

## Examining antecedents' factors influencing the customer co-creation value using open-sooq app in Jordan

Khaled Aboalganam<sup>a\*</sup>, Hasan Alhanatleh<sup>a</sup>, Manaf Al-Okaily<sup>b,c</sup>, Mahmoud Alghizzawi<sup>d</sup>, Amineh Khaddam<sup>a</sup> and Dmaithan Almajali<sup>e</sup>

<sup>a</sup>College of Business, Amman Arab University, Amman, Jordan

<sup>b</sup>School of Business, Jadara University, Irbid, Jordan

<sup>c</sup>School of Business, The University of Jordan, Amman, Jordan

<sup>d</sup>Faculty of Business, Applied Science Private University, Amman, Jordan

<sup>e</sup>Faculty of business, Applied Science private University, The University of Jordan, Amman, Jordan

### ABSTRACT

#### Article history:

Received October 22, 2023

Received in revised format

December 26, 2023

Accepted February 4 2024

Available online

February 4 2024

#### Keywords:

Information Technology

Digital Marketing

e-TailQ Model

Co-Creation Value

TAM

Mobile App

Discovering the marketers and advertisers' knowledge provides an ability to present a well understanding of how value could be created. The main purpose of this research is to identify the factors influencing the marketers and advertisers' co-creation value in mobile applications setting in Jordan through applying several information systems theories. Structural Equation Model (SEM) was used for data analysis and hypothesis testing. The convenience method was also approached to determine the sample size and data collection method. The result of the recent study confirms that extended Technology Acceptance Model (TAM) and eTailQ model provide a capability to determine, increase, or generate the marketers and advertisers value using Open-Sooq app in Jordan. Finally, the current research had some theoretical and practical implications, limitations, and future orientation studies that were discussed in their specific parts.

© 2024 by the authors; licensee Growing Science, Canada.

### 1. Introduction

In the recent digital transformation era, the mobile apps have attracted the attentions of global community and increased the level of mobile apps usage due to several reasons such digital revolution, users' requirements, and Covid-19 pandemic (Al-Okaily, 2024, Alqudah et al., 2023; Aloulou et al., 2023; Alghizzawi et al., 2023; Rahi et al., 2022). Mobile apps have changed the lifestyle of people around the world and considered as critical technology for businesses and individuals (Rahi et al., 2023). In more specific (Habes, Alghizzawi, Ahmad, et al., 2023), provided that citizens of Jordan have recently maximized their use of mobile apps for performing their tasks and daily activities. According to Statista.com, (2021) the number of Jordanian subscribers in mobile apps is closed to be 7.83 million in 2021. Moreover, it is expected to reach 8.28 subscribers in 2025. However, Jordanian citizens' specific preferences and trends for mobile apps are not yet well comprehend (H. Alhanatleh et al., 2022). As stated by Grewal & Stephen, (2019); Schrieck & Wiesche, (2017) in the digital ear environment, organizations have always developed their self through embracing a new technology platform such as mobile apps for earning value. Recently, seeking of adoption a new technology innovation is a critical matter of organization strategy for creating value. The idiom of co-creation provides a primary function for encouraging organizations to have the innovation. Value co-creation is theorized as a cooperative action where customers consider a major component through participating and designing

\* Corresponding author

E-mail address [khaledganam72@aau.edu.jo](mailto:khaledganam72@aau.edu.jo) (K. Aboalganam)

ISSN 2291-6830 (Online) - ISSN 2291-6822 (Print)

© 2024 by the authors; licensee Growing Science, Canada.

doi: 10.5267/j.uscm.2024.2.005

their products and services (Aws et al., 2021; Al-Fraihat et al., 2022; Al-Kofahi et al., 2023; O'Hern & Rindfleisch, 2017). Therefore, in digital platform, the co-creation value has been occurred by involving the customers in shaping and designing their required products and services from organizations (Alharafsheh et al., 2021; Hosseini et al., 2022). Consequently, value co-creation considers the last purpose for organizations. Consumers are treated as vital partners of organizations for creating a business value because they provide considerable role in trends and directions of production organizations' services and creating value (Kim et al., 2019; Lin et al., 2018). As a result, how to motivate consumers to be a primary key to creating value has been a contemporary topic that should be studied and conducted.

A few researches have been performed in developing countries like Jordan on extended TAM and customers' co-creation value in digital platform in more specific mobile app setting (AlSideiri et al., 2022; Ladhari et al., 2022). The dimensions of TAM consider as significant elements that effect customer's behavior and attitude regarding technology (Davis et al., 1989). In accordance with authors' knowledge, there no study has been discussed the eTailQ model dimensions in the context of mobile app. However, reliability, security, web design, and consumer service have been asserted to support customers' relationship with using particular technology (Megdadi et al., 2023). In addition, online relationship quality dimensions have a critical role to determine the level of customers' co-creation value (Hartmann et al., 2018). To the best of authors' knowledge, the linking between extended TAM, eTailQ model, and online relationship quality theory has not been established yet in customer co-creation value of using mobile app in marketing and advertising setting. Throughout the current study, the connection between prior mentioned theories will expensively be illustrated in the context of mobile marketing and advertising.

To respond to the abovementioned gap, the current research aims to evolve and examine an empirical framework that confirms the mutuality of co-creation value theory and mobile app in marketing and advertising context. Accordingly, the present study expects to furnish several contributions regarding the marketing literature. *First*, the recent research contributes to the developing nations' context through applying the study model in Jordan, which gives new results and deep information to the policymakers of mobile apps to work on developing, improving, and boosting their presented services to marketers and advertisers. *Second*, providing a new model considers as a critical contribution in the current research for determining the factors influencing marketers and advertisers' co-creation value through using mobile apps in Jordan depending on combination various information theories and co-creation value theory. *Third*, examining the antecedents affecting online relationship quality using mobile app in marketing and advertising setting is little in marketing literature, especially in non-industrial nations and providing an empirical support in accordance with comprehensive model. The significance of the current study is that it presents broad antecedents of online relationship quality in a mobile app setting so that, relative policymakers and practitioners may select proper guidelines and standards for guaranteeing a sustainable relationship with digital consumers and, eventually, achieve their sharing in process of creating value for mobile app in marketing and advertising context.

## 2. Literature Review

### 2.1. Mobile apps in marketing and advertising

The process of converting customers into digital platforms instead of physical platforms is considered a critical element to change the shape of organizations services into digital technology (Al-Samirae et al., 2020; Al-Okaily, 2023; Halim et al., 2023). The main purpose of the organizations is to employ their digital systems and evolve their methods to present the products and services for their digital consumers (Habes et al., 2022; Habes, Alghizzawi, Elareshi, et al., 2023). Murillo-Zegarra et al. (2020) examined the factors influencing customers' behaviors toward mobile advertising context. The empirical evidence of the study provided that perceived ease of use and perceived usefulness have an essential role to increase the level of perceived value of mobile advertising. Data-driven dimensions (informativeness and credibility) also determined the perceived value of mobile advertising. Through this context, the prior variables have an ability to determine the value of consumers toward using mobile apps in marketing and advertising settings.

Tong et al. (2020) stated that the rapid investment in digital transformation such as mobile apps has led to more personalized marketing and advertising strategies. Authors suggest a new framework, which entitles a 5P for customized marketing and advertising depending on mobile technology platform. 5P's framework consists of products, promotions, place, price, and predictions. In addition, Grewal & Stephen, (2019) confirmed that mobile advertising apps lets producers, retailers, service providers to present customers with expanded offers. This process of advertising needs to conduct analysis regarding market environment, customers' behavior, factors affecting technology, and the use of proper mobile apps. Grounding on prior illustrative review, conducting investigations regarding mobile apps in marketing and advertising is encouraged to provide a full development overview in context such as understanding the customers' needs, attitude, and value regarding mobile marketing apps. Moreover, Sulaimon & Vorobyova, (2022) emphasized that the marketing strategies of mobile apps have a considerable role in dealing with firms' consumers. The main role of mobile apps in marketing settings is to provide firms' consumers with required products and needs, assistance information, and quality of services (Rahi et al., 2021). Authors provided empirical evidence that determines how organizations motivate consumers to engage in marketing mobile apps depending on several factors such as campaigns, messaging, promotions, vouchers, and feeds.

Depending on previous discussion, investigations on mobile marketing and advertising contexts are scarce to identify the consumers' attitude toward mobile technology. Moreover, it is also recommended to perform several kinds of studies especially empirically to discuss, determine the customers beliefs about mobile apps in marketing and advertising settings, and identify the factors increasing or creating consumers' value in this context.

## 2.2. *Open-Sooq App platforms*

Open-Sooq is an organization providing marketing and advertising services through electronic and digital platforms where the users of Open-Sooq app are Middle East residents. Both the website and mobile app of Open-Sooq allow the buyers and sellers to connect effectively. Through Open-Sooq technology platforms, sellers and buyers are digitally and electronically performing their transactions and even enabling them to have a job (Almajali, 2022). Open-Sooq app facilitates the customers' shopping, marketing, advertising, and buying by creating their own account on the Open-Sooq app. Depending on that, the customers can easily access many options from several organizations and individuals of sellers for making a decision for buying (Hammouri et al., 2023). The Open-Sooq app also provides an ability for organizations, individuals, and even customers to connect into the Open-Sooq community through advertising their goods on their own accounts for selling services. Moreover, the Open-Sooq app connects the buyers with various fund organizations to support them getting a loan for conducting buying. Furthermore, the Open-Sooq app supports connection between several countries in the Middle East for performing different services attached to organizations, free lancers, and customers (Eneizan et al., 2020). To the best of the authors' knowledge, there is not any study that provides any discussion about the issues affecting Open-Sooq usage, sustainability, or even developing. Moreover, studying customers' value co-creation in the Open-Sooq app environment has not been provided, especially in Jordan.

## 2.3. *Theory of Value Co-creation*

The concept of co-creation of value has currently come into view as a master power for organizations to support their position in the markets (Merz et al., 2018). Value Co-creation considers as a critical theory regarding the organizations aiming at enhancing the systems processes, developing products, or boosting the services through cooperation, participation, or involvement of organizations' customers, employees, decision makers, and other partners (Ramaswamy & Gouillart, 2010). Value co-creation has been researched in different business models such as online sale (Daabseh & Aljarah, 2021), mobile hotel bookings (Wu et al., 2018), tourism in customer-to-customer model (Rihova et al., 2015), how to create a value in business-to-business model (Sheth, 2019), customer-to-customer in Social media interaction environment (Zadeh et al., 2019), a new way for customer co-creation value in m-banking services (Mostafa, 2020). However, a value co-creation platform needs to be investigated in various business models insightfully (Alghzawi et al., 2020). Studying the factors of implementing value co-creation in local businesses is recommended to be researched (Hamidi et al., 2019). Accordingly, theorized value co-creation in several contexts is still needed to provide more effort (Gupta & Lehmann, 2005) suggesting that the value of consumers and suppliers indicate the meaning of the value co-creation. In accordance with (Carranza et al., 2021). The co-creation value has been determined through the relationship between consumers and organizations in this digitalization era. Conjuring this with the current study, working under customers' value co-creation theory in mobile apps context is predominately imperative to be investigated, and requires a serious effort to provide a comprehensive understanding. More specifically, in accordance with the authors' knowledge, there has not been any study discussing the relationship between mobile apps and customers' value co-creation in Jordan.

