

## Analyzing The Factors Affecting Online Trust in B2C E-commerce and Its Impact on Purchase Intention in Egypt.

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### Abstract

This study investigates the determinants of e-commerce trust among Egyptian consumers, including privacy, security, vendor reputation, website quality, deterrence, experience, and social factors, and adopts the Technology, Organization, Environment (TOE) and technological-personal-environmental (TPE) frameworks. Addressing a significant research gap in the academic literature, particularly regarding e-commerce trust in Egypt, the study employs a quantitative approach to analyze the factors impacting consumers' e-commerce acceptance. A total of 386 self-administered questionnaires were distributed, collected, and analyzed using the Statistical Package for Social Science (SPSS) version 20, with multiple regression analysis employed to test hypotheses. Findings reveal that perceived vendor reputation, social influences, deterrence, and knowledge and experience influence trust in the online vendor, while perceived website quality and privacy were found to be insignificant. The implications of these findings provide practitioners with insights to develop strategies for enhancing trust and business growth in the Egyptian e-commerce market. This research contributes to understanding Egyptian consumers' e-commerce behavior, addressing the need for digitization in developing societies, and adding to the literature on e-commerce usage in such contexts.

### Keywords

Online Trust, E-commerce, Purchase Intention, TOE Framework, TPE Model, Perceived Privacy/Security, Perceived Vendor Reputation, Perceived Website Quality, Perceived Social influence.

### Article history

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## 1. Introduction

E-commerce represents a transformative paradigm shift, constituting a "disruptive" innovation with profound impacts on the conventional business landscape (Sathyapriya & Manochithra, 2023). In the digital era, the purchase of goods and services is greatly facilitated. The advent of online services has streamlined the process, making it not only faster but also significantly more time-efficient (Aditya *et al.*, 2023). Scholars and practitioners argue that for society to embrace digitalization, e-commerce should become a standard in consumer behavior (Sambamoorthi, 2023). In recent years, Egypt boasted 48 million internet users, comprising about half of its population, marking a notable 41% increase from the previous year. E-commerce transactions accounted for 22% of Egypt's total online commercial activity, reflecting significant digital engagement (El Gohary, 2019).

As of 2023, industry forecasts indicate that it will generate approximately 6.78 billion U.S. dollars in revenue (Galal, 2023). This growth underscores the importance of e-commerce in Egypt's business landscape. Information communication technology (ICT) in Egypt plays a pivotal role in facilitating e-transactions, both domestically and across borders, aligning with Egypt's 2030 goals and objectives (UNCTAD Secretariat, 2017). Egypt's internet penetration reached 53.5 million in 2019, and roughly 8% of users regularly engage in online transactions, the highest rate in the MENA region (Trade.gov, 2021). Nevertheless, practitioners believe that this number can further increase due to the large population in the country with internet access. As of 2023, Egypt boasts an internet user base of 80 million, showcasing high regional internet penetration (Statista) This vast internet user base has propelled Egypt's e-commerce market to become the 48th largest globally. Research indicates that Egyptian consumers are still reluctant to shop online, citing negative experiences and a lack of trust in online platforms (Nguyen *et al.*, 2022).

In e-commerce, trust is a crucial factor for users (Rizi *et al.*, 2023). Consumer confidence is a critical factor and a significant barrier to the acceptance of e-commerce by customers, regardless of the size or type of the company (Li *et al.*, 2020). Building trust with online consumers is challenging because of the absence of physical cues and direct seller interactions, as compared to traditional shopping environments. Trust is widely considered one of the most crucial factors influencing the success or failure of the e-commerce process (Bojang *et al.*, 2017; Pribadi *et al.*, 2021). Scholars contend that there is a dearth of empirical research in developing countries, especially regarding the factors that influence online trust among consumers (Al Fagih, 2022). Furthermore, the literature argues that existing individual-level technology acceptance studies provide an incomplete understanding of individuals' technology acceptance (Nguyen *et al.*, 2022).

Studies suggest that numerous technology acceptance models and theories can be applied to understand consumer trust and internet service usage. However, the Technology-Organization-Environment (TOE) framework is a widely used model for examining technology acceptance (Jiang *et al.*, 2010). Unlike other models in the literature, this framework is comprehensive, encompassing several factors related to

three significant aspects: technological, organizational, and environmental (Nguyen *et al.*, 2022). However, the TOE framework was originally designed for technology acceptance at the firm level. Therefore, this research incorporates additional factors from the Technology-Personal-Environmental (TPE) model to explain individual consumers' technology acceptance behavior toward e-commerce and online shopping. It considers the influence of technological, personal, and environmental contexts on technology acceptance at the individual level.

With this proposed research model, the study aims to achieve the following objectives:

- 1) Investigate the various factors related to e-commerce customer trust.
- 2) Determine what are the dominant factors that influence consumer trust in Egypt.
- 3) Assess the importance of customer trust in improving purchase intention.

