An Analysis of the factors that influence the participation of coffee bean farmers in online business: A case study of the mountains of Saudi Arabia

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In e-commerce, commercial activities are executed via the internet, exemplified by electronic retailing. The e-commerce sector within Saudi Arabia has not experienced growth at a pace commensurate with the global trends observed in various sectors of online shopping, despite possessing significant potential in agricultural seeds, particularly coffee beans. Within the context of the Arabian Peninsula, coffee serves as a symbol of the historical and national identity of the Arab populace. To facilitate the enhancement of coffee bean sales and bolster engagement in e-commerce, this research scrutinized the impact of cultural determinants in Saudi Arabia, encompassing variables such as age, gender, and computer literacy. An underutilized area characterized by rugged mountain summits, verdant wadis, dense forests, thermal springs, and expansive fertile territories is located at the southern extremity of Saudi Arabia. In addition to Khawlani coffee, this region is also home to a diverse array of other botanical species. The Saudi Ministry of Environment, Water and Agriculture has initiated several programs aimed at augmenting the population of coffee trees and the number of farmers engaged in cultivation. Consequently, this endeavor has culminated in an increase in production levels. The cultivation of high-quality coffee beans is not inherently problematic. However, numerous coffee producers encounter challenges in marketing their superior products via e-commerce, mobile commerce, and other online retail platforms due to a deficiency in knowledge regarding online sales methodologies. The dynamics of online shopping for coffee beans within the kingdom are influenced by a multitude of factors, including age, gender, and computer literacy.

Keywords: Online shopping, e-commerce, Coffee Beans, Khawlani Coffee, Global market, Saudi Arabia.

Introduction

The internet and its rapid development into a globally ubiquitous resource has not only accelerated previously initiated and computer driven change, but in addition, has introduced many more major changes. One of the most relevant to consumers has been the rise of e-commerce, where the internet is used to facilitate, execute, and process business transactions. Saudi Arabia is one of the top oil producers in the world, and economically very strong due to the oil revenue. The rulers of the kingdom are well aware; however, of the dangers to the country's stability of the kingdom's dependence on this single commodity, and since the 1970s have been seeking to diversify the economy[1]. As part of this effort, they have encouraged the introduction and use of ICTs, determined to expand and diversify its commerce in a digital era.

A wide selection of products, the convenience of finding desired products online and the opportunity to compare prices and products are some of the benefits of online shopping for consumers [2]. Consumers today desire convenience and speed more than ever before [3]. Advertisements in electronic communication can stimulate consumers' interest in certain products by showing them a banner ad or online promotion. It is possible for a customer to seek additional information before purchasing. Online catalogs, websites, and search engines are among the channels they use to find information when there is not enough [4].

A proliferation of coffee shops with various types and types of modern presentations in the Arabian Peninsula indicates that coffee has recently become popular among all circle communities. Today, millennials are increasingly enjoying coffee as part of their contemporary lifestyle and modernized consumer behavior. As a result of the proliferation of coffee shops in a number of major Saudi Arabian cities, millennials are now increasingly fond of coffee and it has become a robust trend that can strengthen the local economy in addition to the advancement of the oil industry as the primary source of the country's economy [5]. Studies on the challenges of the implementation of initiatives have been published in several literatures. The Saudi Arabian online shopping platform. A common challenge for organizations adopting an online business strategy has been the acceptance of this technology [6] [8].
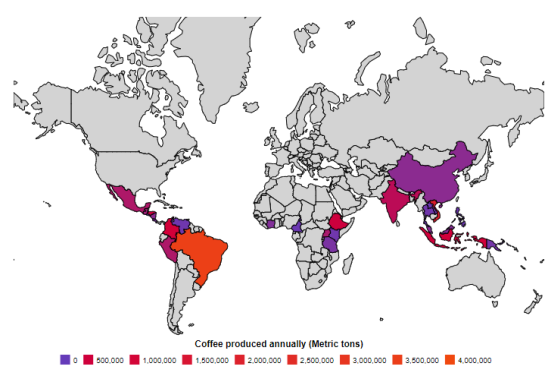

Figure 1. Coffee producing countries in the World 2022
Source: https://worldpopulationreview.com/country-rankings/coffee-producing-countries

In recent years, mobile commerce, also known as m-commerce, has become a core component of the whole supply chain of businesses [10]. Business and customer digital transformations are influenced by legal, economic, political, and technological factors [11]. E-commerce's acceptability is further influenced by technological accessibility, skill levels, security concerns, buying behavior, purchasing power, cultural differences, and regulations [12]. In recent years, Saudi Arabia has invested heavily in the development of its ICT infrastructure to promote online business [9]. Only 9% of commercial organizations in Saudi Arabia are using e-commerce, mostly for business-to-business transactions [13]. Various factors have been studied to explain why online trade is slow in the Arab world as a whole, with a focus on Saudi Arabia in particular.

Based on the fact that online business has been one of the strategic objectives to increase agricultural products and increase non-oil income of the National Transformation Program that supports fulfilling the Saudi Vision 2030 by improving through information technology sector, creating an attractive investment environment for local and international investors, supporting small and medium-sized businesses and productive families in reaching customers and entering new markets [14,15]. Electronic communication and the Internet are used by a large segment of the younger population for shopping purposes. There is a huge market available to online businesses that can be exploited by them. A more trusted environment can be created through SADAD, an online payment option [16-18]. Delivery processes are made more acceptable and reliable by having a diverse range of logistics companies. Online investors can take advantage of the purchasing capability of new generation people [19,20].
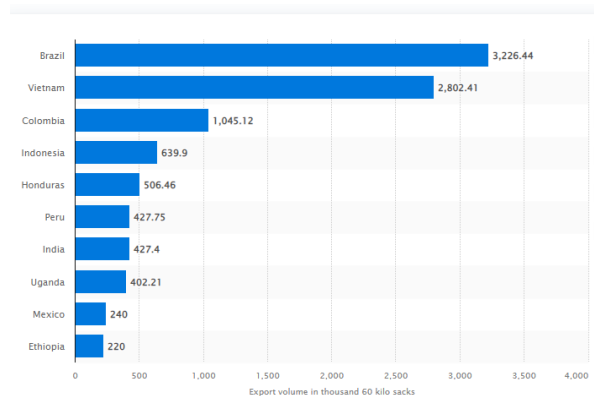
Figure 2. Coffee export volumes worldwide in January 2024, by leading countries
Source: https://www.statista.com/statistics/268135/ranking-of-coffee-exporting-countries.