Due to the rapid change in business models where digital technology is highly employed in different sectors. Co-creation process in the marketing environment is dramatically mutated, becoming extremely complicated (Hartmann et al., 2018; Moncrief, 2017). As a result, the co-creation value of customers is influenced by many factors such as change in technology, customers' attitude, and predilections (Steward et al., 2019). In this study, an alternative model will be approached depending on various theories for investigating the weather of co-creation process among customers of Jordan in mobile app context.

## 2.4. *Theoretical background and hypotheses development*

The theoretical base of recent study is developed depending on the extended technology acceptance model (TAM), eTailQ model and online relationship quality for determining the weather level of customers' co-creation value.

### 2.4.1. *Extended of TAM*

TAM is evolved based on the theory of reasoned action (Davis, 1989; Fishbein et al., 1975). The TAM considers the most popular model that has been employed for investigating customers' behavior in the domain of information technology (Salloum, Al-Emran, et al., 2021). Recently, the TAM has been researched in several fields of electronic and digital environments of information technology covering e-banking and m-banking services (Rahi et al., 2019; Mansour, 2016) (Singh & Srivastava, 2018). E-marketing and m-marketing (Alghizzawi, 2019; AlSideiri et al., 2022; Ladhari et al., 2022; Sari et al., 2022). E-government and M-government (AlHadid et al., 2022; H. Alhanatleh & Akkaya, 2020; Alshammari et al., 2022; Ishengoma et al., 2022) and other fields. In the context of the original TAM, perceived ease of use and perceived usefulness shape the TAM (Alshurideh et al., 2019). These two variables have been studied for various purposes of the information technology environment such as exploring the user's attitude (Alhashmi et al., 2019), predicating user's trust and satisfaction in different areas of information systems (Akdin et al., 2022; Dewan et al., 2022; Siagian et al., 2022).

Investigating user's intention to use (Acikgoz et al., 2023), and discovering user's co-creation value (Guo et al., 2022). Perceived usefulness indicates the anticipation that affirmative consequences will occur through using a certain technology, and perceived ease of use indicates the anticipation that using such technology will not cost much more effort (Salloum, Al-Emran, et al., 2021). Perceived ease of use defines customers' effort toward embracing a new or emerging technology (Salloum, AlAhabbi, et al., 2021). However, several investigations asserted that the extended TAM has a robust explicatory and forecasting of user's co-creation value (Abd Ghani et al., 2017; Daabseh & Aljarah, 2021; Habes et al., 2020; Lutfi et al., 2021). The current research will employ the extended TAM including perceived ease of use and perceived usefulness for determining the level of users' satisfaction, trust, and commitment to use Open-Sooq app.

#### 2.4.2. *eTailQ model*

EtailQ model formed based on four distinguished variables involving fulfillment/reliability, privacy/security, website design, and customer service. Depending on (Wolfenbarger & Gilly, 2003), Website design describes all components of customer interaction during using a website comprising website navigation, information retrieval and search, order processing, convenient personalization, and product chosen. Reliability/fulfillment represents the capability of an organization to precisely offer and characterize products and services meeting the customers' expectations and the capability to stock and deliver products on required time. In terms of privacy/security, assuring consumers that their debit/credit card information is secure and that their buying habit data will not be participated with other businesses is known as privacy/security. Consumer service is defined as a rapid, helpful, and reactive response to customer inquiries swiftly (Al-Okaily & Al-Okaily, 2022).

The eTailQ is nominated as the service quality measurement because it has assessed the interface of the website and the dimensions of perceived e-service quality (Al-Adwan & Al-Horani, 2019). In their inflectional work, Li et al. (2015) conducted the first study in the marketing area depending on eTailQ model to determine the critical characteristics of the customers' online shopping experiences and how eTailQ dimensions and value perception are shared in the e-loyalty process. The dimensions of eTailQ (Reliability, privacy, website design, and customer service) found to have a positive influence on consumers' satisfaction, trust, commitment, and development process of loyalty (Alhanatleh, 2021; Li et al., 2015; Tetteh, 2022).

In accordance with prior discussion, the current research employed the extended TAM with integration of eTailQ model to determine the level of customers' co-creation value in marketing context, especially in marketing and advertising setting of mobile app usage (Alhanatleh, 2021; Daabseh & Aljarah, 2021; Li et al., 2015). Providing the predictive strength of the current research model. eTailQ model dimensions are amalgamated in the current study model as they are a primary key dimension for defining the level of customers satisfaction, trust, and commitment in online and digital business environments (Alomari et al., 2020; Mahafzah et al., 2020; Ren & Liu, 2022).

#### 2.4.3. *Online Relationship dimensions*

Online Relationship quality views as a multi-dimensional construct consist of various variables that show the reality of association between organizations and customers in online patterns. However, there is an agreement in different investigations, which argues that satisfaction, trust and commitment have an ability to determine the online relationship quality (Daabseh & Aljarah, 2021; Ozen, 2015; Wang et al., 2015). Satisfaction is a knowledge and experience of customers over the particular phases of online purchase (Mahafzah et al., 2020). Depending on (Daabseh & Aljarah, 2021), satisfaction and trust with their antecedents provides a positive influence on customers' co-creation value in an e-business environment platform. However, satisfaction and trust are considered to become more vital to shape e-marketing future (Alomari et al., 2020; Daabseh & Aljarah, 2021). Alhanatleh, (2021) provides that online relationship quality dimensions had an affirmative effect on customers' loyalty to e-banking services in Jordan. However, most of the studies of digital marketing in Jordan have discussed the mediation role of trust in intention to use, online shopping, and customers' co-creation value (Alhanatleh, 2021; Daabseh & Aljarah, 2021).

As a critical dimension of online Relationship quality, *trust* has been suggested as an essential contributor on customer co-creation value (Nadeem et al., 2020). Trust is a collection of distinguished persuasions in an individual's impartiality, benevolence and capability (Hasan et al., 2023; Alsmadi et al., 2023 a,b; Magatef et al., 2023; Gefen et al., 2003). Grounding on Akour et al. (2022) the e-commerce environment embraces a massive number of variables that could affect customer trust, and the notion is a decisive factor of consenting e-commerce development process. Trust counts on many antecedents such as the assertiveness of security, organization reputation, the power of web searching, fulfillment, presentation, strengthening of technology and interactions. In accordance with above mentioned definitions, it is indicated that trust is a human feature that personality characteristics such as customer impetus and behaviors. Thus, if the trust is granted, the consumer will stay in the strong relationship. Moreover, the organization will have a long-term relationship with customers that means achieving the organization's profitability. In addition to trust dimension of online relationship quality model, customer satisfaction has provided a new perspective at how pattern changes from marketing through transaction to marketing through relationship (Yoon, 2002). The concept of satisfaction deems as convoluted process that shapes customer practices and propensities towards any kind of business and its functions ( Al-Okaily, 2023; Ai Ping et al., 2023a,b; Alharafsheh et al., 2023). Satisfaction concept has presently deemed as a paramount subject of investigation and analysis due to its ability in putting any institution in a competitive place in the market and bring successful (Al-Okaily, 2022, Abd Rahman et al., 2023; AL-Khatib et al., 2023;

Al-Okaily & Al-Okaily, 2022). The significant influence of satisfaction on loyalty and co-creation value is considered as a key for achieving a vigorous competition with rivals in the market (Habes, Alghizzawi, Elareshi, et al., 2023; Sun et al., 2020).

To the best of researchers' knowledge, there is no study that has discussed the mediation role of online relationship quality dimensions on customers' co-creation value regarding the context of the mobile app in developing nations, specifically in Jordan, Therefore, linking the online relationship quality theory to value co-creation is probably considered to provide better understanding in how customers' value co-creation can be increased in mobile technology environment, especially in Jordan. In this study, trust and satisfaction will be employed to predicate the process of customers' co-creation value due to the common use of these dimensions in marketing literature.

#### 2.4.4. Research model and hypotheses

The current research suggests an integrated model to explore the customers' co-creation value of using mobile apps in Jordan depending on the extended TAM, eTailQ model, and online relationship quality dimensions as provided in Fig. 1. The recent research amalgamates several theoretical frameworks for determining the main factors study model and in justifying the linkage between these factors. The prime variables are perceived usefulness and perceived ease of use, which are developed from extended TAM (Davis, 1989; Fishbein et al., 1975), reliability, security, website design, and customer service, which are developed from eTailQ framework (Wolfenbarger & Gilly, 2003) trust, satisfaction, and commitment, which are developed from online relationship quality framework (Liang et al., 2011; Rafiq et al., 2013) and value co-creation, which is developed from service dominant logic framework (Vargo & Lusch, 2008).

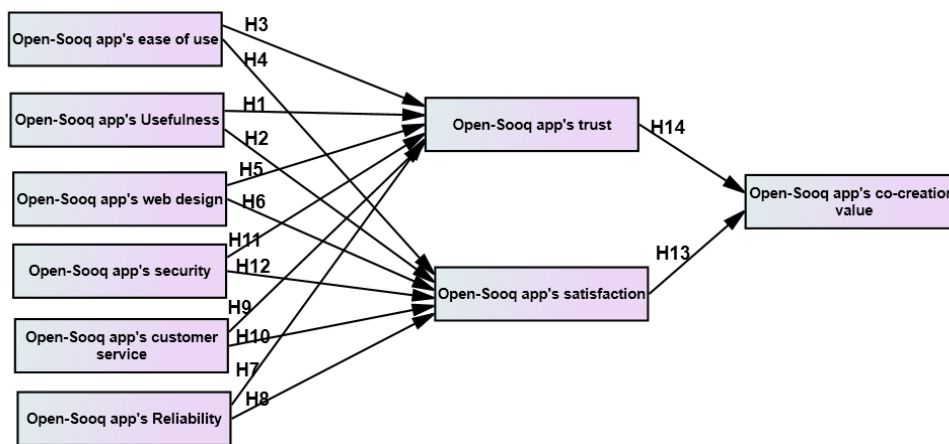


Fig. 1. Open-Sooq's co-creation value model

The hypotheses of the current research are theorized for clarifying the interconnection between the model constructs depending on a well-theoretical basis as studied in the relevant literature such as (Daabseh & Aljarah, 2021; Liang et al., 2011; Tajvidi et al., 2021). Here, it must be stated that even though the combinations of prior frameworks are widely conducted in several sectors of business models such as e-commerce, e-banking services, and e-government, etc., the currently developed model establishes for the first time to explore the level of customer co-creation value using mobile app setting in developing nation, practically in Jordan. Thus, the current research distinguishes itself from other investigations due to more reconnoiter of prior relationships and providing value to the existing literature of marketing and advertising.