This study addresses a substantial gap in the academic literature by investigating the determinants and factors influencing e-commerce trust among Egyptian consumers. While the importance of consumer trust in e-commerce has been acknowledged, there remains a dearth of empirical research, especially in developing countries like Egypt. By scrutinizing the intricate array of elements influencing trust establishment in e-commerce among Egyptian consumers, this study makes a substantial academic contribution. This study offers a complete analysis of the various elements that influence trust in the context of e-commerce. These determinants include privacy, security, vendor reputation, website quality, deterrent, experience, and social factors. By systematically investigating these factors, this study aims to provide a thorough knowledge of the complex nature of trust in e-commerce. In addition, the incorporation of both the TOE and TPE frameworks signifies a methodological advancement that enhances the current corpus of knowledge. The utilization of a dual-framework approach facilitates a comprehensive examination of the several elements, namely technological, organizational, personal, and environmental, that exert an influence on trust in the context of e-commerce. Therefore, this study not only makes a valuable contribution to the field of e-commerce trust but also enhances the scope and adaptability of existing theoretical frameworks. As a result, it offers valuable insights for both scholars and professionals in the areas of e-commerce, consumer behavior, and technology adoption.

The research objective is to explore which aspects of online trust require further investigation to identify the significant factors affecting consumers' online trust. The academic significance of this research lies in its potential to advance theoretical understanding, enhance existing models, and pave the way for further research in the field of e-commerce trust, consumer behavior, and technology adoption, particularly in emerging economies.

Furthermore, this research holds practical importance for e-commerce specialists, entrepreneurs, business owners, marketers, website designers, and others. It will provide empirical evidence on how to boost online sales among consumers. The

insights derived from this research are valuable for businesses operating in Egypt's growing e-commerce landscape and beyond.

## 2. Literature Review

E-commerce, characterized by online transactions, offers consumers a multitude of advantages. These include access to cost-effective products, a wider selection of choices, and the convenience of time-saving benefits (Sathyapriya and Manochithra, 2023). It encompasses various transaction types, including business-to-business (B2B), business-to-consumer (B2C), and consumer-to-consumer C2C (Shopify, 2019). The COVID-19 pandemic has had a significant impact on e-commerce platforms, resulting in a shift in customer behavior towards online shopping (Ji, 2023). In India, the e-commerce industry experienced substantial growth during and after the pandemic, with platforms such as Amazon India and Flipkart gaining popularity (Salunkhe, 2023).

Trust plays a pivotal role in influencing consumer behavior in e-commerce. Consumers must have trust in both e-commerce platforms and online sellers to engage confidently in transactions (Li *et al.*, 2020). Trust can be established through factors such as website design, security measures, privacy policies, and user reviews (Li *et al.*, 2020). Studies indicate that trust has a positive impact on consumers' intention to shop online and their willingness to share personal information (Kumar *et al.*, 2021). Previous research has categorized e-trust factors into consumer-related factors (e.g., trust trends, age, and gender) and e-commerce system-related factors (e.g., security and privacy verification) (Fan *et al.*, 2021). However, recent studies propose more refined categories, including personal-based trust, account-based trust, knowledge-based trust, and institution-based trust (Ghoreishi, 2015). Numerous scholars have dedicated their research efforts to understand the factors influencing e-trust in e-commerce (Alswiy and Nergiz, 2018; Bojang *et al.*, 2017; Pribadi *et al.*, 2021). E-trust refers to consumers' confidence and beliefs in the reliability, security, and privacy of e-commerce platforms and sellers (Ghoreishi, 2015).

### 2.1. Factors Impact Consumer Trust towards e-commerce

This research focuses on customer trust in the e-commerce industry in Egypt, utilizing the TOE framework as a basis (Nguyen *et al.*, 2022). The TOE framework includes various contextual applications. The model explains that customer trust in e-commerce involves three grouped factors: technology-related, business-related, and customer-related factors.

Scholars claim that website quality, characterized by benevolence, integrity, and competence, significantly encourages consumers to consider shopping from websites (Esmaeilian *et al.*, 2023; Khan and Hashim, 2023; Nguyen *et al.*, 2022). In the context of tourism, Punnasuparom *et al.* (2020) found findings similar to Khanna and Wahi (2017), who stated that an attractive website significantly influences the online shopping intentions of high-quality tourists for luxury boutique hotels in Bangkok, Thailand. Additionally, Kavitha and Varadharaj (2020) emphasize the importance of website quality in differentiating a product from competitors in the e-commerce

industry, thereby contributing to the success of online shopping businesses. Liao *et al.* (2006). also conducted a study on website quality in the e-commerce context. Based on the findings of prior studies, this study hypothesizes that **(h1) the perceived website quality of an online vendor's site influences consumer online trust.**

Prior studies have demonstrated the significance of building privacy and security in the context of electronic retailing (Khan *et al.*, 2021; Martínez-Navalón, 2023; Mutimukwe *et al.*, 2020; Pribadi *et al.*, 2018). Regarding security, Salimon (2018) emphasized that security is seen as a potential threat leading to data loss, corruption, harassment, fraud, and alteration. Customers perceive security based on factors such as login authentication and data integrity (Kalakota and Whinston 1997; Yousafzai *et al.*, 2009). Based on the findings of prior studies, this study hypothesizes that **(h2) the perceived privacy/security of online transactions influences consumer online trust.**

According to the findings of Shwaika *et al.*, (2023), the significance of website reputation and review quality as pivotal factors, exhibit a robust and statistically significant correlation with consumers' intentions to make purchases in the electronic products domain.

