaire was used to collect data. The survey asked students' purchase intentions, their perceptions of trust and security, their attitudes toward online purchases, their perceived ease of use, and their perceived usefulness. We evaluated content validity, construct validity, and pilot study of a primary questionnaire using current scales and related surveys. Finally, an updated survey was created in response to feedback. The questionnaire was divided into two parts. Part A contains demographic data. Part B examines characteristics which have an effect on the inclination to purchase online, such as trust, attitude, security, ease of use, and usefulness, as both as a result of (online purchase) factors that are related (trust, security, attitude, ease of use, and usefulness).

**Results and Discussion**

**Demographic of Respondents**

In this subsection, you will find the data about the respondents' demographic characteristics. Age, gender, respondent qualifications, and company life, industry, and internationalization.

**Table 4. Statistical Data of Gender**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	211	55.5	55.5	55.5
Female	172	44.6	44.6	100.0
Total	383	100.0	100.0	

There were 212 males and 171 females among the participants. Thus, male respondents made up roughly Female respondents made up 55.4 percent of all respondents. made up roughly 44.6 percent of all responses.

**Table 5. Age of Demographic Information**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Less than 20	91	23.8	23.8	23.8
22-31	192	49.8	49.8	72.5
32-41	64	17.5	17.4	90.1
Greater 41	39	10.1	10.1	100.0
Total	383	100.0	100.0	

According to numbers in the table, respondents under the age of 20 account for 91 respondents, or 23.8 percent of the overall sample. Additional point to mention is that side, 191 respondents were within ages of 21 and 30, constituting 49.9 percent of the overall sample. Additionally, 63 respondents were between the ages of 31 and 40, while only 38 were beyond 40.

**Table 6. Characteristics Statistical of Education**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Bachelor's degree	171	42.0	42.0	42.0
Master	140	14.30	3.7	76.8
Doctorate	89	23.2	23.2	100.0
Total	383	100.0	100.0	

Including demographic data, that table above includes the educational qualifications of the participants. For instance, the chart indicates that respondents with a bachelor's degree totaled 161, those with a master's degree totaled 133, and those with a PhD totaled 89.

**Table 7. Characteristics Statistical of Income**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Less than 500\$	137	35.8	35.8	35.8
5001-1000\$	97	25.3	25.3	61.1
1001-2000\$	105	27.4	27.4	88.5
Above 2000\$	44	11.5	11.5	100.0
Total	383	100.0	100.0	

In terms of income, we can see that 137 respondents earned less than \$500, while 97 earned between \$501 and \$1000. There were 105 respondents who earned between \$1001 and 2000 dollars, but only 44 who earned more than 2000 dollars.

**4.1. Result**

Non-normally distributed analysis methods such as nominal, ordinal, interval, and ratio scales are used in testing the results. In the first stage, a test of the outer model was performed to determine the value of convergent validity. By default, the value is greater than 0.5.