#### The nexus between perceived usefulness and online relationship quality dimensions

Davis et al. (1992) stated that perceived usefulness conceptualizes, as the level of consumer expectations toward embracing technology will enhance consumer conditions. (Morosan, 2011) claimed that customers tend to adopt the last version of technology if the expected benefits regarding this technology are possible to achieve. However, perceived usefulness is considered as a major factor to adopt/ accept a particular technology like mobile app (Cho et al., 2019). According to Chiu et al. (2009), perceived usefulness has an ability to evaluate the level of customers' intention of use and describe the customers' satisfaction regarding services. The effectiveness of perceived usefulness factor has been investigated in social commerce (Hussien & Mansour, 2020; Sharma & Sharma, 2019; Tamilmani et al., 2019). Perceived usefulness empirically found to have a positive and robust impact on customer satisfaction (Hussien & Mansour, 2020; Sharma & Sharma, 2019) and customer trust (Kurniawan et al., 2022). Reflecting on the previous discussion on the current study, if consumers expect to have the expectation advantages through using Open-Sooq app, this will lead to having a positive relationship with using Open-Sooq app. Thus, consumer trust, satisfaction, commitment will be provided, and co-creation value will be created or increased.

Therefore, it can be formed the following hypotheses:

**H<sub>1</sub>:** *Perceived usefulness of Open-Sooq app will positively affect the Marketers and advertisers' trust of using Open-Sooq app.*

**H<sub>2</sub>:** *Perceived usefulness of Open-Sooq app will positively affect the Marketers and advertisers' satisfaction of using Open-Sooq app.*

*The nexus between perceived ease of use and online relationship quality dimensions*

Venkatesh et al. (2000) indicated that perceived ease of use is a popular factor in drawing the shape of customer attitude and belief, and attention to use and acceptance of information technology. Perceived ease of use has been researched in social commerce (Daabseh & Aljarah, 2021) and several fields (Alshammari et al., 2022; Mansour, 2016) and it disclosed to support a significant and positive effect on satisfaction (Zhong & Moon, 2022), trust (Daabseh & Aljarah, 2021). Conjuring the prior discussion in the current research, the level of consumer belief and attitude toward easy use of Open-Sooq apps, this will lead to having a positive relationship with using Open-Sooq apps and eventually achieve a trust, satisfaction, commitment about Open-Sooq app usage. Thus, the co-creation value could be established and occurred. Therefore, it can be formed the following hypotheses:

**H<sub>3</sub>:** *Perceived ease of use of Open-Sooq app will positively affect the Marketers and advertisers' trust of using Open-Sooq app.*

**H<sub>4</sub>:** *Perceived ease of use of Open-Sooq app will positively affect the Marketers and advertisers' satisfaction of using Open-Sooq app.*

*The nexus between eTailQ dimensions and online relationship quality dimensions*

The website factor considers as vital key of eTailQ model that describes presentation and ability of website system in online or digital environments and take into account the system usability, ease of use, system's aesthetic design, information quality, planning, power of search, and movement between website content (Cristobal et al., 2007). Website design provides a decisive influence to determine the online relationship quality (Wolfenbarger & Gilly, 2003). Website design has been researched in various aspects in the literature review and it is uncovered to positively enhance the level of customer satisfaction and trust (Alhanatleh, 2021; Tetteh, 2022). In the current study, it can be argued that if the design of the Open-Sooq app meets the customers' requirements, the level of satisfaction, trust, and commitment will be positively increased, and this will significantly support the creation or increase of the value of Open-Sooq app. Therefore, it can be formed the following hypotheses:

**H<sub>5</sub>:** *Designing of Open-Sooq app will positively affect the Marketers' and advertisers' trust of using Open-Sooq app.*

**H<sub>6</sub>:** *Designing of Open-Sooq app will positively affect the Marketers' and advertisers' satisfaction of using Open-Sooq app.*

Reliability is another influential factor in the eTailQ model that aims to examine the organization's ability to hand over the customers' products in the promised time and condition (Cristobal et al., 2007). In accordance (Wolfenbarger & Gilly, 2003), reliability dimension in the eTailQ model is debated grounding on two approaches. The first approach is to discuss the description of products and services to consumers. In this place, the organizations are obligated to support advertising about their products and services and provide sufficient descriptions. The second approach is the delivery time that considers a primary key from the consumer's point of view. Since the organization commits to deliver its products in the promised time, this may increase the level of customer reliability regarding the organization. The relationship between reliability and online relationship quality dimensions has been evaluated in the prior eTailQ research such as Li et al. (2015). Reliability has been empirically examined to significantly affect trust and satisfaction (Alhanatleh, 2021; Tetteh, 2022). In the current study, it can be argued that reliability of Open-Sooq app service will provide a positive impression of consumers' expectations regarding shopping and buying processes through using Open-Sooq app. This may lead to increase the level of customers' trust, satisfaction, and commitment toward Open-Sooq app and eventually create or increase the customers' value. Therefore, it can be shaped the following hypotheses:

**H<sub>7</sub>:** *Reliability will positively affect the Marketers and advertisers' trust of using the Open-Sooq app.*

**H<sub>8</sub>:** *Reliability will positively affect the Marketers and advertisers' satisfaction of using Open-Sooq app.*

Customer support service is a primary component of the eTailQ model that shows the ability of firms to provide a quick response to consumers' complaints, requests. Moreover, it shows the organization's readiness to solve consumers' problems and transact with their requirements in proper time (Wolfenbarger & Gilly, 2003). Customer support service is considered a critical factor that positively generates customer trust (Hwang & Kim, 2007; Negash et al., 2003). Moreover, Li and Yang (2015) conducted their study in a social commerce context that indicated that customer support plays an essential role for determining the relationship quality dimensions. In the current research, it can be argued that customer support service of Open-Sooq app service will provide a positive attitude of consumers' expectations regarding shopping and buying processes through using Open-Sooq app and support customer co-creation value. Therefore, it can be shaped the following hypotheses:

**H<sub>9</sub>:** *Customer support service will positively affect the Marketers and advertisers' trust of using the Open-Sooq app.*

**H<sub>10</sub>:** *Customer support service will positively affect the Marketers and advertisers' satisfaction of using Open-Sooq app.*

As a critical dimension in eTailQ model, security/privacy considers a substantial matter that prevents the unauthorized and confidential use of customer information and protects the consumer's financial data during performing the transaction to after completing (Cristobal et al., 2007). In online and digital environments of social commerce, trust includes several concerns such as financial and privacy customers' information (Alhanatleh, 2021; Li et al., 2015). Security/privacy has been conducted in different contexts, which indicated the importance of securing financial and personal information could increase the customer's trust in the technology use such as (Alhanatleh, 2021; Cristobal et al., 2007; Tetteh, 2022) and customer's satisfaction such as (Wilson et al., 2021). In the current research, it can be argued that Security/privacy of Open-Sooq apps will provide a positive attitude of consumers' expectations regarding the protection of their financial and personal information through using Open-Sooq apps and support customer co-creation value. Therefore, it can be shaped the following hypothesis:

**H<sub>11</sub>:** *Security/privacy will positively affect the Marketers and advertisers' trust of using Open-Sooq app.*

**H<sub>12</sub>:** *Security/privacy will positively affect the Marketers' and advertisers' satisfaction of using Open-Sooq app.*

#### *The nexus between online relationship quality dimensions and customer co-creation value*

Palmatier et al. (2006) conducted a meta-analysis study that uncovered that the dimensions of relationship quality (trust, satisfaction, and commitment) significantly affect any kind of business performance. The constructs of relationship quality (trust, satisfaction, and commitment) have been conducted in social commerce environments with customers co-creation value (Daabseh & Aljarah, 2021; Kamboj et al., 2018; Nadeem et al., 2020; Tajvidi et al., 2021).

Satisfaction is considered as the primary construct of the current research, a critical key component in transacting with organization's competitors, and acquiring market position (Daabseh & Aljarah, 2021). In accordance with (Gustafsson et al., 2005) satisfaction views as the comprehensive consumer performance evaluation regarding the organization's products and services after consuming. Satisfaction has been researched in social commerce environments with customer's co-creation value (Nadeem et al., 2020; Kamboj et al., 2018; Daabseh & Aljarah, 2021). Moreover, Szarucki and Menet (2018) uncovered that the satisfaction has a capability to provide customer with high level of value and loyalty as crucial element of marketing strategy. In the current research, it can be suggested that if customers have significant satisfaction with Open-Sooq app, the co-creation value will be generated or increased with Open-Sooq app. Therefore, it can be formed the following hypothesis:

**H<sub>13</sub>:** *Satisfaction will positively generate/ increase the Marketers and advertisers' co-creation value of using Open-Sooq app.*

Trust is considered a fundamental element studied in several fields, covering business management, local and global economics, philosophy science and psychology science (Urban et al., 2009; Sachs et al., 2019). Trust is a decisive key in social commerce and economics investigations as argued by (Guenzi & Pelloni, 2004). According to Pappas et al. (2017), the relationship between trust and customer co-creation value was empirically studied in social commerce settings through the role of trust to influence the customers' buying intention in social business context. Similarly, trust provides a positive influence on creating value for customers in both online and digital settings (Nadeem et al., 2020; Tajvidi et al., 2021). As a result, the current research indicates that the high level of customers' trust with Open-Sooq apps leads to an increase in the level of co-creation value with Open-Sooq apps. Therefore, it can be formed the following hypothesis:

**H<sub>14</sub>:** *Trust will positively generate /increase the Marketers and advertisers' co-creation value of using Open-Sooq app.*

### **3. Methodology**

#### *3.1 Research Method*

Choosing the proper method is considered a critical point for achieving the objectives of the current research. To do so, the sequential steps were employed. *First*, an inclusive theoretical background was justified depending on relative marketing literature and information systems theories. *Second*, a quantitative method was approached to measure the developed model of the current research consisting of sampling techniques and collecting data from the marketers and advertisers of mobile apps in Jordan to identify the level of co-creation value. *Third*, the valid gathered data from the marketers and advertisers of mobile apps in Jordan was entered into the SPSS AMOS version 22 program to provide the results. To empirically confirm the model and its hypotheses of the current research, an online questionnaire approach was employed. The questionnaire was built and deployed using Google form method. To access the respondents of the current research, the direct questioner's link was publicized through several electronic channels such as Facebook, WhatsApp, etc. The selected sample of the current study was approached depending on convenience methods. Grounding on Mou et al., (2017) the convenience approach is chosen for different reasons such as easy access to the users of marketing apps, economic matters, and a rapid method to retrieve the responses. However, there are some limitations for using a convenient approach such as its ability to represent the sample, but it considers an adequate method to be utilized in exploratory investigations as the current research. To achieve

the purposes of the current research, the participants were marketers and advertisers using mobile apps in marketing settings. After distributing the link of the questionnaire to the targeted sample through electronic channels, 600 participants received the link. 431 were answered and returned to the electronic questionnaire with a response rate of 72%. 26 responses of the retrieved questionnaires were not used for analysis purposes due to missing data. Consequently, 405 questionnaires were adequate and valid to be analyzed. In accordance with Hair et al. (2019) the valid retrieved questionnaires are qualified to execute Structural Equation Model (SEM).