In line with the findings of Alhamdina *et al.*, (2023), it is evident that the brand reputation variable exerts a positive and statistically significant influence on the brand trust variable. Nguyen *et al.* (2022) emphasize the significance of brand reputation in attracting consumers to specific e-commerce platforms. The investigation revealed the pivotal role of the company's reputation in the realm of marketing, exerting influence on consumer expectations and purchase decisions (Abdulrab Hadi *et al.*, 2019; Yixiang Zhang *et al.*, 2011). Merchant reputation is found to be shaped by factors like customer feedback, innovation, product quality, and dedication to customer satisfaction (Kong and Hung, 2006; Zhang *et al.*, 2011). Notably, it is recognized that reputation is a valuable asset that can be arduous to construct but easily tarnished, necessitating sellers to uphold their integrity (Lee *et al.*, 2015). Based on the previous studies this study hypothesizes that **(h3) the perceived reputation of an online vendor will influence consumers' online trust in that vendor.**

As observed in the study by Dan *et al.*, (2023), information sharing on social media significantly affects the consumer's purchase intention. Moreover, a meta-analytic model confirms the positive impact of customer engagement on behavioral intention (Salehi *et al.*, 2021). Beyari and Abareshi (2019) stated that the term 'social influence' refers to how a person's beliefs, attitudes, thoughts, and actions change as a result of social interaction. Hidayanto *et al.* (2014) emphasized that human actions are influenced by 'concrete,' continuous systems of social relations, including social media, culture, politics, and religion. In a study related to e-commerce, social norms, customer reviews, and peer recommendations were considered important social factors that contribute to building customer trust (He, 2011). Based on the findings of prior studies, this study hypothesizes that **(h4) social influences will positively impact consumers' online trust.**

Building upon the insights provided by Gu and Encio (2023), it is evident that consumers' purchase intentions are shaped by various environmental factors, such as market competition, social and cultural values, and regulatory policies. Additionally, He (2011) emphasized the significance of deterrence-based trust in the context of e-commerce, comprising calculated trust and the legal framework as its main components. Deterrence-based trust, as highlighted in prior research, plays a pivotal role in shaping consumer trust in online vendors (Gefen *et al.*, 2003). When consumers perceive that an electronics retailer has more to lose than to gain by breaching trust, they are more inclined to place their trust in the vendor (Gefen *et al.*, 2003). This notion extends to the legal framework rooted in assumptions, regulations, and law enforcement governing the Internet landscape (Connolly and Bannister, 2007). When consumers believe that existing laws and regulations provide sufficient protection for their interests, they are more likely to trust electronic retailers, as e-sellers are deterred from engaging in dishonest practices due to the fear of severe punishment. Considering these findings from previous studies this study hypothesizes that **(h5) deterrence positively influences consumers' online trust in the vendor.**

