

The Impact of Electronic Commerce on Consumer Satisfaction and Consumer Preferences for Retail Stores in Saudi Arabia

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Abstract

E-commerce or online shopping is becoming a vital method of shopping worldwide, and it has a huge effect on consumer choices. This paper aims to investigate the impact of e-commerce on consumer satisfaction and preference compared to retail stores in Saudi Arabia. The paper uses applied methods using structural equation modeling to test the hypotheses; an electronic questionnaire with 30 questions was disseminated among 839 Saudis. After testing the reliability and validity, the result showed that e-commerce has a significant positive impact on consumers' satisfaction and preference compared to physical stores. This paper seeks out what customers need and want, which provides Saudi businesses with insights to grow their online stores and improve their offline stores in order to compete in the market. The study has some limitations that need to be considered for future studies.

Keywords: e-commerce, consumer satisfaction, and consumer preferences.

1. Introduction

E-commerce has changed the way people trade globally and it led to double and triple sales revenue (Kwadade-Cudjoe, 2022), and recently Saudi Arabia experienced a shift toward online sales. According to a report by the Riyadh Chamber, in 2020, the volume of e-commerce in Saudi Arabia was \$5.7 billion (B), with a return of \$10.48 B; \$3.2 B in clothing and footwear; \$2.99 B in electronics; \$1.47 B in furniture and house appliances; and \$776 M in food and medicine (Annual Report, 2021). Shoppers now make 51% of their purchases online, compared to purchases in 2015 and 2014, and more than 50% of the world's population will be shopping online in 2017 (Khan et al., 2020).

The shopping experience for consumers is more than just receiving a product or service; it is a complete journey of receiving the quality required by each consumer. This study is built on earlier research in this field and will be specifically focused on the Saudi Arabian context because there is a lack of research on this topic in the region. It investigates the impact of e-commerce on buyers' satisfaction and preference compared to traditional retail stores. Also, it helps in identifying the factors that impact the way consumers preferences of shopping method.

2. Literature Review

2.1 E-Commerce

E-commerce is the buying and selling of goods and services over the internet, and part of it, is business-to-consumer or B2C "online shopping." In B2C e-commerce, a well-designed website represents the vendor, not the salesperson (Rezaeian, 2016). Online shopping has been experiencing continuous growth at around 16% worldwide (Hasan, 2019). And the use of the internet had shifted the ways of trading, ways of communicating, and the ways of accessing information. Engaging in online shopping saves time and effort, compared to in-store shopping (Eastlick & Feinberg, 1999). Also, it allows consumers to have a range of assortment, immediate information, lower prices, and product availability. "Website interactivity, product reviews, and price comparison are the other features available in online shopping" (Haridasan & Fernando, 2019). Online shopping allows consumers to buy any product or service that will be delivered quickly without the need to wait a long time for checkout in-store (Rohm & Swaminathan, 2004). E-commerce is convenient because in retail shops, consumers must deal with the salesperson's attitude and high pressure to buy without enough information or reviews, which results in consumers making the wrong purchasing decision of consumers (Haridasan & Fernando, 2019). Also, it works on two dimensions: "ease of use" and "usefulness," which is what

customers need, especially in the busy lifestyle they are living right now. e-commerce involves shopping using the internet, telecommunications, and information technology with no physical presence, whereas the traditional market involves consumer to be physically present with (face-to-face) interaction (Kwadade-Cudjoe, 2022).

However, some consumers avert online shopping due to the risks associated with it such as security issues, credit card fraud, reliability to fulfill orders correctly, lack of privacy, delivery risk, and a lack of a good quality guarantee (Chandra & Sinha, 2013). According to Rezaeian (2016), online shopping does not allow consumers to feel, touch, and experience the product they will buy; they only decide through photos and videos on the website.

2.2 Consumer Satisfaction

According to Oliver (1980), consumer satisfaction is obtained from service assessment in cases of positive treatment and dissatisfaction in cases of negative treatment. Also, it is the way a consumer perceives certain services or products, as satisfying or dissatisfying, based on the performance and standard of the product or service (Evans & Dongmei, 2016). "Satisfaction is the person's feelings of pleasure or disappointment from comparing the product's performance or outcome to his or her expectations" (Rezaeian, 2016).