Grounding on relative investigations in the marketing domain, the constructs of the current study model were developed. The items' instrument of each construct was adapted and developed to serve the objectives of the current research. The items' constructs of eTailQ model were adapted from several studies (4 items of Open-Sooq's web design, 4 items of Open-Sooq's reliability, 4 items of Open-Sooq's security, and 4 items of Open-Sooq's customer support from (Alhanatleh, 2021). Moreover, the items' constructs of TAM were measured from various investigations depending on relative literature (4 items Open-Sooq's perceived ease of use from (Huang et al., 2011), and 4 items of Open-Sooq's usefulness from (Ozturk et al., 2016; Zhong & Moon, 2022) In addition, the items' constructs of online relationship quality model were adapted from several studies (6 items of Open-Sooq's trust and 5 items of Open-Sooq's satisfaction (Daabseh & Aljarah, 2021; Zhong & Moon, 2022). The items of co-creation value constructed with 10 items were adapted depending on relative literature (Daabseh & Aljarah, 2021). After that, three English and Arabic language experts were asked to translate the items of model constructs to Arabic language due to the population language of the current research. Later, the pilot study was conducted through asking 15 marketers and advertisers. As a result, some corrections were modified on items of study instruments. The final draft of the study instrument was modified and adjusted to rely on existing investigations from literature review to achieve the purposes of the recent research. The items of model constructs were scaled and measured depending on Five-Likert scale ranging from strongly disagree representative by 1 to strongly agree representative by 5.

#### 4. Results

To retrieve the results of the developed model of the recent study, various methods were minutely executed on AMOS Version 22 and SPSS software due to their proficiency to provide reliable findings (Hair Jr et al., 2021; Sarstedt et al., 2020). Grounding on (Hair et al., 2007) providing the results of co-creation value model of marketers and advertisers was estimated in accordance with several approaches and techniques. Firstly, the SPSS program was selected for processes of preparing data employing a group set of serial steps such as encoding the gathered data, handling unengaged values of respondents, removing the missing respondents' values, calculating the Skewness and computing the respondents' outlier. As an important technique, Confirmatory Factor Analysis (CFA) was implemented to measure the validity of the developed model of co-creation value of marketers and advertisers in Jordan. As the last step to retrieve the results, SEM was shaped and estimated for determining the level of co-creation value of marketers and advertisers in Jordan.

##### 4.1 Respondents' Profile

Table 1 provides the main characteristics information about marketers and advertisers in Jordan using the open-Sooq app who engaged in the current research, where the number of marketers and advertisers participating in this study has reached 405. As noted from the retrieved results, the Gender feature includes two categories, which are male with (59.3%) and female (40.7%). Moreover, the age characteristic is divided into four categories, where the high frequent participation has fallen in ( $\geq 41$  years) range with (39.3%). The last feature is education, which consists of five classifications, the highest frequent range was the participants who received the Bachelor's certification with (49.1%).

**Table 1**  
Profile of marketers and advertisers in Jordan using open-Sooq app (N=405)

Demographic characteristic	Criteria	Frequency	Percentage
Gender	Male	240	59.3
	Female	165	40.7
Age	$\leq 20$ years	47	11.6
	21- 30 years	69	17
	31- 40 years	130	32.1
	$\geq 41$ years	159	39.3
Education	Secondary school or less	24	5.9
	Diploma	25	6.2
	Bachelors	199	49.1
	Master degree	115	28.4
	Ph. D degree	42	10.4

##### 4.2 Measurement co-creation value model of the current research

Before embarking to run the SEM of the study's model, the CFA must take place to ensure the instruments validation of the current research support fit indicators to move on the analysis processes. As asserted by (Awang, 2014), several required tests were recommended to be evaluated during CFA execution such as the convergent validity, construct validity and



discriminant validity to measure the validation of the marketers and advertisers co-creation value model of using mobile apps in Jordan. The first step of the measurement co-creation value model was to estimate the constructs through applying several techniques in CFA to obtain the fit indicators. As a result, some items from various constructs were deleted due to factor loading features and high covariance correlation between constructs to provide a model fit. As recommended by (Raza & Awang, 2021), the required loading value for each item should be exceeded (0.60) and the covariance correlation between any two factors should not exceed (0.85). In this case, the multi-collinearity issue does not occur. After running the CFA, the items that meet the required threshold of factor loading value were remained to be used for further analysis (The deletion items were SE1 from Open-Sooq's security construct, CS1 from Open-Sooq's customer service construct, and both CC2 and CC5 from Open-Sooq's co-creation value construct). Moreover, the issue of multi-collinearity did not exist because the covariance correlation values between all constructs in the co-creation value model were less than (0.85) as noticeable in Table 2.

**Table 2**

Co-creation model constructs loaded items

Construct	Coded Items	Loaded Items
Open-Sooq's ease of use	ES1: The Open-Sooq app is easy to use.	0.829
	ES2: The Open-Sooq app is easy to learn.	0.887
	ES3: The Open-Sooq app is user friendly.	0.740
	ES4: The Open-Sooq app is easy to master	0.858
Open-Sooq's usefulness	US1: The Open-Sooq app is a comparatively efficient way to marketing and advertising.	0.809
	US2: The Open-Sooq app will help me make marketing and advertising smoothly.	0.846
	US3: The use of The Open-Sooq app is useful for me.	0.772
	US4: The use of The Open-Sooq- app is beneficial for me.	0.751
Open-Sooq's web design	WD1: I find the Open-Sooq app easy to use.	0.751
	WD2: The Open-Sooq app has effective search functions.	0.703
	WD3: The Open-Sooq app loads quickly.	0.859
	WD4: Overall, the Open-Sooq app works very well technically.	0.680
Open-Sooq's security	SE2: I feel safe in my transactions at the Open-Sooq app.	0.751
	SE3: I trust that the Open-Sooq app will not misuse my personal information.	0.785
	SE4: I am satisfied with the information about security provided on the Open-Sooq app.	0.880
Open-Sooq's reliability	RE1: When I order, I receive the services of marketing and advertising quickly	0.811
	RE2: The Open-Sooq app respects the delivery delays promised	0.777
	RE3: I obtain exactly the services which I ordered	0.825
	RE4: My requests and instructions are correctly processed in the Open-Sooq app	0.894
Open-Sooq's customer service	CS2: The Open-Sooq app company is responsive to my complaints.	0.772
	CS3: The Open-Sooq app company is responsive to my requests.	0.876
	CS4: The Open-Sooq app company is dependable in handling customer service problems.	0.840
Open-Sooq's satisfaction	ST1: Overall, the Open-Sooq app consistently meets my expectations	0.774
	ST2: My decision to market and advertise from the Open-Sooq app was a wise one.	0.791
	ST3: My overall experience with the Open-Sooq app is satisfactory	0.813
	ST4: I am satisfied with the product provided by the Open-Sooq app.	0.846
	ST5: The Open-Sooq app service is successful.	0.800
	ST6: Overall, I am satisfied with the transaction service provided by The Open-Sooq app.	0.788
Open-Sooq's trust	TR1: I am prepared to give my private information to the Open-Sooq app.	0.816
	TR2: The Open-Sooq app always fulfills promises and commitments.	0.826
	TR3: The Open-Sooq app is professional in marketing and advertising field.	0.847
	TR4: I am willing to give my credit card number to the Open-Sooq app.	0.758
	TR5: It is not a problem for the open-Sooq buyers to pay in advance for purchasing products over the app	0.698
Open-Sooq's co-creation value	CC1: Spending a lot of time-sharing information about my needs and opinions with the Open-Sooq app during the marketing and advertising processes.	0.770
	CC3: I give advice to the Open-Sooq app to provide new products and services.	0.829
	CC4: I give suggestions to the Open-Sooq app on how to improve its product offerings.	0.792
	CC6: Being very much involved in deciding the payment way (cash money/ credit card).	0.792
	CC7: I would say positive things about the Open-Sooq app to others.	0.883
	CC8: When I receive a good service, I will let the Open-Sooq app know.	0.874
	CC9: When I experience a problem, I will let the Open-Sooq app know.	0.830
	CC10: I would carefully observe the rules and policies of the Open-Sooq app.	0.813

Table 3 states the mean and standard deviations (Std) for each construct that mean the marketers and advertisers support high ( $\geq 3.666$ ) and moderate ( $< 3.666$ ) perception toward the items of each construct. The result is that improving, developing, and enhancing the open-Sooq app are required processes to frequently occur.

**Table 3**

Mean and Std of Co-creation model constructs

Construct	Mean	Std
Open-Sooq's ease of use	3.5642	.87904
Open-Sooq's usefulness	3.7111	.86798
Open-Sooq's web design	3.2810	.68464
Open-Sooq's security	3.6732	.93148
Open-Sooq's reliability	3.5579	.99907
Open-Sooq's customer service	3.2086	.83586
Open-Sooq's satisfaction	3.4376	.82032
Open-Sooq's trust	2.5415	.74898
Open-Sooq's co-creation value	2.4486	1.03897

To evaluate the convergent validity of the current research, the measurement model's fitness index and the Average Variance Extracted (AVE) were conducted.

**Table 4**

Model fit classifications and their accepted values.

Classification name	Indicator name	Accepted value
Absolute Fit Index	RMSEA	RMSEA less than 0.08
	GFI	GFI greater than 0.85 → accepted, GFI greater than 0.90 → ideal
Incremental Fit Index	AGFI	AGFI greater than 0.85 → accepted, AGFI greater than 0.90 → ideal.
	CFI	CFI greater than 0.85 → accepted, CFI greater than 0.90 → ideal.
	TLI	TLI greater than 0.85 → accepted, TLI greater than 0.90 → ideal.
	NFI	NFI greater than 0.85 → accepted, NFI greater than 0.90 → ideal.
Parsimonious Fit Index	ChiSq /df	Chi-Square/ df less than 5 → accepted, Chi-Square/ df less than 3 → ideal.

The summary of the discriminant validity indicators was computed to confirm both the discriminant and convergent validity as supported by Hair et al. (2010). In terms of constructs reliability, the composite reliability (CR) test was assessed as CR replaces the Cronbach Alpha's measurements as suggested by (Kashif et al., 2016). There are three types of model fit consisting of incremental fit, parsimonious fit and absolute fit as popularly used in literature (Awang, 2015). Table 4 provides the indicators for each types of model fit with their accepted value as recommended by Awang (2015) As used in many studies in the literature review such as (Isah et al., 2023), it is revealed that the model is provided fit when the bold indicators support the cut-off of the accepted value. The retrieved indicators value of the co-creation model has provided powerful evidence to conduct further analysis. However, Table 5 clarifies the model fit indicator and their values. The results uncovered that the co-creation value model supported a fit in accordance with above discussion and Table 4.

**Table 5**

Measurement co-creation value model indicators

Indictors	RMSEA	GFI	AGFI	CFI	TLI	NFI	ChiSq /df
Value	0.050	.851	.818	.936	.929	.881	2.015

Depending on CR and AVE value in Table 6. The research's results provided that the obtained values of CR and AVE exceeded the accepted threshold values of (0.50) and (0.60) respectively as recommended by Mohamad et al. (2019). Thus, the current study summarizes that the composite reliability and the convergent validity of co-creation value models have been supported. In addition, the current research needs to present the assessment of discriminant validity. To conduct the discriminant validity, two computed assumptions should be evaluated. *First*, the AVE's square root of each construct has been computed which are represented in bold font in Table 6.