The Saudi Arabian kingdom has a long history with coffee, which spread from Ethiopia to Yemen and then to the rest of the Middle East around the 15th century [21, 22]. The year has been designated as the "Year of Saudi Coffee" by the government, since coffee remains an integral part of Saudi culture. Saudi Arabia has requested UNESCO to list its Khawlani coffee cultivation as an "Intangible Cultural Heritage of Humanity" that will promote one of the finest coffee beans to the global market [23, 24]. Five additional sections are included in the paper in addition to the introduction and conclusion. The second section presents the study of literature and third section presents the basic problem and defines the research hypotheses in section four [25, 26]. In Section Five, the obtained research results are presented along with the developed methodology and research model. In section six, discussion are offered.

Background Study
Yi Jin Lim, Abdullah Osman, Shahrul Nizam Salahuddin, Abdul Rahim Romle, Safizal Abdullah (2015) Retailers are increasingly prioritizing e-commerce due to the widespread nature of digital shopping. This research aims to investigate the relationship between subjective norms, perceived utility, and online shopping behavior, with purchase intention serving as a mediating variable. The analysis employed structural equation modeling for model fit assessment and hypothesis testing. The findings indicate that both subjective norms and perceived utility exert a significant influence on online purchase intention, whereas subjective norms demonstrate an insignificant impact on shopping behavior. Furthermore, the research indicated that online shopping behavior is notably shaped by purchase intention. To mitigate sampling bias, future inquiries should encompass samples from employed individuals and variables pertinent to online shopping. This study established that online shopping behavior and purchase intention exhibited greater explanatory power compared to earlier investigations [27].

Nebojsa Vasic, Milorad Kilibarda, Tanja Kaurin (2019) Numerous critical determinants influence consumer satisfaction within the realm of online shopping. Marketing professionals encounter challenges in identifying the specific elements that impact consumer satisfaction associated with Internet-based retail. This concern is particularly pertinent in developing economies where the presence of online commerce is insufficiently established. To foster greater engagement in online commerce, it is imperative to scrutinize and assess various determinants of consumer satisfaction. Consumer satisfaction was operationalized as a function of security, availability of information, shipping logistics, product quality, pricing strategies, and temporal considerations. In this investigation, confirmatory factor analysis was employed to evaluate the proposed model. Furthermore, the manuscript should furnish recommendations for online retailers to enhance the precision of their marketing strategies.[28].

Ngoc Thang HA, Thi Lien Huong Nguyen, Thanh Van Pham, Thi Hong Tham Nguyen (2021).Tthis study investigates the various elements that influence the purchasing intentions of online consumers in Vietnam. The elements examined include consumer attitudes, subjective norms, perceived behavioral control, perceived usefulness, perceived risks, and trust. We conducted a survey targeting individuals with prior experience in online shopping. A total of 836 completed questionnaires were selected and approved for data analysis. The collected data were subjected to a comprehensive analytical process that commenced with a reliability assessment of the scales, followed by exploratory factor analysis (EFA), correlation analysis, and regression analysis. In addition to the previously mentioned findings, this study acknowledges certain limitations. Within the framework of online shopping, the potential risks that consumers may encounter include financial risks, vendor-related risks, personal risks, security risks, and others. However, this study is limited to the examination of financial and product-related risks. Consequently, future research could be expanded to investigate the impact of security and personal risks on consumers' intentions to engage in online shopping. [29].

Saeed Q. Al-Khalidi Al-Maliki (2021) The potential and limitations of the e-commerce sector in the Kingdom of Saudi Arabia (KSA) are meticulously examined within this investigation, with a particular emphasis on sectors that generate non-oil revenue. In light of the rapid advancement of the Internet and the information technology revolution, the impact of e-commerce on the retail market sector has become increasingly globalized and adaptable. E-commerce facilitates the capacity for enterprises to generate profit through electronic means. As the global marketplace evolves, nations will encounter numerous innovative and dynamic elements that enhance national revenue, market growth, employment prospects, capital investment, and technological access. Instead of employing a purely analytical methodology, this research adopts a more exploratory perspective. To cultivate a novel methodological framework for examination, it is imperative that an analytical strategy is formulated in subsequent studies. Grounded in the proposed conceptual framework, we advocate for the establishment of specific criteria aimed at assessing and mitigating obstacles to the initiation of global enterprises, thereby augmenting non-oil revenue streams within KSA [30].

Mir Shahid Satar, Ghadah Alarifi (2022) The objective of this investigation is to ascertain and rigorously analyze the factors influencing the landscape of online commerce in Saudi Arabia. The conceptual framework was initially formulated based on a dual-methodological approach: a comprehensive review of existing literature and a focus group interview conducted with a panel of subject matter experts. Subsequently, a survey utilizing a questionnaire was executed. The findings of the investigation, alongside potential avenues for future research, are elaborated upon. The contemporary research proposed an expanded conceptual framework that encompasses the essential factors pertaining to e-business adoption, thereby enriching the existing literature on e-business and facilitating comparative analysis and future replication studies. Furthermore, the investigation concentrates on the empirical examination of e-business determinants within

Small and Medium-sized Enterprises (SMEs) by integrating and refining the conventional Technology-Organization-Environment (TOE) framework. [31].