"Consumer satisfaction and service excellence or quality are interconnected" (Ziyad et al., 2020). For that reason, consumer loyalty, behavior, and satisfaction are very close and deliver product or service excellence. Consumer satisfaction and consumer orientation are the basics of any business, and organizations that do not pay attention to them will be eliminated from the market (Rezaeian, 2016). Pattern (1993) recommends measuring and evaluating consumer satisfaction on a regular basis in order to maintain a competitive advantage in the markets. s. Consumers are satisfied when their needs are met, and their expectations are exceeded, and that will make them repeat their purchasing activity (Vasic et al., 2019). Furthermore, some elements regarding online shopping affect consumer satisfaction, such as: security, saving time, information availability, shipping method, quality, and price of the product or service (Vasic et al., 2019).

2.3 Consumer Preferences

According to Rohm and Swaminathan (2004), some components that affect consumer shopping motivation and preferences are the convenience of the shopping method, the amount of information in planning and shopping, immediate possession, the need for social interaction, and the retail shopping experience. For that, the preference of a shopping method depends on the benefits consumers receive. Consumers can be motivated to shop in-store when they can have certain utilities such as store location, store hours, efficient checkout, inventory, and a distribution system (Sarker, 1996). Swaminathan (1999) mentioned that convincing is an essential factor of online shoppers because location becomes irrelevant in the online method. Online shopping allows for more access to information by searching and comparing easily (Rohm & Swaminathan, 2004).

However, some consumers prefer physical retail store shopping due to the need for immediate possession (Balasubramanian, 1998) as well as the influence of social interaction, their need to communicate with others and enjoy the shopping experience. According to Rohm & Swaminathan (2004), "online retailers may find it difficult to replicate the sensory effects and product-trial experiences available to the consumer in a physical store setting." Online shopping provides great service quality that may exceed the consumers' needs, which will make them prefer e-commerce "online shopping" (Khan et al., 2020). According to Haridasan & Fernando (2019), consumers' attitudes toward store purchases are affected by store layout, salesperson interaction, customer service, and the ability to choose the product by hand. Salesperson attitude and knowledge of the product or service influence consumers' preferences for online or in-store shopping.

3. Research Methodology

3.1 Research Model

This study is based on the following model

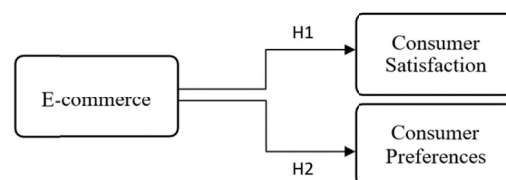


Figure 1. Research model

3.2 Research Hypothesis

H1: E-commerce has a significant impact on consumer satisfaction compared to retail stores.

H2: E-commerce has a significant impact on consumer preference compared to retail stores.

3.3 Sampling Framework

The population of this study is Saudi consumers, male and female, from the age of 20 to 60 years, who shop for fashion items online and offline. The random sampling method had been used to reach large numbers of respondents using Google Forms, it is an electronic survey. The data was gathered using an electronic questionnaire of Saudi consumers, living in Riyadh and shopping online and in-store. The process of data collection took three weeks. A total of 839 surveys were collected.

3.4 Statistical Analysis

This research paper used descriptive analysis to study the demographics of the sample as well as the Pearson Correlation Coefficient validity to assess the study's internal consistency and the Cronbach Alpha reliability. For testing the hypothesis, a simple regression was used to find the impact of e-commerce on consumer satisfaction and preferences.

3.5 Instrument Design

To test the hypothesis and achieve the research objectives, a questionnaire has been adopted from previous research. The demographic, including gender, age, occupation, monthly income, and online shopping frequency, were included in the first part of the questionnaire. To measure the impact of e-commerce, nine questions were adopted from Abdou et al. (2021). Five questions were adopted from Vasic et al. (2019) to measure consumer satisfaction. For measuring consumer preferences, eleven questions were adopted from Rohm et al. (2004). The electronic survey has a set of 30 scales for measuring the relationship among variables. All scale items were measured using the five-point Likert scale format. The questionnaire was developed in the English language and then translated into Arabic. A back translation was performed to ensure face validity.