**Table 6**

CR, AVE, and discriminant validity of co-creation value model

	CR	AVE	TRT	EoU	UF	WD	SE	REL	CoS	SAT	COV
TRT	0.893	0.625	<b>0.791</b>								
EoU	0.898	0.689	-0.033	<b>0.830</b>							
UF	0.873	0.633	0.038	0.794	<b>0.795</b>						
WD	0.837	0.565	0.050	0.056	0.031	<b>0.751</b>					
SE	0.848	0.652	0.205	0.625	0.606	0.058	<b>0.807</b>				
REL	0.897	0.685	0.319	0.002	0.107	0.123	0.112	<b>0.828</b>			
CoS	0.869	0.690	0.232	0.451	0.527	0.044	0.614	0.197	<b>0.830</b>		
SAT	0.915	0.644	0.123	0.624	0.766	0.072	0.647	0.116	0.705	<b>0.802</b>	
COV	0.944	0.679	-0.111	-0.033	0.006	-0.094	-0.073	-0.055	-0.038	-0.049	<b>0.824</b>

Note: the abbreviations of TRT (trust), EoU (ease of use), UF (usefulness), WD (web design), SE (Security), REL (Reliability), CoS (customer support), SAT (satisfaction), and COV (co-creation value) in Table 6.

Also, the correlations coefficients have been obtained. However, the condition to reach the decrement validity of the current research model is that the AVEs square root of all constructs should be greater than the internal correlations coefficient of other constructs (Awang, 2018). Considering the results represented in Table 6, the discriminant validity of co-creation value model has been supported, which means the redundant construct does not seem to exist. As a result, all validity issues of the co-creation value model have been achieved that guide the current study analysis to conduct the hypotheses results.

### 2.3. SEM of co-creation value model and test hypotheses

After executing the CFA and completing the validity requirements of co-creation value model constructs, data were imputed to be used for estimating the hypotheses results. The table and figure below represent the returned findings of co-creation model hypotheses depending on estimating SEM approach. However, the estimated results of the co-creation value model clarify that **H2**, **H3**, **H4**, **H6**, **H7**, **H8**, **H9**, **H10**, **H11**, **H12**, and 14 were empirically supported, while **H1**, **H5**, and **H13** were not supported as can be noticed in Table 7 and Fig. 2. In more detail, the returned results of the current study uncovered that perceived usefulness does not support empirical evidence on marketers' and advertisers' trust of using Open-Sooq app in Jordan ( $\beta = -0.045$ ,  $p = 0.574$ ) where perceived usefulness has a direct and significant empirical support on Marketers' and advertisers' satisfaction of using Open-Sooq app in Jordan ( $\beta = 0.637$ ,  $p = 0.000$ ). Thus, (**H1** is not supported and **H2** is supported). Moreover, the provided results of the current study disclosed that perceived ease of use gains an empirical and significant evidence on marketers' and advertisers' trust of using Open-Sooq app in Jordan ( $\beta = -0.241$ ,  $p = 0.002$ ) and perceived ease of use presents an empirical and significant evidence on marketers' and advertisers' SAT of using Open-Sooq app in Jordan ( $\beta = -0.162$ ,  $p = 0.000$ ) as a consequence (**H3** and **H4** are significantly supported).

In terms of eTailQ dimensions hypotheses, the presented findings uncovered that web design does not provide empirical and significant evidence on marketers' and advertisers' trust of using Open-Sooq app in Jordan ( $\beta = -0.10$ ,  $p = 0.841$ ) and web design presents an empirical and significant evidence on marketers' and advertisers' satisfaction of using Open-Sooq app in Jordan ( $\beta = 0.055$ ,  $p = 0.038$ ) as consequence (**H5** is not supported and **H6** is significantly supported). Also, the provided results of the current study disclosed that reliability gains an empirical and significant evidence on marketers' and advertisers' trust of using Open-Sooq app in Jordan ( $\beta = 0.212$ ,  $p = 0.000$ ) and reliability presents an empirical and significant evidence on marketers' and advertisers' satisfaction of using Open-Sooq app in Jordan ( $\beta = -0.045$ ,  $p = 0.016$ ) as consequence (**H7** and **H8** are significantly supported). In addition, the findings of the current study revealed that customer support gains an empirical and significant evidence on marketers' and advertisers' trust of using Open-Sooq app in Jordan ( $\beta = 0.132$ ,  $p = 0.020$ ) and customer support presents an empirical and significant evidence on marketers' and advertisers' SAT of using Open-Sooq app in Jordan ( $\beta = 0.379$ ,  $p = 0.000$ ) as consequence (**H9** and **H10** are significantly supported). Finally, the findings of the current study revealed that security gains an empirical and significant evidence on marketers' and advertisers' trust of using Open-Sooq app in Jordan ( $\beta = 0.256$ ,  $p = 0.000$ ) and security presents an empirical and significant evidence on marketers' and advertisers' satisfaction of using Open-Sooq app in Jordan ( $\beta = 0.099$ ,  $p = 0.001$ ) as consequence (**H11** and **H12** are significantly supported). In terms of online relationship quality dimensions hypotheses, the presented findings of the recent research uncovered that satisfaction does not provide empirical and significant evidence on marketers' and advertisers' co-creation value of using Open-Sooq app in Jordan ( $\beta = -0.046$ ,  $p = 0.467$ ) and trust presents an empirical and significant evidence on marketers' and advertisers' co-creation value of using Open-Sooq app in Jordan ( $\beta = -0.158$ ,  $p = 0.022$ ) as consequence (**H13** is not supported and **H14** is significantly supported).

**Table 7**

Findings of Co-creation value model hypotheses

Hypothesis code	Estimate	S.E.	C.R.	P	Result
<b>H1:</b> UF → TRT	-.045	.080	-.562	.574	Rejected
<b>H2:</b> UF → SAT	.637	.043	14.840	***	Accepted
<b>H3:</b> EoU → TRT	-.241	.078	-3.081	.002	Accepted
<b>H4:</b> EoU → SAT	-.162	.042	-3.848	***	Accepted
<b>H5:</b> WD → TRT	.010	.049	.201	.841	Rejected
<b>H6:</b> WD → SAT	.055	.026	2.077	.038	Accepted
<b>H7:</b> REL → TRT	.212	.035	6.098	***	Accepted
<b>H8:</b> REL → SAT	-.045	.019	-2.410	.016	Accepted
<b>H9:</b> CoS → TRT	.132	.057	2.323	.020	Accepted
<b>H10:</b> CoS → SAT	.379	.031	12.352	***	Accepted
<b>H11:</b> SE → TRT	.256	.058	4.411	***	Accepted
<b>H12:</b> SE → SAT	.099	.031	3.184	.001	Accepted
<b>H13:</b> SAT → COV	-.046	.063	-.727	.467	Rejected
<b>H14:</b> TRT → COV	-.158	.069	-2.291	.022	Accepted

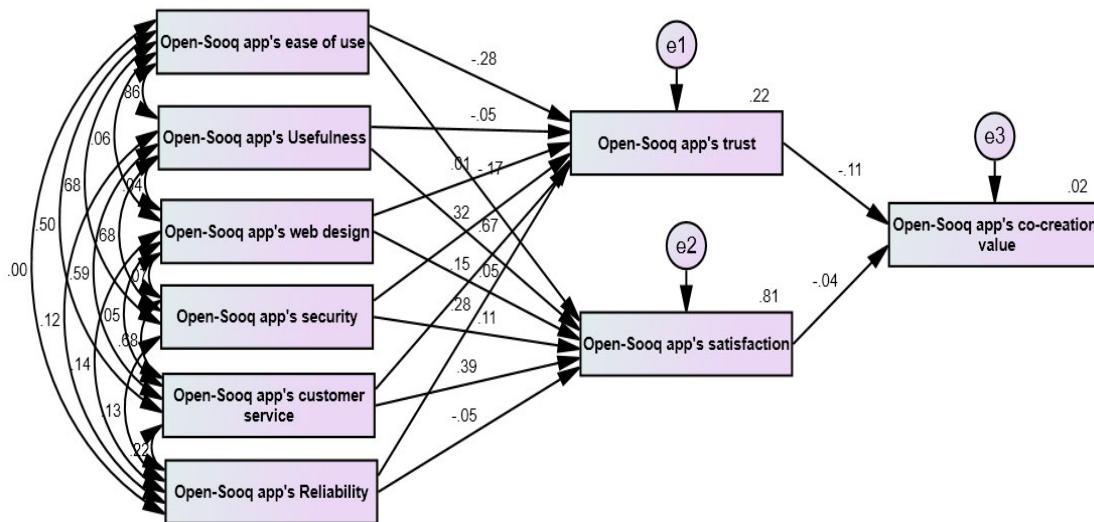


Fig. 2. SEM of Co-creation value model of using Open-Sooq app.

## 5. Results discussion

The current article has been conducted to draw a new theoretical and practical baseline regarding digital technology platforms through applying this study in a marketing setting depending on several information technology theories. The recent manuscript has evaluated the factors influencing the co-creation value of using Open-Sooq app among Jordanian marketers and advertisers through selecting extended TAM, eTailQ model, and online relationship quality model. Moreover, the empirical findings of this study has responded to an allegation of the dimensions of extended TAM, eTailQ model, and online relationship quality model increasing the co-creation value of marketers and advertisers using Open-sooq app.

Depending on the research results, it is sudden that perceived usefulness has no significant and direct effect on trust of using Open-sooq app in Jordan as this result does not meet the prior investigations such as (Kurniawan et al., 2022; Sarkar et al., 2020), the justification to interpret this result could be referred to old version of Open-sooq app where the marketers and advertisers do not update their app to have an effective version to have a complete benefits for performing their practices. In accordance with the second hypothesis findings, perceived usefulness provides a direct and significant impact on satisfaction of using Open-sooq app in Jordan; which means that the marketers and advertisers are satisfied about the using of Open-Sooq app where this result meets the prior studies in relative setting (Hussien & Mansour, 2020; Sharma & Sharma, 2019; Tamilmani et al., 2019). Depending on third and fourth hypotheses of the current research, perceived ease of use has a direct and significant effect on trust and satisfaction of using Open-Sooq app from the marketers' and advertisers' point of view in Jordan in line with previous empirical investigations (Daabseh & Aljarah, 2021; Zhong & Moon, 2022). Managers and policymakers of Open-Sooq app may develop an effective design of the app to bring it more ease, friendly and ease to learn. In this way, attitude and belief, and attention to use and acceptance of information technology could be enhanced by using Open-Sooq app and then increase the level of co-creation value of marketers and advertisers.