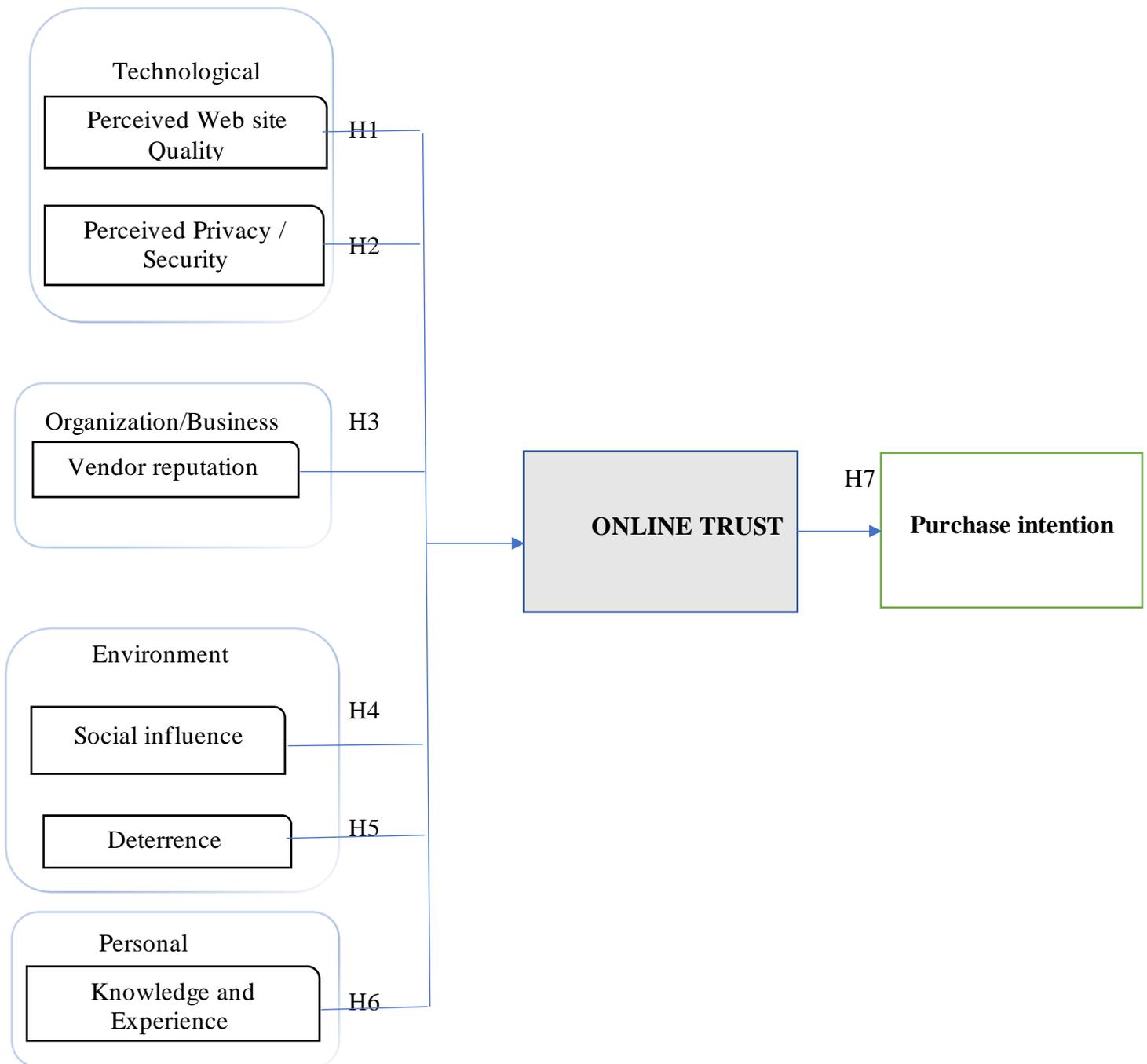
Liu (2023) indicates a significant relationship between emotional experience, interactive experience, presence experience, and consumers' intention to purchase. Wan *et al.* (2009) conclude in their study that many factors contribute to consumer confidence in online shopping, but this consumer information and knowledge is one of the strongest. According to the results of the aforementioned study, information is closely associated with reliance on online shopping, and so on, with online shopping activities. This means that consumer information can determine the level of reliance on online retailers and their purpose to shop online. Hidayanto *et al.* (2014) stated that the more information and knowledge the user obtains from an online platform, the more trust can be built toward this platform (He, 2011). Based on the findings of previous studies, this study hypothesizes that **(h6) perceived Knowledge and Experience will influence consumers' online trust.**

According to Gu and Encio (2023), customer trust serves as the foundation for nurturing long-term, stable relationships between customers and enterprises. When customers have a higher level of trust in a company, they strengthen their intention to make purchases. As, Khoa *et al.* (2022) concluded that customers' awareness of a company's ability to enforce privacy policies can enhance trust and leadership in purchase intentions on e-commerce sites. Also, (Loketkrawee and Bhatiasevi, 2018 as cited in Vatunyou *et al.* 2022) Online shopping behavior, also known as online buying or internet shopping, pertains to the act of purchasing products or services over the internet. Trust is a factor that influences customers' intention to shop online (Ha *et al.*, 2021). In addition, customer trust and satisfaction are critical to the growth of e-commerce as they can induce purchase intent (Suurmaa, 2021). Based on the findings of prior studies, this study hypothesizes that **(h7) customer trust has a positive impact on a customer's intention to purchase online on e-commerce sites.**

In conclusion, the literature and prior studies claim that many factors can impact consumers' technology acceptance, specifically when it comes to e-commerce.

Accordingly, this study adopts TOETPE frameworks to develop the proposed research model (figure 1) and its emerging hypotheses.

**Figure 1: the proposed research model**



### 3. Methodology

#### 3.1. Research Approach and Purpose

In this study, a quantitative research approach was adopted, involving the systematic collection and rigorous analysis of numerical data (Sintia *et al.*, 2023). The primary purpose of this research was descriptive in nature. Descriptive research is employed to characterize the attributes of a population. It involves gathering data to

answer various "what," "when," and "how" questions related to a specific population or group (Miao *et al.*, 2021).

### **3.2. Population and Sampling Methodology**

This research focuses on examining the trust of Egyptian consumers in e-commerce. The target population encompasses all users of business-to-consumer (B2C) e-commerce platforms in Egypt, including individuals who have engaged in activities such as making purchases, comparing product prices, or seeking product information. Our study specifically targets individuals aged between 18 and 50 with significant experience in online shopping.