Yahya Al Qahtani, Natalia Beloff, Martin White (2022) M-commerce is particularly well-positioned to thrive within the market of Saudi Arabia. This research investigates the determinants that affect the propensity of Saudi citizens and enterprises to engage with m-commerce technology. It proposes an innovative methodological framework to examine the underlying motivations for the adoption of mobile commerce in Saudi Arabia. Various factors exert influence on the intentions of both consumers and suppliers to embrace m-commerce. A distinct study will meticulously scrutinize the role of the proposed model to validate and assess it with greater precision. The research methodology is dual-faceted, encompassing both quantitative surveys and qualitative interviews. The objective of the quantitative analysis is to investigate consumers' perceptions regarding the adoption of m-commerce. This will be executed through a survey questionnaire, which will be randomly distributed among potential m-commerce users in Saudi Arabia [32].

Namreen, Panakaje (2023) This review article conducts an analysis of coffee cultivators by utilizing secondary data derived from academic journal articles and scholarly research publications. The principle of sustainability predominantly emphasizes traditional agricultural methodologies aimed at sustaining life, the utilization and conservation of agricultural resources, the protection of biodiversity, and ecological strategies to rehabilitate soil fertility. Our investigation reveals a significant lack of information regarding the mechanisms, locations, and motivations behind various land use and landscape alterations, as well as the implications of these transformations on coffee production, farmer livelihoods, ecosystem services, and other dimensions of sustainable development. These alterations may yield either beneficial or detrimental consequences for the sustainability of the coffee sector. The cultivators confront numerous issues. As a result of the Coffee Board's monopolistic control over coffee trade, producers frequently receive inadequate compensation for their products [33].

Ochago, Dentoni, Trienekens (2023) Numerous challenges within the value chain confront smallholder farmers, thereby necessitating solutions that are specifically tailored to the context. This study augments experiential theory within the agricultural context by proposing a model that elucidates how rural familial support can operate as a resource to transform the mechanisms that underlie farmers' experiential learning. The smallholder farm functions as a node within broader social learning networks, where resources such as information, labor, emotional support, and production inputs are exchanged.These networks facilitate not only the sharing of knowledge but also foster collaboration among farmers, enabling them to adapt to changing market demands and environmental conditions more effectively [34].

Khalid M. AL-Asmari, Isam M. Abu Zeid, Atef M. Al-Attar (2020) The Kingdom of Saudi Arabia represents a significant segment of the Arabian Peninsula. It is characterized by its vast deserts, rich cultural heritage, and strategic economic importance due to its oil reserves. It encompasses an extensive land area predominantly characterized by arid terrain, covering approximately 2.15 million square kilometers. The south-western region of Saudi Arabia, specifically in the provinces of Jazan, Al-Baha, and Aseer, is home to trees that are over a century old, recognized as a traditional zone for coffee cultivation. Arabian coffee is utilized extensively for both medicinal applications and as a fundamental beverage in Arabica coffee thrives in mountainous terrains and is optimally cultivated in elevated regions. The unique climate and rich soil in these areas contribute to the distinct flavor profiles of the coffee, making it a sought-after commodity both locally and internationally [35].

The Challenges of Selling Coffee Beans online

Coffee has been grown in Saudi Arabia for several centuries, but the country is not a major coffee producer. Around 800 tonnes of Saudi-grown coffee in the year 2021 whereas 2019 the production of coffee 300 tonnes. It has been increased of production 100% per year. Coffee consumption in the country has a long history, and it is only continuing to grow. Asser and Jazan are the main regions where Arabian coffee is grown in KSA.

There is a high-quality coffee produced in these areas called Khoulani coffee, which is famous throughout the world.

From Figure 4, only 6.7% of rural lands are utilized for agriculture products. As per the source, 2021 coffee seeds are grown by Saudi Arabia, with 800 tonnes. At least 3200 tonnes of coffee beans can be grown in Saudi Arabia if 25% of rural or agricultural land is used to produce coffee seeds. Production of coffee seeds is not a factor, Exporting or selling the coffee beans is a challenging factor. Figure 5 shows the potential area of cultivating agricultural or coffee bean products. The only way to 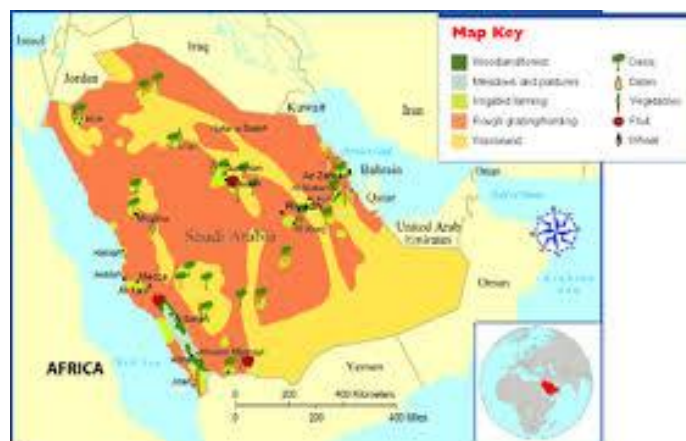globalize Saudi coffee beans is through exporting or selling them online. There are a lot of issues with online selling. Here are a few challenging issues that are mentioned below.
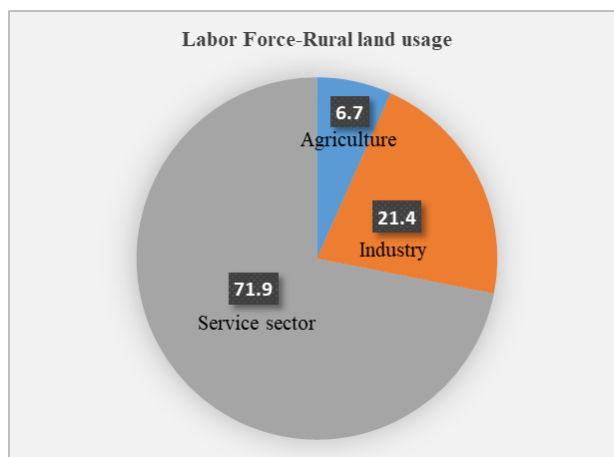
Figure 3. Rural land Labor sectors
Source:https://sites.google.com/a/richland2.org/richardson-saudi-arabia/rural-land-use