In accordance with **H5** and **H6** findings, the returned results of the recent study has no significant and direct effect on trust of using Open-sooq app in Jordan as this result does not come into contact with the prior investigations such as (Alhanatleh, 2021; Tetteh, 2022) However, the potential reason of this result could be referred to the marketers' and advertisers' comparison with similar mobile apps they use. Web design has significant and direct effect on satisfaction of using Open-sooq apps in Jordan as this result meets the prior investigations such as (Alhanatleh, 2021; Li et al., 2015; Tetteh, 2022). Analysts, Developers, and designer's apps could play a primary role to re-enhance the design of open-sooq then creating/increasing the value of customers. Depending on **H7** and **H8** findings, the retrieved results of the current study detected that reliability has significant and direct effect on trust and satisfaction of using Open-sooq app in Jordan as these results meet the prior empirical studies such as (Alhanatleh, 2021; Li et al., 2015; Tetteh, 2022). Grounding in these results, the management of Open-Sooq app may take more consideration to facilitate the marketing and advertising practices through the app, this could be a more effective way to deliver the products and services in promised time for consumers. In this way, reliability factor could increase the level trust and satisfaction of marketers and advertisers. Relying on **H9** and **H10** findings, the retrieved results of the current research discovered that customer support provides significant and direct effect on trust and satisfaction of using Open-sooq app in Jordan as these results are in line with prior empirical research such as (Li et al., 2015). Therefore, for top management and policymakers of Open-Sooq apps, taking attention about the responding time for complaints and requests of marketers and advertisers may play a crucial role to increase the level of trust and satisfaction and add value for Open-Sooq customers. Grounding on **H11** and **H12** findings, the retrieved results of the current research

uncovered that SE provides significant and direct effect on trust and satisfaction of using Open-sooq app in Jordan as these results are in line with prior empirical investigations such as (Li et al., 2015; Tetteh, 2022; Wilson et al., 2021). As a result, providing a high-level security regarding information of marketers and advertisers of Open-sooq apps could be a critical point to keep the level of trust and satisfaction highly and generate the value of app users. In accordance with **H13** results, the current research findings detected that satisfaction does not support a significant and direct impact on co-creation value of using Open-sooq app in Jordan as this result does not meet the prior practical investigations such as (Daabseh & Aljarah, 2021; Kamboj et al., 2018; Nadeem et al., 2020). As a result, the policymakers of Open-Sooq apps may always be ready to meet the trends and expectations of their consumers. Also, enhancing the services of transactions could be another critical point to increase/ generate the value for customers. Depending on **H14** findings, the results of the recent research found that trust provides a significant and direct effect on co-creation value of using Open-sooq app in Jordan as this result is in line with the prior empirical articles such as (Pahi et al., 2016; Tajvidi et al., 2021). Consequently, for the top management of Open-Sooq, adopting the latest version infrastructure of information technology, such as blockchain; could increase the trust level of the Open-Sooq marketers and advertisers then this may positively affect the level of user's value.

## 6. Theoretical and Practical Implications

Through conducting the current research, several implications have been presented consisting of theoretical and managerial. In terms of theoretical implications, the developed model of the current research has been examined and evaluated to determine how extended TAM and eTailQ model influence marketers' and advertisers' co-creation value using Open-Sooq app in Jordan. For instance, previous investigations have researched the value, trust, or satisfaction in different contexts such as websites companies (Alkhwaldi et al., 2023; Bany Mohammad et al., 2022 Al-Majali, A et al., 2023; Daabseh & Aljarah, 2021), firms' social commerce (Pappas et al., 2017), and consumers engagement with co-creation value (Zhang et al., 2018). However, drawing a theoretical background depending on the extended TAM and eTailQ model in the digital platform has been considered as a critical theoretical implication. Throughout the current article, it has been found that the extended TAM and eTailQ model and their dimensions had an ability to determine the marketers' and advertisers' co-creation value using Open-Sooq app. In terms of practical implication, the recent manuscript has contributed to the digital marketing domain especially in marketing and advertising contexts depending on the perspective of marketers and advertisers using mobile app technology. The empirical results of the current research have practically emphasized and confirmed the previous investigations which have argued that extended TAM dimensions, eTailQ model dimensions, and online relationship quality dimensions could identify the co-creation value of consumers in digital platform (Davis, 1989; Fishbein et al., 1975; Gefen et al., 2003; Merz et al., 2018; Wolfinbarger & Gilly, 2003). The findings of the article detected that the theories of extended TAM, eTailQ model, and their dimensions provide an ability to determine marketers' and advertisers' co-creation value in Jordan through the mediating role of online relationship quality dimensions. The results uncovered that both perceived usefulness from extended TAM and security from eTailQ model are the most critical dimensions that have influenced the co-creation value of using Open-Sooq app. However, the distinction of the current article from prior research is that it has empirically estimated the effect of several information technology theories (extend TAM, eTailQ, and online relationship quality model) on co-creation value in the digital marketing environment relying on marketers' and advertisers' opinion. The findings of the current research could be recommended as a reference for policymakers, practitioners, and top management in the field of digital marketing especially in Jordan. As a result, providing a comprehensive understanding regarding the dimensions that impact the co-creation value is a required process to develop and sustain the use of mobile apps in digital marketing more specifically in advertising and marketing activities. Finally, generating or raising the value of using Open-Sooq needs to support various procedures such as serious support from top management, adopting the latest proper version of information technology, and frequent development of that app to meet the users' requirements.

## 7. Limitations and Recommendation

As with prior investigations, there are a few challenges and future trends regarding the current article. There are some limitations that have existed during conducting the objectives of the current research. Firstly, convenience methods that are used to conduct the objectives of the current research may not provide generalization and accurate results. Thus, using different methods for determining the sample size could provide more realistic results. A cross-sectional survey method is also required to generalize and confirm the current research results because the Open-Sooq app is used in different countries. In addition to, perceived value (H. Li et al., 2015; Zhong & Moon, 2022) of mouth, and app performance (Al-Adwan & Sammour, 2020). as prior variables of co-creation value that have the likelihood to provide a positive effect in the mobile marketing and advertising platform; it is recommended that future trends could add the perceived value, word of mouth, app performance, and other factors to identify the co-creation value. Moreover, the mediation role of trust, satisfaction, and commitment could provide another insight to measure customers' co-creation value in mobile app environments as studied in online patterns (Daabseh & Aljarah, 2021) thus it is recommended to be researched in future investigations. Finally, maximizing the sample size could also give a better understanding about customers' co-creation value in mobile apps contexts in the same file of the recent article.

## References

- Abd Ghani, M., Rahi, S., Yasin, N. M., & Alnaser, F. M. (2017). Adoption of internet banking: extending the role of technology acceptance model (TAM) with e-customer service and customer satisfaction. *World Applied Sciences Journal*, 35(9), 1918–1929.
- Acikgoz, F., Filieri, R., & Yan, M. (2023). Psychological predictors of intention to use fitness apps: The role of subjective knowledge and innovativeness. *International Journal of Human–Computer Interaction*, 39(10), 2142–2154.
- Akdim, K., Casaló, L. V, & Flavián, C. (2022). The role of utilitarian and hedonic aspects in the continuance intention to use social mobile apps. *Journal of Retailing and Consumer Services*, 66, 102888.
- Akour, I., Alnazzawi, N., Alshurideh, M., Almaiah, M. A., Al Kurdi, B., Alfaisal, R. M., & Salloum, S. (2022). A Conceptual Model for Investigating the Effect of Privacy Concerns on E-Commerce Adoption: A Study on United Arab Emirates Consumers. *Electronics*, 11(22), 3648.
- Al-Samirae, Z., S. Alshibly, M., & Alghizzawi, M. (2020). Excellence in Drawing up Marketing Mix Strategies for Small and Medium Enterprises (SMEs) and Their Impact on the Marketing Performance. *Business, Management and Economics Research*, 6(3), 30–36. <https://doi.org/10.32861/bmer.63.30.36>
- AlHadid, I., Abu-Taieh, E., Alkhalwaldeh, R. S., Khwaldeh, S., Masa'deh, R., Kaabneh, K., & Alrowwad, A. (2022). Predictors for E-government adoption of SANAD App services integrating UTAUT, TPB, TAM, Trust, and perceived risk. *International Journal of Environmental Research and Public Health*, 19(14), 8281.
- Alhanatleh, H., & Akkaya, M. (2020). Factors affecting the cloud ERP: a case study of learning resources department at Jordanian education ministry. *Management & Economics Research Journal*, 2(4), 101–122.
- Alhanatleh, H., Khaddam, A., & Abousweilem, F. (2022). Mobile government public value model for assessing the public institution's services: evidence through the context of Jordan. *International Journal of Data and Network Science*, 6(4), 1295–1308.
- Alhanatleh, H. M. (2021). The effect of electronic banking services usage on clients electronic loyalty. *International Journal of Human Capital Urban Manage*, 6(4), 461–476.
- Alharafsheh, M., Alghizzawi, M., Ezmigna, I., Al Darwish, M., & Alawneh, E. (2023). The Relationship Between Transformational Leadership and Public Sector Employees Job Satisfaction During COVID-19. *International Journal of Professional Business Review*, 8(6), e01535–e01535.
- Al-Okaily, M. (2024). So What About the Post-COVID-19 Era?: Do Users Still Adopt FinTech Products?. *International Journal of Human–Computer Interaction*. Vol. and No. ahead-of-print. DOI - 10.1080/10447318.2024.2305992.
- Al-Okaily, M. (2023). The influence of e-satisfaction on users' e-loyalty toward e-wallet payment apps: a mediated-moderated model. *International Journal of Emerging Markets*. Vol. and No. ahead-of-print. <https://doi.org/10.1108/IJOEM-08-2022-1313>
- Al-Okaily, M. (2022). Toward an integrated model for the antecedents and consequences of AIS usage at the organizational level. *EuroMed Journal of Business*. Vol. and No. ahead-of-print. <https://doi.org/10.1108/EMJB-05-2022-0100>.
- Al-Okaily, M., & Al-Okaily, A., (2022). An Empirical Assessment of Enterprise Information Systems Success in a Developing Country: The Jordanian Experience. *The TQM Journal*, 34(6), pp. 1958-1975. <https://doi.org/10.1108/TQM-09-2021-0267>.
- Rahi, S., Othman Mansour, M. M., Alharafsheh, M., & Alghizzawi, M. (2021). The post-adoption behavior of internet banking users through the eyes of self-determination theory and expectation confirmation model. *Journal of Enterprise Information Management*, 34(6), 1874-1892. <https://doi.org/10.1108/JEIM-04-2020-0156>
- Alhashmi, S. F. S., Salloum, S. A., & Abdallah, S. (2019). Critical success factors for implementing artificial intelligence (AI) projects in Dubai Government United Arab Emirates (UAE) health sector: applying the extended technology acceptance model (TAM). *International Conference on Advanced Intelligent Systems and Informatics*, 393–405.
- Almajali, D. A. (2022). Determinants Of Online Behavior Among Jordanian Consumers: An Empirical Study Of Opensooq. *Interdisciplinary Journal of Information, Knowledge & Management*, 17.
- Almajali, D., Al-Okaily, M., Al-Daoud, K., Weshah, S., & Shaikh, A. A. (2022a). Go Cashless! Mobile Payment Apps Acceptance in Developing Countries: The Jordanian Context Perspective. *Sustainability*, 14(20), 13524.
- Almajali D, Al-Okaily M, Barakat S, Al-Zegaier H, Dahalin ZM. (2022b). Students' Perceptions of the Sustainability of Distance Learning Systems in the Post-COVID-19: A Qualitative Perspective. *Sustainability*, 14(12), 7353. <https://doi.org/10.3390/su14127353>.
- Al-Majali, D., Al-Okaily, A. and Majali, T. (2023). Blockchain technology and its applications in digital accounting systems: insights from Jordanian context. *Journal of Financial Reporting and Accounting*. Vol. and No. ahead-of-print. <https://doi.org/10.1108/JFRA-05-2023-0277>.
- Alsmadi, A. A., Alrawashdeh, N., Al-Okaily, A., Oroud, Y., & Al-Gasaymeh, A. S. (2023a). The role of digital accounting transformation in the banking industry sector: an integrated model. *Journal of Financial Reporting and Accounting*. Vol. and No. ahead-of-print. <https://doi.org/10.1108/JFRA-04-2023-0214>.
- Alomari, K. A. K., Aljawarneh, N. M., Alomari, Z. S., Albhareen, R., & Alawneh, A. (2020). *Innovations in knowledge management perspectives: an empirical study in the Jordanian commercial and Islamic banks*, 4.
- Alshammari, T., Messom, C., & Cheung, Y. (2022). M-government continuance intentions: an instrument development and validation. *Information Technology for Development*, 28(1), 189–209.