Egypt's internet user base is noteworthy, having reached an estimated 53.5 million users by 2019, indicating high regional internet penetration. To ensure the robustness and manageability of our sample, we adhered to the guidelines recommended by Kridjice and Morgan (1947). As a result, we selected a sample size of no less than 385 Egyptian consumers, aligning with these principles to achieve meaningful and representative results. This study employs convenience sampling, a non-probability method driven by practicality and accessibility. While convenience sampling may not guarantee a fully representative sample of the entire population, this limitation can be mitigated by subsequently applying probability statistical techniques during the analysis.

### **3.3. Data Collection**

Data collection took place in January 2023, employing a cross-sectional timeframe. We utilized an administered questionnaire designed to assess variables within the population. Convenience sampling was employed for participant selection, in line with Hidayanto's recommendation (2014). The questionnaire consisted of two sections: the first collected demographic information, while the second focused on indicators related to customer trust in e-commerce, aligning with our research questions. In the second section, a 5-point Likert scale was utilized, ranging from 'strongly agree' (5) to 'strongly disagree' (1), to measure the studied variables.

The chosen sample size for this study was no less than 385 respondents, considering the substantial number of internet users in Egypt (Bouigie and Sekaran, 2019; Miao *et al.*, 2021). The sample size impacts two critical statistical properties: 1) the precision of our estimates and 2) the study's statistical power to draw meaningful conclusions. After data collection, we employed the Statistical Package for Social Science (SPSS), version 20, for questionnaire analysis. Multiple regression analysis was utilized to rigorously test the established hypotheses.

### 3.4. Measurement

The measurement employed in this study's questionnaire followed an administered questionnaire approach, as recommended by Bouie and Sekaran (2019). To facilitate widespread distribution, we created the questionnaire using Google Forms, an accessible online survey tool. It was made available through strategically placed links on websites and social media platforms. The questionnaire comprised five main sections: Introduction: Providing an overview of the research and explaining its purpose. Demographics: Collecting information on age, gender, education level, and other relevant demographic data. Online Shopping Habits: Exploring respondents' online shopping behaviors and experiences. Trust in E-commerce: Assessing factors related to trust in online B2C transactions. Additional Comments: Offering respondents the opportunity to provide any additional comments or insights.

Prior to the actual data collection, a pretest was conducted to evaluate the questionnaire's accuracy and comprehensibility. The pretest involved a small group of individuals representing the target population who answered the questionnaire. Their feedback was valuable in refining and enhancing the survey. Reliability and validity analyses were performed to assess the questionnaire's quality. The reliability analysis, utilizing Cronbach's Alpha, demonstrated a high level of internal consistency among the questionnaire items ( $\alpha = 0.85$ ). The validity analysis, encompassing content validity and construct validity, confirmed that the questions effectively measured the intended constructs. Table 3.1 presents the research variables of this study.

Table 3.1

Variable	Scale	Sources
Perceived website quality	5-point Likert scale	Esmaeilian <i>et al.</i> (2023), Hidayanto <i>et al.</i> (2014)
Perceived privacy and security.	5-point Likert scale	Hidayanto <i>et al.</i> (2014), Kim <i>et al.</i> (2008), Belanger <i>et al.</i> (2002).
Vendor Image (reputation)	5-point Likert scale	Hidayanto <i>et al.</i> (2014), He (2011), Kim and Park (2012)
Deterrence (DE)	5-point Likert scale	Hidayanto <i>et al.</i> (2014), He (2011)
Social Influence (SI)	5-point Likert scale	Hajili (2014), Dashti <i>et al.</i> (2016), Zamrudi <i>et al.</i> (2017), Yuhua (2012).
Knowledge and Experience (KE)	5-point Likert scale	Hidayanto <i>et al.</i> (2014)
Trust in E-vendor	5-point Likert scale	Hidayanto <i>et al.</i> (2014)
Purchase Intention (PI)	5-point Likert scale	Athapaththu & Kulathunga (2018).

## 4. Data Analysis

### 4.1 Statistical analysis

In this study, several quantitative research analyses were conducted to investigate the determinants of Online Trust in B2C e-commerce in Egypt and its subsequent influence on purchase intention. The following key statistical methods were employed: (1) **Descriptive Statistics:** Descriptive statistics were used to create a comprehensive profile of the study's participants, summarizing their characteristics and providing an overview of the variables under investigation. (2) **Validity and Reliability Analysis:** Factor analysis was performed to assess the validity of the measurement scales used in the questionnaire. Additionally, Cronbach's Alpha was applied to evaluate scale reliability, internal consistency, and accuracy. (3) **Correlation Analysis (Pearson Correlation):** Pearson correlation analysis was used to explore the relationships between variables as posited by the research hypotheses, providing insights into the strength, direction, and significance of these relationships. (4) **Multiple Regression Analysis:** a robust statistical method, was employed to rigorously test the research hypotheses and identify the most influential relationships among the variables under examination.