4. Results

4.1 Sample Characteristics

To ensure that the questionnaire was correct and valid, a pilot study of 15 people was conducted before it was distributed to the entire sample. The sample had 839 respondents, of whom the majority were female (66.9%) and 33.1% were male. 30% of respondents were in the age group of 50–59 years old, followed by the age group of 40–49 with 23.5%. 37% of the sample are employees, and 28.4% are retired. Respondents with a monthly income range of SR 10,000–19,000 were 43%, followed by 39.7% with less than SR 9,999. The majority of the sample sometimes shops using the internet (52.3%), while 17% rarely shop and 15% always shop via the internet (look at Table 1 for more information).

Table 1. Sample characteristics

Demographics	Categories	N = 839	%
Gender	Male	278	33.1
	Female	561	66.9
Age	20–29	110	13.1
	30–39	155	18.5
	40–49	197	23.5
	50–59	252	30.0
	60 and over	125	14.9
Occupation	Student	45	5.4
	Employee	318	37.9
	Free work	30	3.6
	Housewife	189	22.5
	Retired	238	28.4
Monthly income	Other	19	2.3
	Less than 9,999	333	39.7
	10,000–19,999	362	43.1
	20000–29,000	96	11.4
	30000 and over	48	5.7
Online shopping	Never	24	2.9
	Rarely	143	17.0
	Sometimes	439	52.3
	Usually	126	15.0
	Always	108	12.9

4.2 Reliability and Validity Measures

“Cronbach’s (1951) recommended that Alpha result of 0.5 to 0.7 is acceptable while higher than 0.7 is considered as scale of good internal consistency” (Khan et al., 2020). Thus, the value of Cronbach’s alpha for the study tool is high, which indicates the study tool is highly stable and will achieve the purposes of the study (see Table 2).

Table 2. Reliability of questionnaire

Axes	Alpha Cronbach	Number of Elements
E-commerce	0.839	9
Consumer satisfaction	0.870	5
Consumer preference	0.720	11
Total questionnaire	0.813	25

Table 3 shows that the values of the correlation coefficient between the expressions of the study and the total degree of the variables are statistically significant at 0.01, which shows that the study tool has a high level of internal homogeneity and a high validity rate.

Table 3. Correlation between the study variables

phrases	correlation coefficient	P-value
E-commerce		
Saves time	0.637**	0.000
Provides quick payment for purchases	0.626**	0.000
Reduces purchasing cost	0.630**	0.000
Provides the necessary information for productseasily	0.749**	0.000
Provides information needed to make the purchasdecision and it is more available	0.738**	0.000
Ease of comparison between alternatives of purchasing	0.701**	0.000
Allows access to after-sales services	0.652**	0.000
Many offers of products and their diversity	0.650**	0.000
Privacy in customer service (the ability to contact each customer and provide services to him in a particular)	0.589**	0.000
Consumer Satisfaction		
I am satisfied because those websites offer online purchasing option	0.591**	0.000
Internet shopping makes the purchasing process interesting	0.819**	0.000
I would recommend online shopping to other consumers	0.859**	0.000
I enjoy online shopping	0.882**	0.000
It is my opinion that online shopping is excellent	0.881**	0.000
Consumer Preferences		
The Internet is a convenient way of shopping	0.143**	0.000
The Internet is often frustrating	0.366**	0.000
I save a lot of time by shopping on the Internet	0.205**	0.000
I would rather buy from the store than wait for delivery	0.478**	0.000
I like to shop where people know me	0.562**	0.000
While shopping on the internet, I miss the experience of interacting with people	0.621**	0.000
I like browsing for the social experience	0.631**	0.000
I like to have a great deal of information before I buy	0.451**	0.000
I always compare prices	0.406**	0.000
I carefully plan my purchases	0.345**	0.000
I buy things I had not planned to purchase	0.311**	0.000

4.3 Hypothesis Testing

H1:

There is a positive correlation between e-commerce and consumer satisfaction, at 0.01, which shows the correctness of the first hypothesis of the study (look at Table 4). There is a positive impact between the level of e-commerce and the level of consumer satisfaction, compared to retail stores.