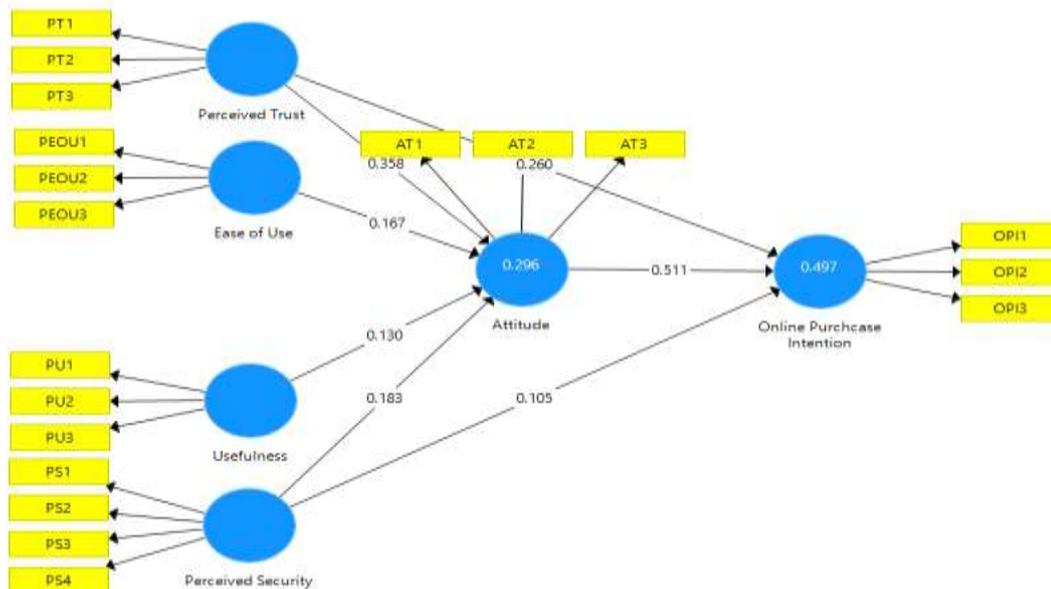


Figure 5. The PLS Model R-Square and Path Coefficients

Table 8. R-Square

	R Square
Attitude	0.296
Online Purchase Intention	0.497

The function of the intelligent-PLS algorithm was utilized to ascertain the values in this investigation. The picture below illustrates the structural model's output, which comprises values and path coefficients. usefulness, ease of use, trust, and security all contribute 29.6 percent to attitude variability. Perceived trust and perceived security, on the other hand, responsible for 49.7% of the variability in internet shopping.

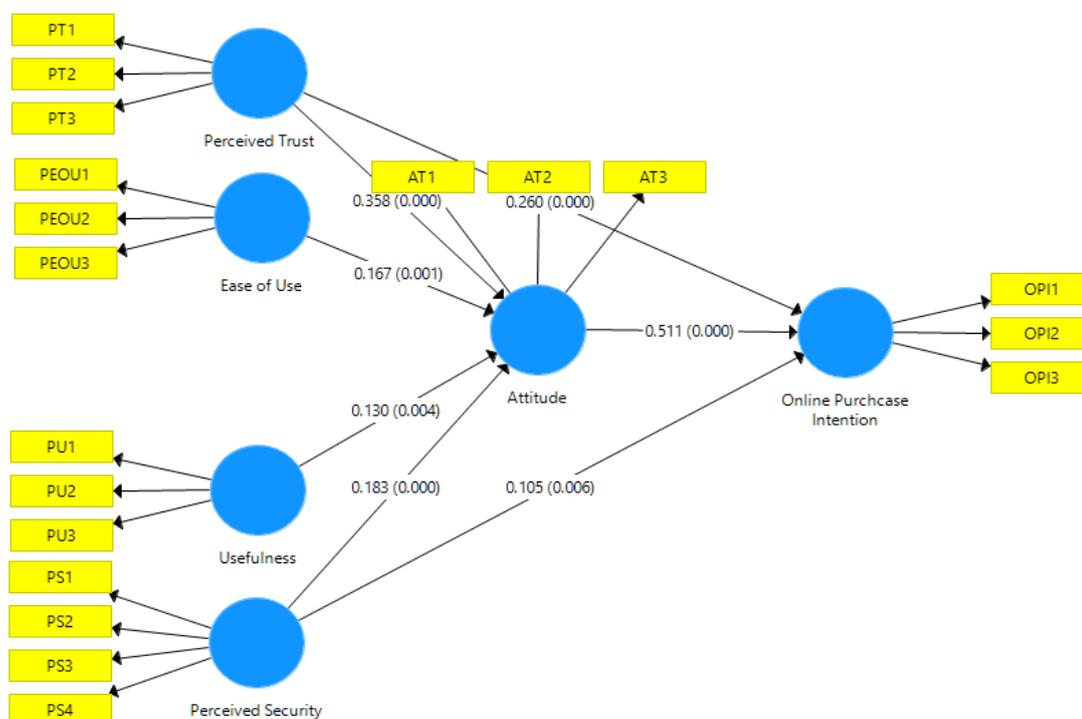


Figure 6. Model Showing Path Coefficient With P-Values

Every following paragraph model displays a directional factor and p-value on each and every direct hypothesis. Each of the p-values is significant because it is less than 0.05.