In Table 1, out of 386 respondents, 269 (68.6%) identified as male, and 117 (29.8%) identified as female. The majority of respondents (236 individuals or 60.2% of the sample) were over the age of 35. The next largest group consisted of respondents between the ages of 25 and 35, totaling 78 individuals (19.9% of the sample). A total of 60 individuals (15.3% of the sample) were between the ages of 18 and 24, while the smallest group, comprising 12 individuals (3.1% of the sample), were under 18 years old. Regarding the city of residence, the majority of participants (271 individuals or 69.1%) were from Greater Cairo, followed by 115 individuals (29.3% of the sample) from Alexandria governorate.

**Table 1: Demographics of the Respondents**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	269	69.7	69.7	69.7
	Female	117	30.3	30.3	100.0
	Total	386	100.0	100.0	
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<18	12	3.1	3.1	3.1
	18-24	60	15.5	15.5	18.7
	25-35	78	20.2	20.2	38.9
	>35	236	61.1	61.1	100.0
	Total	386	100.0	100.0	

(Source: Data Analysis conducted using IBM SPSS Statistics, Version 26)

### 4.2. Descriptive statistics

Descriptive statistics aim to provide a clear and concise summary of the main characteristics and features of a dataset. A 5-point Likert scale was utilized, ranging from one equal to strongly disagree to five equals to strongly agree. Table 4.1 presents

the descriptive statistics, including mean, mode, median, standard deviations, and minimum and maximum scores, for the responses related to the studied variables and their dimensions.

**Table 4.1: Descriptive Statistics of all variables in this study**

Variables	Minimum	Maximum	Mean	Mode	Median	Standard Deviation
Website Quality	1.00	5.00	3.7829	4.00	3.8000	.82533
Perceived Privacy	1.00	5.00	4.0503	4.20	4.2000	.85479
Vendor Image	1.00	5.00	4.1114	5.00	4.2500	.88249
Deterrence	1.00	5.00	3.3325	3.00	3.3333	1.11619
Social Influence	1.00	5.00	3.8990	5.00	4.0000	.87970
Knowledge and Experience	1.00	5.00	4.1386	5.00	4.5000	.93779
Trust	1.00	5.00	3.8918	4.00	4.0000	.88775
Purchas Intention	1.00	5.00	3.9320	4.00	4.0000	.88553
Overall questionnaire	1.26	5.00	3.9104	4.41	4.0147	.71005

(Source: Data Analysis conducted using IBM SPSS Statistics, Version 26)

### 4.3. Validity and Reliability Analysis

To assess the questionnaire's validity, the Pearson Product Moment Correlation in SPSS is used to calculate the correlation value between the variables or the variable with a total score. The p-value (2-tailed) was also calculated to determine the validity of the questions/instrument. If the p-value was found to be less than 0.05, the questions/instruments were deemed valid. However, if the p-value was greater than 0.05, then the questions/instruments were deemed not valid.

The reliability analysis assesses whether the scale is error-free, indicating that it is trustworthy, consistent, and precise in measuring the variable over time, social and academic contexts (Middleton, 2022). Cronbach's alpha is the most frequently used method to evaluate internal consistency (reliability), determining the average correlation of variables in the survey (Gliem, 2003). Scholars claim that if the alpha is more than 0.65, then the scale is free from error. Table 4.2 presents the results of the Cronbach analysis, indicating that all of the scales are reliable, as well as the questionnaire format since the alpha is greater than 0.65. The significance level for all analyses was set at  $\alpha = 0.05$ .

**Table 4.2: Reliability Analysis**

Variables	Cronbach's Alpha ( $\alpha$ )	No. of Items
Website Quality	.847	5
Perceived Privacy	.772	5
Vendor Image	.812	5
Deterrence	.822	3
Social Influence	.853	5
Knowledge and Experience	.875	4
Trust	.862	4
Purchas Intention	.859	4
Overall questionnaire	.956	34

(Source: Data Analysis conducted using IBM SPSS Statistics, Version 26)

#### 4.4. Multiple Regression

The analysis evaluated research hypotheses using P-values. Based on scholars, if the p-value is less than 0.05, the research should accept the claim (Gliem, 2003). The results depicted in Table 4.3 indicate that vendor image, deterrence, social influence, and knowledge and experience are statistically significant with p-values below 0.05. Conversely, perceived website quality and perceived Privacy are not statistically significant with p-values greater than 0.05. These findings suggest that vendor image, deterrence, social influence, and knowledge and experience have a significant impact on the outcome. In contrast, perceived website quality, and perceived Privacy may not have a substantial influence. Table 4.4 shows the summary of the hypothesis testing.

This approach was chosen to align with the specific research objectives and in accordance with academic practices established within the field of e-commerce and consumer behavior research in Egypt and beyond (Al-Sahouly, 2015; Alswiy and Cagiltay, 2018; Salim and Doraisamy, 2022).