- AlSideiri, A., Cob, Z. B. C., & Drus, S. B. M. (2022). Factors Influencing the Adaption of Online Pharmacy in Oman: Pilot Study. *2022 International Electronics Symposium (IES)*, 691–697.
- Awang, P. (2015). *SEM made simple: A gentle approach to learning Structural Equation Modeling*. MPWS Rich Publication, Bangi.
- Awang, P. (2018). *Pendekatan Mudah SEM (Structural Equation Modeling)*. MPWS Rich Resources.
- Awang, Z. (2014). A handbook on SEM for academicians and practitioners: step by step practical guides for the beginners (Vol. 2 First). *Perpustakaan Negara Malaysia: MPSW Rich Resources*.
- Carranza, R., Díaz, E., Sánchez-Camacho, C., & Martín-Consuegra, D. (2021). e-Banking adoption: an opportunity for customer value co-creation. *Frontiers in Psychology*, *11*, 621248.
- Al-Kofahi, M., Shiyyab, F.S. & Al-Okaily, A. (2023). Determinants of user satisfaction with financial information systems in the digital transformation era: insights from emerging markets. *Global Knowledge, Memory and Communication*, Vol. and No. ahead-of-print. <https://doi.org/10.1108/GKMC-12-2022-0285>.
- Al-Fraihat, D., Al-Debei, M. M., & Al-Okaily, A. (2022). Factors Influencing the Decision to Utilize eTax Systems During the COVID-19 Pandemic: The Moderating Role of Anxiety of COVID-19 Infection. *International Journal of Electronic Government Research (IJEGR)*, *18*(1), 1-24.
- Aws, A. L., Ping, T. A., & Al-Okaily, M. (2021). Towards business intelligence success measurement in an organization: A conceptual study. *Journal of System and Management Sciences*, *11*(2), 155-170.
- AL-Khatib, A.W., Shuhaiber, A., Mashal, I. and Al-Okaily, M. (2023). Antecedents of Industry 4.0 capabilities and technological innovation: a dynamic capabilities perspective. *European Business Review*, Vol. and No. ahead-of-print. <https://doi.org/10.1108/EBR-05-2023-0158>
- Alqudah, H., Al-Qudah, A.A., Al-Qadi, N.S., Elrehail, H., & Al-Okaily, A. (2023). Does financial awareness increase the acceptance rate for financial inclusion? An empirical examination in the era of digital transformation. *Kybernetes*, *52*(11), 4876-4896. <https://doi.org/10.1108/K-08-2021-0710>
- Alkhwaldi, A. F., Abdulmuhsin, A. A., Alqudah, H., & Al-Okaily, A. (2023). Cloud-based accounting information systems usage and its impact on Jordanian SMEs' performance: the post-COVID-19 perspective. *Journal of Financial Reporting and Accounting*, *21*(1), 126-155.
- Abd Rahman, M. S., Ali, A., Abu-Shanab, E., & Masa'deh, R. (2023). An Empirical Investigation on Acceptance of Mobile Payment System Services in Jordan: Extending UTAUT2 Model with Security and Privacy. *International Journal of Business Information Systems*, *42*(1), 123–152.
- Aloulou, M., Grati, R., Al-Qudah, A.A., & Al-Okaily, M. (2023). Does FinTech adoption increase the diffusion rate of digital financial inclusion? A study of the banking industry sector. *Journal of Financial Reporting and Accounting*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JFRA-05-2023-0224>
- Bany Mohammad, A., Al-Okaily, M., Al-Majali, M., & Masa'deh, R. E. (2022). Business Intelligence and Analytics (BIA) Usage in the Banking Industry Sector: An Application of the TOE Framework. *Journal of Open Innovation: Technology, Market, and Complexity*, *8*(4), 189.
- Srouji, A. F., Hamdallah, M. E., Al-Hamadeen, R., Al-Okaily, M., & Elamer, A. A. (2023). The impact of green innovation on sustainability and financial performance: Evidence from the Jordanian financial sector. *Business Strategy & Development*. Vol. and No. ahead-of-print. <https://doi.org/10.1002/bsd2.296>
- Abd Rahman, M. S., Al-Okaily, M., Ismail, W. N. S. W., & Ali, A. (2020). Measuring success of accounting information system: applying the DeLone and McLean model at the organizational level. *Journal of Theoretical and Applied Information Technology*, *98*(14), 2697-2706.
- Alsmadi, A. A., Shuhaiber, A., Al-Okaily, M., Al-Gasaymeh, A., & Alrawashdeh, N. (2023b). Big data analytics and innovation in e-commerce: current insights and future directions. *Journal of Financial Services Marketing*, 1-18. <https://doi.org/10.1057/s41264-023-00235-7>.
- Chiu, C., Chang, C., Cheng, H., & Fang, Y. (2009). Determinants of customer repurchase intention in online shopping. *Online Information Review*, *33*(4), 761–784.
- Cho, M., Bonn, M. A., & Li, J. J. (2019). Differences in perceptions about food delivery apps between single-person and multi-person households. *International Journal of Hospitality Management*, *77*, 108–116.
- Cristobal, E., Flavian, C., & Guinaliu, M. (2007). Perceived e-service quality (PeSQ) measurement validation and effects on consumer satisfaction and web site loyalty. *Managing Service Quality: An International Journal*, *17*(3), 317–340.
- Daabseh, T., & Aljarah, A. (2021). The relationship between online sale and customer value co-creation: The mediating role of e-satisfaction and e-trust. *International Journal of Data and Network Science*, *5*(2), 97–106.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, *13*(3), 319–340. <https://doi.org/10.2307/249008>
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: a comparison of two theoretical models. *Management Science*, *35*(8), 982–1003.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1992). Extrinsic and intrinsic motivation to use computers in the workplace 1. *Journal of Applied Social Psychology*, *22*(14), 1111–1132.
- Dewan, N., Hossain, M. B., Kim, G.-G., Dunay, A., & Illés, C. B. (2022). Transportation Mobile Applications Adoption Behavior Does Affect Overseas Residents' Life Satisfaction: Involvement as A Moderator. *Cogent Business & Management*, *9*(1), 2096998.

- Eneizan, B., Alsaad, A., Abdelbaset Alkhalwaldeh, H. N., & Rawash, O. E. (2020). E-wom, trust, usefulness, ease of use, and online shopping via websites: the moderating role of online shopping experience. *Journal of Theoretical and Applied Information Technology*, 98(13), 2554–2565.
- Fishbein, M., Ajzen, I., & Belief, A. (1975). *Intention and Behavior: An introduction to theory and research*. Addison-Wesley, Reading, MA.
- Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, 27(1), 51–90.
- Grewal, L., & Stephen, A. T. (2019). In mobile we trust: The effects of mobile versus nonmobile reviews on consumer purchase intentions. *Journal of Marketing Research*, 56(5), 791–808.
- Guenzi, P., & Pelloni, O. (2004). The impact of interpersonal relationships on customer satisfaction and loyalty to the service provider. *International Journal of Service Industry Management*, 15(4), 365–384.
- Guo, L., Li, Z., Zhou, Y., Wu, M., Liao, Y., & Cao, C. (2022). Interaction Design of New Media Reading Platforms Based on Value Co-Creation. *Proceedings of the 2022 6th International Conference on E-Education, E-Business and E-Technology*, 111–117.
- Gupta, S., & Lehmann, D. (2005). *Managing customers as investments the strategic value of customers in the long run*. Wharton School Publishing.
- Gustafsson, A., Johnson, M. D., & Roos, I. (2005). The effects of customer satisfaction, relationship commitment dimensions, and triggers on customer retention. *Journal of Marketing*, 69(4), 210–218.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook*. Springer Nature.
- Halim, S. B. K., Osman, S. B., Al Kaabi, M. M., Alghizzawi, M., & Alrayssi, J. A. A. (2023). The Role of Governance, Leadership in Public Sector Organizations: A Case Study in the UAE. In *Digitalisation: Opportunities and Challenges for Business: Volume 2* (pp. 301–313). Springer.
- Hamidi, F., Shams Gharnah, N., & Khajeheian, D. (2019). A conceptual framework for value co-creation in service enterprises (case of tourism agencies). *Sustainability*, 12(1), 213.
- Hartmann, N. N., Wieland, H., & Vargo, S. L. (2018). Converging on a new theoretical foundation for selling. *Journal of Marketing*, 82(2), 1–18.
- Hasan, F., Al-Okaily, M., Choudhury, T., & Kayani, U. (2023). A comparative analysis between FinTech and traditional stock markets: using Russia and Ukraine war data. *Electronic Commerce Research*, 1-26.
- Hosseini, M., Shajari, S., & Akbarabadi, M. (2022). Identifying multi-channel value co-creator groups in the banking industry. *Journal of Retailing and Consumer Services*, 65, 102312.
- Huang, Y.-M., Chiu, P.-S., Liu, T.-C., & Chen, T.-S. (2011). The design and implementation of a meaningful learning-based evaluation method for ubiquitous learning. *Computers & Education*, 57(4), 2291–2302.
- Hussien, F. M., & Mansour, N. M. (2020). Factors affecting customer satisfaction towards mobile food ordering applications (MFOAs). *The Scientific Journal of the Faculty of Tourism and Hotels, Alexandria University*, 17(1), 17–35.
- Hwang, Y., & Kim, D. J. (2007). Customer self-service systems: The effects of perceived Web quality with service contents on enjoyment, anxiety, and e-trust. *Decision Support Systems*, 43(3), 746–760.
- Isah, S., Ibrahim, R. M., & Karim, F. (2023). Validating the constructs of employees' competence model through confirmatory factor analysis: evidence from Nigeria. *International Journal of Economics (IJECE)*, 2(1), 71–86.
- Ishengoma, F., Mselle, L., & Mongi, H. (2022). An empirical study of critical success factors for the adoption of m-government services in Tanzania. *Smart Trends in Computing and Communications: Proceedings of Smart Communication, 2021*, 11–20.
- Kamboj, S., Sarmah, B., Gupta, S., & Dwivedi, Y. (2018). Examining branding co-creation in brand communities on social media: Applying the paradigm of Stimulus-Organism-Response. *International Journal of Information Management*, 39, 169–185.
- Kashif, M., Zakiah Melatu Samsi, S., Awang, Z., & Mohamad, M. (2016). EXQ: measurement of healthcare experience quality in Malaysian settings: A contextualist perspective. *International Journal of Pharmaceutical and Healthcare Marketing*, 10(1), 27–47.
- Kim, E., Tang, L., & Bosselman, R. (2019). Customer perceptions of innovativeness: An accelerator for value co-creation. *Journal of Hospitality & Tourism Research*, 43(6), 807–838.
- Kurniawan, I. A., Mugiono, M., & Wijayanti, R. (2022). The effect of Perceived Usefulness, Perceived Ease of Use, and social influence toward intention to use mediated by Trust. *Jurnal Aplikasi Manajemen*, 20(1), 117–127.
- Ladhari, R., Hudon, T., Massa, E., & Souiden, N. (2022). The determinants of Women's redemption of geo-targeted m-coupons. *Journal of Retailing and Consumer Services*, 66, 102891.
- Li, H., Aham-Anyanwu, N., Tevrizci, C., & Luo, X. (2015). The interplay between value and service quality experience: e-loyalty development process through the eTailQ scale and value perception. *Electronic Commerce Research*, 15, 585–615.
- Liang, T.-P., Ho, Y.-T., Li, Y.-W., & Turban, E. (2011). What drives social commerce: The role of social support and relationship quality. *International Journal of Electronic Commerce*, 16(2), 69–90.
- Lin, C.-P., Chiu, C.-K., Liu, C.-M., Chen, K.-J., & Hsiao, C.-Y. (2018). Modeling e-loyalty: a moderated-mediation model. *The Service Industries Journal*, 38(15–16), 1160–1178.