**Table 9.** *The Assessment of Lateral Collinearity's Results*

	<b>Attitude</b>	<b>Online Purchase Intention</b>
Usefulness	1.047	
Ease of Use	1.139	
Perceived Security	1.019	1.066
Perceived Trust	1.178	1.361
Attitude		1.420

Seen with following list, show inside VIF values for all independent variables requiring lateral multicollinearity analysis are less than 5, indicating that lateral multicollinearity should not be an issue in this research (Hair Jr. et al., 2014).

**Table 10.** *The Summary of The Results*

Relationship	Direct Effect ( $\beta$ )	Standard Error	T Statistics	P Values
H1: Attitude -> Online Purchase Intention	0.511	0.051	9.966	0.000
H2: Perceived Trust -> Online Purchase Intention	0.26	0.056	4.645	0.000
H3: Perceived Trust -> Attitude	0.358	0.054	6.669	0.000
H4: Perceived Security -> Online Purchase Intention	0.105	0.038	2.75	0.006
H5: Perceived Security -> Attitude	0.183	0.044	4.125	0.000
H6: Usefulness -> Attitude	0.13	0.045	2.891	0.004
H7: Ease of Use -> Attitude	0.167	0.047	3.577	0.001

## Conclusion

This study of the theoretical framework presented within the study will contribute to Iraq's development Commission for Communications and Media (CMC.iq) and the Iraqi Ministry of Communications (MoC), that performs the Iraqi communications and multimedia regulatory agencies. The author investigated perceived trust, perceived security, perceived ease of use, and attitudes toward online shopping behaviour. According to Statista (2021), There were 4.66 billion active Internet users globally in January 2021, providing for 59.5 percent of the worldwide people. 92.6 percent (4.32 billion) of this total accessed the Internet using mobile devices. Globally and in Iraq, the digital population is growing. Iraq's total population in 2020 was 40.13 million. These figures show how important it is for Iraq to have a robust ICT infrastructure. When it is important to ensure cybersecurity, performance and reliability, and consistency in Iraq to advised that internet

## Hypothesis Testing and Discussion

the explained of technique smart analyzing is a nonparametric showing in the table assume regularly explain information. In the table, t-values can do excessively large in excessively small, leading to a type 1 error. Therefore, Wong (2013) advocates a technique called bootstrapping. In the bootstrapping approach, Various purposive sampling techniques (e.g., 5000) are selected derived from the sample group and replaced with standard bootstrap errors to generate existing t-values in the table pathway approved tests (Wong, 2013). In addition, this study needs to analyse in path triplets that indicate possible causal the structures' interactions with one another. The path coefficient informs the researcher about the strength of the association between two latent variables. Ramayah et al. provide the significance criteria for two-sided and one-sided tests (2016). Thus, the following table summarises the direct results of the hypotheses through the use of bootstrapping (5000) and Smart-PLS as indicated by Chin (1998b).

providers evaluate their customers' perspectives and perceptions of trust and security. To this end, the Iraqi CMC could launch public education campaigns to improve Internet users' and communication and multimedia service providers'

## Acknowledgments

In the name of Allah, the beneficent and the Most Merciful. All praises and thanks to ALLAH for all the wonderful experience and achievements that I have gained. I am very grateful to my supervisor, Prof. Dr Valliappan Rajufor, to guide me throughout this study. Moral support received from my friends are much appreciated. Lastly, I would like to express my sincere gratitude to my family members, who stood beside me on this journey. I also want to thank my parents, my wife and sisters for their continuous prayers and support.

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