**Table 4.3: Hypothesis testing**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.014	.148		.093	.926
	Website Quality	.079	.044	.073	1.806	.072
	Privacy	.073	.045	.070	1.611	.108
	Vendor Image	.310	.055	.308	5.653	.000
	Deterrence	.159	.026	.200	6.073	.000
	Social Influence	.105	.042	.104	2.521	.012
	Knowledge	.259	.046	.273	5.668	.000
		B	Std. Error	Beta		
1	(Constant)	.953	.130		7.317	.000
	Trust	.765	.033	.767	23.444	.000

(Source: Data Analysis conducted using IBM SPSS Statistics, Version 26)

#### 4.5. Research Findings

According to the results presented in the other table, it is evident that Perceived Online Trust has a substantial effect on consumer purchase intention. This finding is supported by the statistical significance of the p-values, which are below the standard threshold of 0.05, indicating that the relationship between Perceived Online Trust and Purchase intention is highly significant. In other words, consumers are more likely to purchase from a website they trust and perceive to be credible, which highlights the importance of building and maintaining trust in online business transactions. Therefore, **the following hypotheses are supported:**

**Hypothesis Three: There is a positive relationship between the perceived reputation of an online vendor and online trust in that vendor.** The results show that the relationship between the variables is significant with the sig value less than 0.05 ( $\beta = .308$ ,  $p < 0.05$ ).

**Hypothesis Four: There is a positive relationship between social influences and consumer online trust.** The results show that the relationship between the variables is significant with the sig value less than 0.05 ( $\beta = .104, p < 0.05$ ).

**Hypothesis Five: There is a positive relationship between the perceived deterrence and consumer online trust in that vendor.** The results show that the relationship between the variables is significant with the sig value less than 0.05 ( $\beta = .200, p < 0.05$ ).

**Hypothesis Six: Perceived knowledge and experience positively impact consumer online trust.** The results show that the relationship between the variables is significant with the sig value less than 0.05 ( $\beta = .273, p < 0.05$ ).

**Hypothesis Seven: Customer trust has a positive impact on a customer's intention to purchase online on e-commerce sites.** The results show that the relationship between the variables is significant with the sig value less than 0.05 ( $\beta = .767, p < 0.05$ ).

On the flip side, after conducting a thorough multiple regression analysis, it has been concluded that the following **hypotheses lack support:**

**Hypothesis One: the perceived website quality of an online vendor's site influences consumer online trust.**

. The results show that the relationship between the variables is not significant with the sig = .072 which is greater than 0.05 ( $\beta = .073, p > 0.05$ ).

**Hypothesis Two: the perceived privacy/security of online transactions influences consumer online trust.** The results show that the relationship between the variables is not significant with the sig = .108 which greater than 0.05 ( $\beta = .070, p > 0.05$ ).

**Table 4.4: summary of the Hypothesis testing**

Hypothesis	Hypothesis	Outcome
1	The perceived website quality of an online vendor's site will influence consumer online trust.	Not Supported
2	The perceived Privacy/Security of online transactions will influence consumer online trust.	Not Supported
3	The perceived reputation of an online vendor will influence consumer online trust in that vendor	Supported
4	social influences will positively impact consumer online trust	Supported
5	The perceived Deterrence will influence consumer online trust in that vendor.	Supported
6	The perceived Knowledge and Experience will influence consumer online trust.	Supported
7	Customer trust has a positive impact on a customer's intention to purchase online on e-commerce sites.	Supported

(Source: Data Analysis conducted using IBM SPSS Statistics, Version 26)

## 5. Research Discussion

The research investigates the determinants of e-commerce trust among Egyptian consumers, including factors such as privacy, security, vendor reputation, website

quality, deterrence, experience, and social factors. The study adopts the TOE and TPE frameworks. The analysis revealed results that were both consistent with earlier research and in conflict with other research. For example, the findings regarding the perceived reputation of an online vendor are consistent with previous studies (Bashir *et al.*, 2018; Gefen & Straub, 2004; Hadi *et al.*, 2019; Hidayanto *et al.*, 2014; Kim *et al.*, 2009; Widiyanto & Prasilowati, 2015). However, some studies have contradicted this perspective (Agus *et al.*, 2020). The positive relationship between perceived social influence and online trust is supported by previous studies (Chen & Liu, 2017; Chen *et al.*, 2018; Chiu *et al.*, 2005; Chiu & Huang, 2015; Huang *et al.*, 2013; Wing *et al.*, 2022; Zhang *et al.*, 2019), although some studies have found no significant relationship (Gupta & Kim, 2017; He, 2011; Hidayanto *et al.*, 2014; Kim & Park, 2011). The positive relationship between perceived deterrence and online trust is consistent with prior research (Pavlou & Gefen, 2004; He, 2011), although some studies have found no significant relationship (Hidayanto *et al.*, 2014). The positive relationship between perceived knowledge and experience and consumer online trust aligns with previous studies (Li *et al.*, 2019; Yang *et al.*, 2017). The significant correlation between perceived online trust and purchase intention is consistent with previous research (Gefen *et al.*, 2003; Ha & Stoel, 2009; Kim *et al.*, 2008; Kumiadi & Rana, 2023; Vo *et al.*, 2023). Regarding perceived website quality, the study did not find a significant relationship with consumer trust in online transactions, which is consistent with mixed findings in previous studies (Gefen *et al.*, 2003; Hidayanto *et al.*, 2014; Kim *et al.*, 2009; McKnight *et al.*, 2002; Yoon, 2002). However, the study also found no significant relationship between the perceived privacy/security of online transactions and consumer trust, which contradicts assumptions held by scholars like (Martínez-Navalón, 2023; Vasanthakumar, 2023).