Figure 4. Saudi potential area of agriculture land
Source:https://sites.google.com/a/richland2.org/richardson-saudi-arabia/rural-land-use

❖ The issue of trust and privacy is a major concern among farmers when conducting online business, especially since personal information, and in particular their financial information, is transferred.
❖ Among some businesses in Saudi Arabia, online business is generally considered an immature industry.
❖ Businesses and customers find it difficult to have confidence in online business due to the lack of supervision or supporting agencies.
❖ Online businesses face problems when consumers find unreliable products.

- ❖ It Customers have a difficult time convincing themselves of the quality of products when there are no physical items to hold in their hands.
- ❖ It is difficult for buyer and seller to understand how online shopping can benefit them.
- ❖ Fraud and theft could result from weak legal and regulatory oversight of online sales.
- ❖ International companies that offer lower-priced goods and services can make it difficult for some companies to sell online.
- ❖ The security of buyer information and their privacy can be questioned when dealing with unknown or smaller companies.
- ❖ Due to concerns about safety and trust, cultivator is wary of electronic shopping.

Study Population and Sample:

The study sample is chosen randomly with a total number of (180) participants. The description of the study sample in terms of the demographic variables (i.e., gender, age, academic qualification, occupation, and income level) is given as follows:

1- Gender variable: All the participants in the questionnaire were males.
2- Age: Table. 2 illustrates the distribution of the respondents in terms of age. It is clear from this Table that 73.33% of the total participants are between 36 to 55 years.

Table. 1 Distribution of the respondents in terms of age

Age	Frequency	Percentage
From 18 to 25 year	6	3.33%
From 26 to 35 year	21	11.67%
From 36 to 45 year	63	35.00%
From 46 to 55 year	69	38.33%
Elder than 55 year	21	11.67%
Total	180	100.0%
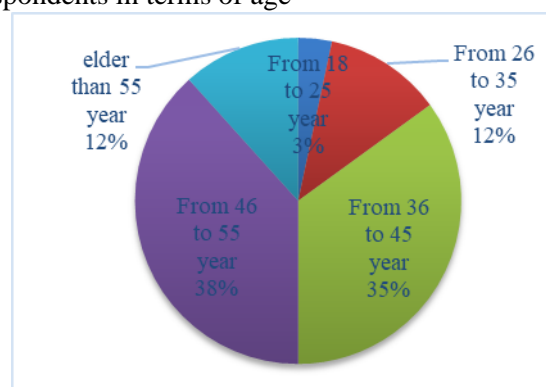
3- Academic qualification variable: Table. 2 shows the percentage and distribution of the respondents in terms of academic qualifications. 43.33% of the participants hold a bachelor's degree.

Table. 2 Distribution of the respondents in terms of academic qualifications

Academic qualification	Frequency	Percentage
Less than secondary school	51	28.33%
Secondary school	45	25.00%
Bachelor's degree	78	43.33%
Postgraduate Degree	6	3.33%
Total	180	100.0%
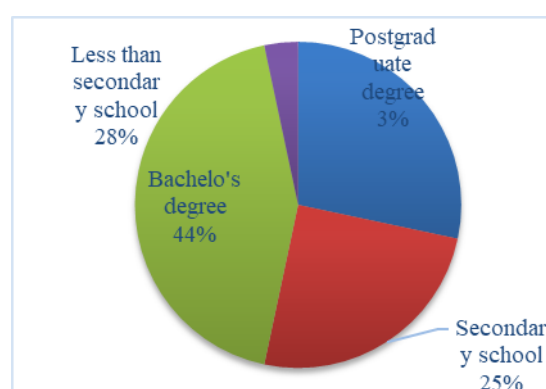
4- Occupation variable: Table. 3 represents the distribution of the sample respondents by profession. It can be observed that 41.67% of the participants work in the government sector, and 30% of them work as coffee farmers, while the rest are retired with 28.33%.

Table. 3 Distribution of the respondents in terms of occupation

Occupation	Frequency	Percentage
Coffee farmer	54	30.00%
Government employee	75	41.67%
Retired employee	51	28.33%
Total	180	100%
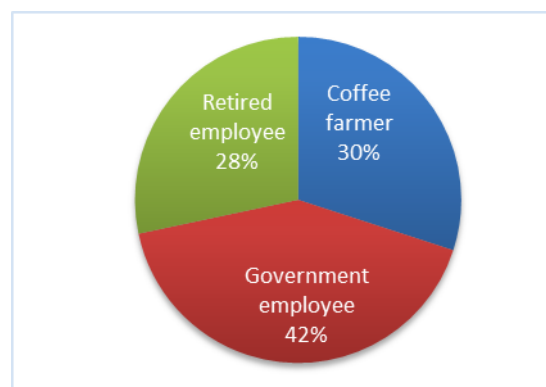
5- Income level variable: Table. 4 shows the distribution of the respondents from the perspective of income level. Participants with an income ranges of (3001-6000 Riyals) and (9001-15000) Riyal have an equal percentage of 20% of the total participant, as illustrated in Table. 4. Moreover, 25% of the participants earn less than 3000 Riyals. However, 15% of the respondents have an income higher than 16000 Riyal.