- Magatef, S., Al-Okaily, M., Ashour, L., & Abuhussein, T. (2023). The Impact of Electronic Customer Relationship Management Strategies on Customer Loyalty: A Mediated Model. *Journal of Open Innovation: Technology, Market, and Complexity*, 100149.
- Mansour, K. Ben. (2016). An analysis of business' acceptance of internet banking: an integration of e-trust to the TAM. *Journal of Business & Industrial Marketing*, 31(8), 982–994.
- Megdadi, Y., Alghizzawi, M., Hammouri, M., Megdadi, Z., Haddad, R., & Ibrahim, E. (2023). The Impact of Electronic Sales Channels on Customers Response of Convenience Products Outlets Stores. *International Journal of Professional Business Review*, 8(6), e01379–e01379.
- Merz, M. A., Zarantonello, L., & Grappi, S. (2018). How valuable are your customers in the brand value co-creation process? The development of a Customer Co-Creation Value (CCCV) scale. *Journal of Business Research*, 82, 79–89.
- Mohamad, M., Afthanorhan, A., Awang, Z., & Mohammad, M. (2019). Comparison between CB-SEM and PLS-SEM: Testing and confirming the maqasid syariah quality of life measurement model. *The Journal of Social Sciences Research*, 5(3), 608–614.
- Moncrief, W. C. (2017). Are sales as we know it dying... or merely transforming? *Journal of Personal Selling & Sales Management*, 37(4), 271–279.
- Morosan, C. (2011). Customers' adoption of biometric systems in restaurants: An extension of the technology acceptance model. *Journal of Hospitality Marketing & Management*, 20(6), 661–690.
- Mostafa, R. B. (2020). Mobile banking service quality: a new avenue for customer value co-creation. *International Journal of Bank Marketing*, 38(5), 1107–1132.
- Mou, J., Shin, D.-H., & Cohen, J. (2017). Understanding trust and perceived usefulness in the consumer acceptance of an e-service: A longitudinal investigation. *Behaviour & Information Technology*, 36(2), 125–139.
- Murillo-Zegarra, M., Ruiz-Mafe, C., & Sanz-Blas, S. (2020). The effects of mobile advertising alerts and perceived value on continuance intention for branded mobile apps. *Sustainability*, 12(17), 6753.
- Nadeem, W., Juntunen, M., Shirazi, F., & Hajli, N. (2020). Consumers' value co-creation in sharing economy: The role of social support, consumers' ethical perceptions and relationship quality. *Technological Forecasting and Social Change*, 151, 119786.
- Negash, S., Ryan, T., & Igbaria, M. (2003). Quality and effectiveness in web-based customer support systems. *Information & Management*, 40(8), 757–768.
- O'Hern, M. S., & Rindfleisch, A. (2017). Customer co-creation: a typology and research agenda. *Review of Marketing Research*, 84–106.
- Ozen, H. (2015). Online relationship quality: Does it increase repurchase intention from private shopping sites. *International Journal of Academic Research in Business and Social Sciences*, 5(7), 300–312.
- Ozturk, A. B., Bilgihan, A., Nusair, K., & Okumus, F. (2016). What keeps the mobile hotel booking users loyal? Investigating the roles of self-efficacy, compatibility, perceived ease of use, and perceived convenience. *International Journal of Information Management*, 36(6), 1350–1359.
- Pahi, M. H., Hamid, K. A., & Khalid, N. (2016). Save talent of banking sector of Pakistan: Mediating job satisfaction between job stress and employee turnover intention. *International Review of Management and Marketing*, 6(3), 617–624.
- Palmatier, R. W., Dant, R. P., Grewal, D., & Evans, K. R. (2006). Factors influencing the effectiveness of relationship marketing: A meta-analysis. *Journal of Marketing*, 70(4), 136–153.
- Pappas, I., Mikalef, P., Giannakos, M., & Pavlou, P. (2017). Value co-creation and trust in social commerce: An fsQCA approach. *The 25th European Conference on Information Systems (ECIS)*.
- Rafiq, M., Fulford, H., & Lu, X. (2013). Building customer loyalty in online retailing: The role of relationship quality. *Journal of Marketing Management*, 29(3–4), 494–517.
- Ramaswamy, V., & Gouillart, F. J. (2010). *The power of co-creation: Build it with them to boost growth, productivity, and profits*. Simon and Schuster.
- Raza, I., & Awang, Z. (2021). Knowledge-sharing practices in higher educational institutes of Islamabad, Pakistan: an empirical study based on theory of planned behavior. *Journal of Applied Research in Higher Education*, 13(2), 466–484.
- Ren, S., & Liu, D. (2022). Effects of digital nudging on the adoption of APPs for value co-creation among online consumers. *Information Technology and Management*, 1–12.
- Rihova, I., Buhalis, D., Moital, M., & Gouthro, M. (2015). Conceptualising customer-to-customer value co-creation in tourism. *International Journal of Tourism Research*, 17(4), 356–363.
- Sachs, J. D., Woo, W. T., Yoshino, N., & Taghizadeh-Hesary, F. (2019). Importance of green finance for achieving sustainable development goals and energy security. In *Handbook of Green Finance* (pp. 3–12). Springer.
- Salloum, S. A., Al-Emran, M., Habes, M., Alghizzawi, M., Ghani, M. A., & Shaalan, K. (2021). What Impacts the Acceptance of E-learning Through Social Media? An Empirical Study. *Recent Advances in Technology Acceptance Models and Theories*, 419–431.
- Salloum, S. A., AlAhbabi, N. M. N., Habes, M., Aburayya, A., & Akour, I. (2021). Predicting the Intention to Use Social Media Sites: A Hybrid SEM-Machine Learning Approach. *Advanced Machine Learning Technologies and Applications: Proceedings of AMLTA 2021*, 324–334.
- Sari, A. E., Munir, A. R., Maming, J., & Satria, E. (2022). Development of Marketing Mix in Tourism With Technology Acceptance Model (TAM) in the Tourist Area of Kerinci Regency. *KnE Social Sciences*, 378–385.

- Sarkar, S., Chauhan, S., & Khare, A. (2020). A meta-analysis of antecedents and consequences of trust in mobile commerce. *International Journal of Information Management*, 50, 286–301.
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2020). Handbook of Market Research. In *Handbook of Market Research* (Issue September). <https://doi.org/10.1007/978-3-319-05542-8>
- Schreieck, M., & Wiesche, M. (2017). *How established companies leverage IT platforms for value co-creation—insights from banking*.
- Sharma, S. K., & Sharma, M. (2019). Examining the role of trust and quality dimensions in the actual usage of mobile banking services: An empirical investigation. *International Journal of Information Management*, 44, 65–75.
- Sheth, J. N. (2019). Customer value propositions: Value co-creation. *Industrial Marketing Management*, 87, 312–315.
- Siagian, H., Tarigan, Z. J. H., Basana, S. R., & Basuki, R. (2022). *The effect of perceived security, perceived ease of use, and perceived usefulness on consumer behavioral intention through trust in digital payment platform*. Petra Christian University.
- Singh, S., & Srivastava, R. K. (2018). Predicting the intention to use mobile banking in India. *International Journal of Bank Marketing*, 36(2), 357–378.
- Statista.com. (2021). *Accessed by the Internet in (19 January 2022)*. <https://www.statista.com/forecasts/1145545/mobile-internet-users-in-jordan>
- Tajvidi, M., Wang, Y., Hajli, N., & Love, P. E. D. (2021). Brand value Co-creation in social commerce: The role of interactivity, social support, and relationship quality. *Computers in Human Behavior*, 115, 105238.
- Tamilmani, K., Rana, N. P., Prakasam, N., & Dwivedi, Y. K. (2019). The battle of Brain vs. Heart: A literature review and meta-analysis of “hedonic motivation” use in UTAUT2. *International Journal of Information Management*, 46, 222–235.
- Tetteh, J. E. (2022). Electronic banking service quality: Perception of customers in the Greater Accra region of Ghana. *Journal of Internet Commerce*, 21(1), 104–131.
- Tong, S., Luo, X., & Xu, B. (2020). Personalized mobile marketing strategies. *Journal of the Academy of Marketing Science*, 48(1), 64–78. <https://doi.org/10.1007/s11747-019-00693-3>
- Urban, G. L., Amyx, C., & Lorenzon, A. (2009). Online trust: state of the art, new frontiers, and research potential. *Journal of Interactive Marketing*, 23(2), 179–190.
- Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: continuing the evolution. *Journal of the Academy of Marketing Science*, 36, 1–10.
- Venkatesh, V., Davis, F. D., Hossain, M. A., Dwivedi, Y. K., Piercy, N. C., Hu, P. J., Chau, P. Y. K., Sheng, O. R. L., & Tam, K. Y. (2000). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *Management Science*, 46(2), 319–340.
- Wang, L., Law, R., Guillet, B. D., Hung, K., & Fong, D. K. C. (2015). Impact of hotel website quality on online booking intentions: eTrust as a mediator. *International Journal of Hospitality Management*, 47, 108–115.
- Wilson, N., Alvita, M., & Wibisono, J. (2021). The effect of perceived ease of use and perceived security toward satisfaction and repurchase intention. *Jurnal Muara Ilmu Ekonomi Dan Bisnis*, 5(1), 145–159.
- Wolfenbarger, M., & Gilly, M. C. (2003). eTailQ: dimensionalizing, measuring and predictingetail quality. *Journal of Retailing*, 79(3), 183–198.
- Wu, J., Law, R., & Liu, J. (2018). Co-creating value with customers: a study of mobile hotel bookings in China. *International Journal of Contemporary Hospitality Management*, 30(4), 2056–2074.
- Yoon, S.-J. (2002). The antecedents and consequences of trust in online-purchase decisions. *Journal of Interactive Marketing*, 16(2), 47–63.
- Zadeh, A. H., Zolfagharian, M., & Hofacker, C. F. (2019). Customer–customer value co-creation in social media: conceptualization and antecedents. *Journal of Strategic Marketing*, 27(4), 283–302.
- Zhang, T., Lu, C., & Kizildag, M. (2018). Banking “on-the-go”: examining consumers’ adoption of mobile banking services. *International Journal of Quality and Service Sciences*.
- Zhong, Y., & Moon, H.-C. (2022). Investigating customer behavior of using contactless payment in China: A comparative study of facial recognition payment and mobile QR-code payment. *Sustainability*, 14(12), 7150.