### 5.1. Theoretical contributions

This research makes significant theoretical contributions to the field of e-commerce trust, specifically within the context of Egyptian consumers. It adopts the TOE and TPE frameworks to investigate the determinants of e-commerce trust. These contributions are noteworthy for several reasons:

(1) **Unique Context:** By focusing on Egyptian consumers, this research explores a relatively underrepresented context. The majority of prior e-commerce trust research has focused on developed economies. This extension of the research context broadens the applicability of trust theories to diverse cultural and economic environments. This is consistent with the call from scholars like Al Fagih (2022) for more research in developing countries. (3) These findings hold implications for both academia and industry, guiding marketing and e-commerce strategies. (2) **Challenging Assumptions:** Notably, the research challenges some established assumptions in the literature. For instance, it finds no significant relationship between perceived website quality and consumer trust, challenging the conventional belief that a well-designed website directly leads to enhanced trust (Saoula *et al.*, 2023; Kurniawati *et al.*, 2022). Furthermore, the research challenges the widespread assumption that the perceived Privacy/Security of online transactions significantly influences consumer online trust,

thereby contrasting with the beliefs commonly held by scholars such as (Martínez-Navalón, 2023; Vasanthakumar, 2023).

## **5.2. Theoretical Managerial Implications**

The present study has shed light on the notable determinants that impact customer trust in e-commerce within the Egyptian market, providing vital insights for enterprises operating in this particular setting. These observations can be transformed into practical approaches that have a significant impact on building trust, enhancing consumer happiness, and eventually strengthening the intention to make a purchase.

Picture yourself as the owner of an e-commerce store in bustling Egypt, eager to win the trust of your customers. Here's your journey to building trust:

As you start your online venture, you realize that reputation is everything. You actively seek feedback from your customers, resolving any issues promptly to maintain a stellar reputation. Each positive review becomes a badge of honor, proudly displayed for all to see.

Harnessing the power of social media, you share stories of satisfied customers and encourage others to share their experiences. With each glowing testimonial, trust in your brand grows stronger.

Security is paramount in the digital world, so you spare no expense in safeguarding your customers' information. You implement stringent security measures and communicate openly about your commitment to their privacy.

Empowering your customers with knowledge, you provide comprehensive guides and FAQs to help them make informed decisions. You're always there to lend a helping hand, ensuring they feel confident in their purchases.

Your website is your storefront, and you spare no effort in keeping it polished and user-friendly. Regular updates and enhancements ensure a seamless shopping experience, further cementing trust in your brand.

Listening to your customers is key, so you actively seek their feedback and address any concerns promptly. Their satisfaction is your top priority, and you go above and beyond to ensure it.

Ultimately, trust becomes the cornerstone of your brand identity. Your unwavering dedication to transparency and quality shines through in every interaction, making trust an integral part of your brand's DNA. And with each satisfied customer, your reputation as a trusted e-commerce leader in Egypt grows stronger.

By adopting these techniques, firms should have the potential to establish a favorable position in the ever-changing e-commerce environment in Egypt, ultimately attaining a competitive advantage by bolstering client confidence.

## 6. Research Conclusion

Research on e-commerce trust among Egyptian consumers has yielded significant insights into various factors influencing consumer behavior in online transactions. Through the adoption of theoretical frameworks such as TOE and TPE, this study has explored the complexities of trust formation in digital environments. The findings underscore the importance of vendor reputation, social influence, and deterrent in shaping consumer trust, while also highlighting the limited impact of perceived website quality and privacy concerns. However, it is essential to acknowledge the limitations of this study. Firstly, the focus on specific theories may have overlooked alternative perspectives, warranting further exploration of other theoretical frameworks. Secondly, the context-specific nature of the findings in Egypt may limit their generalizability to other regions. Moving forward, future research could employ longitudinal or experimental designs to strengthen causal inferences and explore the impact of external factors such as industry changes and the COVID-19 pandemic on consumer trust and online purchasing behaviors. Additionally, studying e-commerce trust in other developing countries would enhance the generalizability of findings and contribute to a more comprehensive understanding of consumer behavior in digital marketplaces.

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