Table. 4 Distribution of the respondents in terms of income level

Income level	Frequency	Percentage
Less than 3000 Riyal	45	25.00%
From 3001 to 6000 Riyal	36	20.00%
From 6001 to 9000 Riyal	24	13.33%
From 9001 to 15000 Riyal	36	20.00%
More than 15000 Riyal	27	15.00%
Depending on others	12	6.67%
Total	180	100%
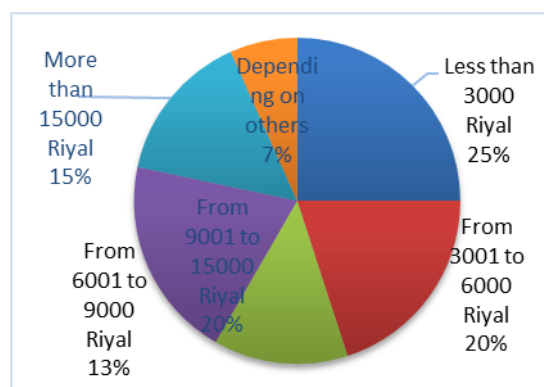
Study Tools:

The study analysis tools consisted of a questionnaire divided into four parts to measure the independent variables. The first dimension: is Skills, the second dimension: is the Motivation factors, the third dimension: Obstacles and the first dimension: Suggestions.

Data collection tool:

The researcher has developed a questionnaire to collect the study-related data and information. This questionnaire consists of three parts as follows:

First part: includes the general information, gender, age, academic level, occupation, and income level of the participants.

Second part: contains questions about the status of creating an online store to display and sell the coffee product of the research sample.

Third part: comprises 43 statements to measure the independent variables. These statements are distributed on four aspects: The first dimension includes 11 statements about e-store management and development skills. The second dimension is dedicated to study the motivation factors in building an e-store (14 statements), the third dimension contains the obstacles to create an e-store (10 statements), and the fourth dimension presents the suggestions to improve the displaying and marketing Al-Khawlani coffee product online (8 phrases). A five-point Likert scale was adopted to evaluate the answers of the participants. The scores were calculated based on giving (5) marks for a strongly agree answer, (4) marks for agree answer, (3) marks for a neutral answer, (2) marks for a disagree answer, and (1) mark for an answer with strongly disagree.

Tool Validity and Reliability

A- Tool Reliability

The researcher utilized Cronbach's alpha equation to verify the tool's reliability. According to this equation, the value of the reliability coefficient of the total degree was (0.946), which is a very high value. This value exceeds the statistically acceptable value of (0.60). This analysis aims to obtain the same data using the same study tool under the same conditions while reconducting the study. Table. 5 presents the reliability coefficients of the study dimensions and the total range.

Table. 5 Reliability coefficients of the study dimensions and total range

Tool dimensions	Statement number	Reliability coefficient value
First dimension: Skills	11	0.959
Second dimension: Motivation factors	14	0.971
Third dimension: Obstacles	10	0.933
First dimension: Suggestions	8	0.947
Total tool	43	0.946

B- Validity and Internal Consistency of the Tool:

Table. 6 shows the validity of the internal consistency. All the statements are related to their corresponding aspect implying their statistical significance. It is also found that the calculated correlation coefficients for each aspect's statement are greater than the tabular r-value of all statements in the aspect, indicating a significant correlation. Therefore, the statements of the first aspect are valid and internally consistent.

Table. 6 Validity Coefficients of internal consistency

Statement No.	First dimension	Second dimension	Third dimension	Fourth dimension
1	.796**	.813**	.664**	.872**
2	.809**	.835**	.657**	.873**
3	.765**	.813**	.747**	.882**
4	.800**	.851**	.851**	.875**
5	.805**	.785**	.888**	.911**
6	.901**	.864**	.852**	.879**
7	.906**	.921**	.859**	.816**
8	.929**	.824**	.834**	.746**
9	.868**	.852**	.715**	

10	.855**	.764**	.819**	
11	.856**	.935**		
12		.911**		
13		.875**		
14		.897**		

Seventh: The Utilized Statistical Coefficients:

The SPSS software (version 25) was used to analyze the obtained data from the respondents through the following statistical methods:

1- Frequencies and percentages

2- Evaluating the level using the mean: create the beginning and end of the 5-point Likert scale groups: the data was encoded and entered into the computer. The range was calculated (5-1 =4) to determine the length of the 5-point scale cells (lower and upper limits). After that, it was divided by the number of scale cells to obtain the correct cell length (4/5 = 0.80). This value was added to the lowest value in the scale (or the beginning of the scale, the integer one) to determine the corresponding cell's upper limit. Thus, the length of the cells become as follows: -

If the mean for statement or dimension varies between 1:1.8	Very weak
If the mean for statement or dimension varies between 1.8:2.6	Weak
If the mean for statement or dimension varies between 2.6:3.4	Medium
If the mean for statement or dimension varies between 3.4:4.2	Large
If the mean for statement or dimension varies between 4.2:5	Very Large

3- Standard deviation (SD): It is utilized to obtain the degree of the dispersion of the respondents' responses. Moreover, it helps arrange the statements or variables with the weighted average (WAVG). In the case of statements with an equal-weighted mean, the statement or variable with less standard deviation takes the first order.

4- Cronbach's alpha test to verify the reliability of the questionnaire statements

5- Pearson correlation test to measure the validity of internal consistency

6- ANOVA test to analyze the variance between several groups

7- T-test for two independent samples to examine the variance in the means between two independent populations

Results of the Study:

A- The status of e-stores for displaying and selling the coffee product:

- As a farmer or interested in the coffee product or coffee marketing in the mountainous provinces of Jizan, have you ever thought of or created an online store to display and sell your farm's coffee product?
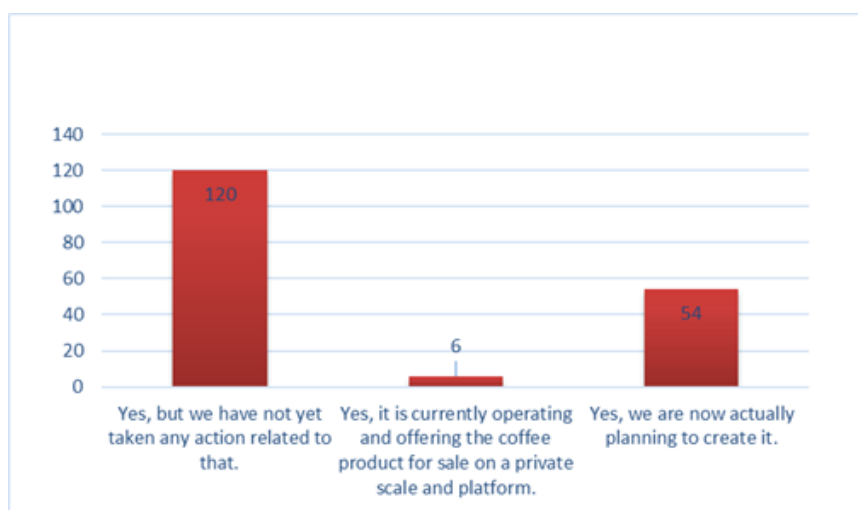
Table 7 shows that only 3.33% of the respondents currently have an online coffee shop that offers coffee products on a private platform. Moreover, 30% of the participants plan to set up an online store. However, 66.67% of the same have not taken any action to start their online store.

Table. 7 Have you ever thought of or created an online store to display and sell your farm coffee product

Income level	Frequency	Percentage
Yes, but we have not yet taken any action related to that.	120	66.67%
Yes, it currently operates and offers the coffee product for sale on a private platform.	6	3.33%
Yes, we are now actually planning to create it.	54	30.00%
Total	180	100%

It can be noted from Table. 8 that the respondents with an online coffee store do not seek specialized assistance in the management and development. A 15% of the respondents have previously attended an introductory or training course on initiating an online store for selling coffee. Moreover, 81.67% of the respondents support the idea that coffee farmers should have an online store for their Al-Khawlani coffee products.

Table. 8 Status of e-stores for displaying and selling the coffee product

		Yes	No
Do you hire a specialist to manage and develop an online store if you have an e-store?	Frequency	0	6
	%	0%	100%
Have you ever attended an introductory or training course on setting up an e-store to display and sell Al-Khawlani coffee?	Frequency	27	153
	%	15.00%	85.00%
Do you support the idea that every Al-Khawlani coffee farmer should have an online store for his farm?	Frequency	147	33
	%	81.67%	18.33%

B- The first dimension: e-store management and development skills

The frequencies and percentages of the first-dimension statements were calculated. After that, the weighted mean and standard deviation were calculated for each statement and for the aspect as a whole to determine the relative importance of the statement and its rank within the dimension.

Table. 9 First dimension: e-store management and development skills

No.	e-store management and development skills		very high skill	high skill	medium skill	low skill	no skill	weighted mean	standard deviation	rank	agreement degree
1	Planning to create an online store.	K	3	15	45	42	75	2.05	1.08	4.00	No skill
		%	1.7%	8.3%	25.0%	23.3%	41.7%				
2	Preparing and formulating e-store policies.	K	3	21	24	45	87	1.93	1.12	8.00	No skill
		%	1.7%	11.7%	13.3%	25.0%	48.3%				
3	Supporting and training coffee farmers in my governorate on building an e-store.	K	6	21	18	36	99	1.88	1.19	9.00	No skill
		%	3.3%	11.7%	10.0%	20.0%	55.0%				
4	Subscribe to my shop on behalf of my neighbors	K	6	24	21	42	87	2.00	1.21	6.00	No skill
		%	3.3%	13.3%	11.7%	23.3%	48.3%				
5	Examining the qualified coffee product for display and sale in my own e-store	K	18	21	27	33	81	2.23	1.39	1.00	No skill
		%	10.0%	11.7%	15.0%	18.3%	45.0%				
6	Managing, maintaining, and following up on updating the content of my e-store, such as text content, professional images and videos	K	12	27	30	33	78	2.23	1.33	2.00	No skill
		%	6.7%	15.0%	16.7%	18.3%	43.3%				
7	Handling installation and technical updates of e-stores.	K	6	18	39	24	93	2.00	1.21	6.00	No skill
		%	3.3%	10.0%	21.7%	13.3%	51.7%				
8	Dealing with the file-hosting plan of my store website.	K	6	27	33	30	84	2.12	1.25	3.00	No skill
		%	3.3%	15.0%	18.3%	16.7%	46.7%				
9	The knowledge	K	3	21	21	30	105	1.82	1.14	10.00	No skill

	of the English language to understand the English texts of my e-store application	%	1.7%	11.7%	11.7%	16.7%	58.3%			
10	Dealing with the basics of the store website development such as programming languages, designing web pages and website interfaces	K	3	18	21	36	102	1.80	1.10	11.00	No skill
		%	1.7%	10.0%	11.7%	20.0%	56.7%			
11	Managing backup and recovery	K	12	15	27	39	87	2.03	1.26	5.00	No skill
		%	6.7%	8.3%	15.0%	21.7%	48.3%			
								2.01	1.02		No skill

It is clear from the previous Table:

The first dimension includes 11 statements that measure the skills of managing and developing a coffee e-store in the study population. The level of different skills in the total dimension was very low, with a weighted mean of (2.01) and a standard deviation of (1.02). It can be concluded that the respondents lack the necessary skills to manage coffee e-stores. Moreover, they need to improve their skill and have more awareness about the e-stores.

The skill of "Examining the qualified coffee product for display and sale in my own e-store" is a prominent skill among the respondents. However, this skill is still weak at 63% of the respondents, with a weighted average of (2.23) and a standard deviation of (1.39). This skill is followed by the skill of "Managing, maintaining, and following up on updating the content of my e-store, such as text content, professional images, and videos", with a weighted average of (2.23) and a standard deviation of (1.33). The skills of having "The knowledge of the English language to understand the English texts of my e-store application" and " Dealing with the basics of the store website development such as programming languages, designing web pages and website interfaces " score the least weighted average (1.82 and 1.80) and standard deviation (1.14 and 1.10), respectively.