The value of (F) was significant at the level of 0.01, and there is a statistically significant impact of e-commerce on consumer satisfaction. When e-commerce increased by 1%, the level of consumer satisfaction increased by 0.494% (see Table 5 for more details).

Table 4. Correlation between e-commerce & consumer satisfaction

Variable	Consumer Satisfaction
E-commerce	0.730**

Table 5. Impact of e-commerce on consumer satisfaction

B	R ²	T	F	P-VALUE
0.494	0.534	30.947**	957.698**	0.000

H2:

There is a positive correlation between e-commerce and consumer preference at 0.05, which shows the correctness of the second hypothesis and the positive impact between the level of e-commerce and the level of consumer preference for retail stores (see Table 6).

The value of F was significant at the level of 0.05, and there is a statistically significant impact of e-commerce

on consumer preference (look at Table 7). When e-commerce increased by 1%, the level of consumer preference for retail stores increased by 0.058%.

Table 6. Correlation between e-commerce and consumer preference

Variable	Consumer Preference
E-commerce	0.077*

Table 7. Impact of e-commerce on consumer preference

B	R ²	T	F	P-VALUE
0.058	0.006	2.227*	4.959*	0.026

The study shows relationships between the demographic variables (gender, age, occupation, monthly income, and online shopping) and consumer satisfaction and consumer preferences in Saudi e-commerce.

- Females are happier with e-commerce and prefer to shop online more than men.
- Consumers aged 20–29 are the most satisfied with e-commerce, whereas consumers aged 30–39 prefer it.
- Students are the most satisfied with e-commerce, and the employment rate is high among those who prefer e-commerce to regular stores.
- Respondents with an income of SR 9,999 and less are most satisfied with online shopping, whereas respondents with an income of SR 30,000 and over prefer to shop online.

5. Discussion

Understanding the impact of electronic commerce on Saudi shoppers is critical, especially in these times, because it can help businesses better understand their customers' behaviors. The result supports the hypothesis and the argument of the study. Based on the result, there is a positive correlation between e-commerce and consumer satisfaction and preferences compared to retail stores. When online shopping increased by 1%, the level of consumer satisfaction increased by 0.494%, and the level of consumer preferences increased by 0.058%. This is a strong indication that the rise of e-commerce in Saudi Arabia has positively shifted consumer expectations and preferences toward online shopping rather than in-store shopping due to efficiency, time savings, assortment availability, and reduced dealing with salesperson attitudes.

Businesses in Saudi Arabia should recognize the power and significance of online commercialism, as well as how to use it as a great tool to increase consumer satisfaction and, consequently, sales and profit. The study findings agreed with previous research (Haridasan & Fernando, 2019), proving that e-commerce is a more convenient way of shopping because consumers don't have to deal with salesperson attitude, store layout, or the high pressure to purchase without having enough information about the product. Today, people are looking for more than just a product or service. Consumers want a complete shopping process that is reliable, efficient, and easy to use, with fast delivery and a wide variety of goods and promotions. E-commerce has become more effective in terms of providing engaging sites with pictures and videos, and some websites, such as Amazon, provides "try before you buy" option, which is a prime option that allows customers to try the products and then decide whether to purchase them or not (Yiming & Yifan, 2020).

6. Limitations and Future Studies

Time was a limitation of the study because the questionnaire was conducted over three weeks, which may affect the quality and quantity of information. Also, the sample largely employed females in the age range of 50–59, which may not represent the population of e-commerce consumers in Saudi Arabia. Therefore, future studies should attempt larger sample sizes with more male respondents and enough time to get valid results. In addition, this study was conducted on consumers who live in Riyadh. To generalize the findings, future researchers should test different cities, such as Jeddah, Dammam, or Abha.

7. Conclusion

E-commerce has shifted the way people shop, especially in Saudi Arabia. This study provides important insights, demonstrating that the majority of Saudis prefer e-commerce and they are more satisfied when shopping online, rather than being in physical stores. The study used a conceptual model to conduct empirical research on Saudi

consumers to test the value of e-commerce on consumer satisfaction and preferences. When compared to in-store shopping, the results show that e-commerce “online shopping” has a significant positive impact on consumer satisfaction and preferences and more Saudi prefer to shop online rather in stores.

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