The researcher suggests conducting quick training courses that focus on the essential skills to establish and manage the e-stores, spreading awareness of their importance and the expected returns of using them.

C- The second dimension: the motivation factors in building an online store

To identify the motivation factors in building an e-store, the frequencies and percentages of the second aspect statements were calculated. Thereafter, the weighted mean and standard deviation were calculated for each statement and for the aspect as a whole to determine the relative importance of the statement and its rank within the dimension.

Table. 10 Second dimension: Motivation factors in building an e-store

No.	Motivation factors in building an e-store		strongly agree	agree	neutral	disagree	strongly disagree	weighted mean	standard deviation	rank	agreement degree
1	Getting acquainted - before creation - with successful experiences in e-commerce.	K	51	66	36	12	15	3.70	1.20	8.00	Agree
		%	28.3%	36.7%	20.0%	6.7%	8.3%				
2	Existence of successful local e-stores to display and sell agricultural products.	K	45	75	30	21	9	3.70	1.12	7.00	Agree
		%	25.0%	41.7%	16.7%	11.7%	5.0%				
3	The presence of specialists in our community who can provide the assistance	K	42	78	21	21	18	3.58	1.25	12.00	Agree
		%	23.3%	43.3%	11.7%	11.7%	10.0%				
4	Conducting the Al-Khawlani coffee festival in Al-Dayer Governorate every year	K	90	45	30	9	6	4.13	1.08	1.00	Strongly agree
		%	50.0%	25.0%	16.7%	5.0%	3.3%				
5	The interest of the community near the coffee farms to buy the Al-Khawlani coffee product	K	57	57	36	21	9	3.73	1.18	4.00	Strongly agree
		%	31.7%	31.7%	20.0%	11.7%	5.0%				
6	High demand in the Kingdom and the Gulf countries to buy Al-Khawlani coffee.	K	60	78	24	6	12	3.93	1.10	2.00	Agree
		%	33.3%	43.3%	13.3%	3.3%	6.7%				
7	The annual abundance of coffee in the mountainous provinces of Jazan	K	45	72	42	9	12	3.72	1.11	5.00	Agree
		%	25.0%	40.0%	23.3%	5.0%	6.7%				
8	The fast display and sale on the online store	K	42	63	45	15	15	3.57	1.18	13.00	Agree
		%	23.3%	35.0%	25.0%	8.3%	8.3%				

9	The ease of displaying and selling the coffee product from its original country	K	54	72	39	3	12	3.85	1.09	3.00	Agree
		%	30.0%	40.0%	21.7%	1.7%	6.7%				
10	Creating my online store does not require large capital and some of its prices are minimal	K	36	69	51	12	12	3.58	1.09	11.00	Agree
		%	20.0%	38.3%	28.3%	6.7%	6.7%				
11	Buying and selling on e-stores provide job opportunities from home that suit us	K	45	66	48	9	12	3.68	1.11	10.00	Agree
		%	25.0%	36.7%	26.7%	5.0%	6.7%				
12	Building an online store does not require a large capital compared to a traditional store.	K	39	81	36	15	9	3.70	1.06	6.00	Agree
		%	21.7%	45.0%	20.0%	8.3%	5.0%				
13	The possibility to design platforms or websites at nominal prices.	K	33	72	48	15	12	3.55	1.10	14.00	Agree
		%	18.3%	40.0%	26.7%	8.3%	6.7%				
14	Online shopping for agricultural products in the Kingdom is overgrowing.	K	54	63	39	3	21	3.70	1.25	9.00	Agree
		%	30.0%	35.0%	21.7%	1.7%	11.7%				
Total mean for the dimension								3.72	0.97		

It is clear from the previous Table:

The second dimension has 14 statements utilized to evaluate the motivation factors in building an e-store. The agreement of these statements was high with a weighted mean of (3.72) and a standard deviation of (0.97).

The most agreed factors among respondents were "Conducting the Al-Khawlani coffee festival in Al-Dayer Governorate every year " with a WAVG and SD of (4.13) and (1.08), respectively. This factor is followed by the "High demand in the Kingdom and the Gulf countries to buy Al-Khawlani coffee". The corresponding WAVG and SD are (3.93) and (1.10), respectively. The third factor on the list is " The ease of displaying and selling the coffee product from its original country", with a WAVG of (3.85) and a SD of (1.09). The "interest of the community near the coffee farms to buy the Al-Khawlani coffee product " factor scores a WAVG of

(3.73) and an SD of (1.18). On the other hand, "The annual abundance of coffee in the mountainous provinces of Jazan" ranks fifth on the motivation factors in building a coffee e-store with (3.72, 1.11) for the WAVG and SD, respectively.

On the other hand, " The possibility to design platforms or websites at nominal prices" was the least motivation factor in building an online coffee store (14th rank) with a WAVG of (3.55) and a SD of (1.10). This factor is preceded by "The fast display and sale on the online store" factor scoring 3.57 and 1.13 for the weighted mean and standard deviation, respectively. The statement of " The presence of specialists in our community who can provide the assistance" has the 12th rank with (3.58) for weighted average and (1.25) for the standard deviation. The 11th and 10th ranked statements are "Creating my online store does not require large capital and some of its prices are minimal " and "Buying and selling on e-stores provide job opportunities from home that suit us" (3.58, 3.68) for WAVG and (1.09, 1.11) for the SD, respectively.

The researcher proposes providing specialists to explain the importance of establishing and managing e-stores to sell Al-Khawlani coffee, providing marketing opportunities, and paying attention to e-marketing training. Furthermore, the researcher recommends considering the importance of festivals similar to the Al-Khawlani Coffee Festival as a distinct marketing channel.

D- The third dimension: Obstacles to manage and develop an e-store

The frequencies and percentages of the third-dimension statements were calculated. Thereafter, the weighted mean and standard deviation were calculated for each statement and for the aspect as a whole to determine the relative importance of the statement and its rank within the dimension.

Table. 11 Third dimension: Obstacles to manage and develop an e-store

No.	Obstacles to manage and develop an e-store		strongly agree	agree	neutral	disagree	strongly disagree	weighted mean	standard deviation	rank	agreement degree
1	I do not have sufficient knowledge or experience to create and manage an e-store to display and sell Al-Khawlani coffee.	K	24	66	63	18	9	3.43	1.01	4.00	Agree
		%	13.3%	36.7%	35.0%	10.0%	5.0%				
2	I do not have enough time to create an online store to display and sell Al-Khawlani coffee	K	30	48	60	30	12	3.30	1.14	7.00	Neutral
		%	16.7%	26.7%	33.3%	16.7%	6.7%				
3	The weakness of the Internet in our governorate	K	60	54	36	21	9	3.75	1.19	1.00	Strongly agree
		%	33.3%	30.0%	20.0%	11.7%	5.0%				

4	High cost of establishing an e-store to display and sell Al-Khawlani coffee	K	18	63	57	30	12	3.25	1.07	9.00	Agree
		%	10.0%	35.0%	31.7%	16.7%	6.7%				
5	The difficulty of obtaining technical support in our governorate	K	39	57	45	30	9	3.48	1.16	2.00	Agree
		%	21.7%	31.7%	25.0%	16.7%	5.0%				
6	A large number of competitors for the same product displayed and sold through special e-stores	K	30	48	54	15	33	3.15	1.33	10.00	Neutral
		%	16.7%	26.7%	30.0%	8.3%	18.3%				
7	Similar names of e-stores in the mountainous governorates for displaying and selling Al-Khulani coffee	K	27	63	39	33	18	3.27	1.22	8.00	Agree
		%	15.0%	35.0%	21.7%	18.3%	10.0%				
8	The difficulty and costs of order shipping may lose reliance on my e-store	K	30	60	48	36	6	3.40	1.09	5.00	Agree
		%	16.7%	33.3%	26.7%	20.0%	3.3%				
9	The high cost of the Al-Khawlani coffee product may delay the sale through the e-store	K	24	66	42	39	9	3.32	1.11	6.00	Agree
		%	13.3%	36.7%	23.3%	21.7%	5.0%				
10	Lack of product packaging capabilities in our governorate	K	45	54	39	24	18	3.47	1.28	3.00	Agree
		%	25.0%	30.0%	21.7%	13.3%	10.0%				
								3.38	0.92		

It is clear from the previous Table:

The third dimension has ten statements to investigate the obstacles in managing and developing an e-store. The agreement of these statements was high with a weighted mean of (3.38) and a standard deviation of (0.92).

The most common obstacles agreed upon by the respondents were " The weakness of the Internet in our governorate " followed by the "difficulty of obtaining technical support in our governorate " with a weighted mean of (3.75, 3.48) and a standard deviation of (1.17, 1.61), respectively. The " Lack of product packaging capabilities in our governorate " ranked the third in the obstacles' list scoring a weighted mean of (3.47) and standard deviation of (1.28). The fourth rank corresponds to the statement "I do not have sufficient knowledge or experience to create and manage an e-store to display and sell Al-Khawlani coffee" with a weighted average of (3.43) and a standard deviation of (1.01). "The difficulty and costs of order shipping may lose reliance on my e-store" statement has scored 3.40 and 1.09 for the weighted mean and standard deviation, respectively.

"A large number of competitors for the same product displayed and sold through special e-stores" corresponds to the least obstacle agreed upon by the respondents (10th rank). This obstacle shows a 3.15 weighted mean and 1.33 standard deviation. This obstacle is preceded by the "High cost of establishing an e-store to display and sell Al-Khawlani coffee", at 9th rank, with a weighted mean of (3.25) and standard deviation of (1.07). The 8th rank is preserved for "Similar names of e-stores in the mountainous governorates for displaying and selling Al-Khulani coffee" statement (3.27 weighted average and 1.22 standard deviation). " I do not have enough time to create an online store to display and sell Al-Khawlani coffee" and "The high cost of the Al-Khawlani coffee product may delay the sale through the e-store" meet the seventh and sixth ranks in the obstacles list with (3.30, 3.32) for weighted mean and (1.14, 1.11) for the standard deviation, respectively.

It can be interpreted from the previous results that the poor internet connection is the most prominent obstacle leading to the delay in establishing and managing e-stores for selling Al-Khawlani coffee.

E- **The fourth dimension: Suggestions to improve displaying and marketing Al-Khawlani coffee products online**

The frequencies and percentages of the fourth dimension statements were calculated. Thereafter, the weighted mean and standard deviation were calculated for each statement and for the aspect as a whole to determine the relative importance of the statement and its rank within the dimension.

Table. 12 Fourth dimension: Suggestions to improve displaying and marketing Al-Khawlani coffee products online

No.	Suggestions to improve displaying and marketing Al-Khawlani coffee products online		strongly agree	agree	neutral	disagree	strongly disagree	weighted mean	standard deviation	rank	agreement degree
1	All the Al-Khawlani coffee farmers in the mountainous governorates should have a unified online platform to display and sell their coffee	K	51	78	30	12	9	3.83	1.08	5.00	Agree
		%	28.3%	43.3%	16.7%	6.7%	5.0%				

	product									
2	The formation of working group for Al-Khawlani coffee farmers to take over the aspects of supplying and selling coffee through e-stores	K	54	66	24	18	18	3.67	1.28	8.00	Agree
		%	30.0%	36.7%	13.3%	10.0%	10.0%				
3	A unified team of coffee farmers and specialists in information technology undertake the task of e-marketing for displaying and selling Al-Khawlani coffee	K	57	69	18	21	15	3.73	1.26	6.00	Agree
		%	31.7%	38.3%	10.0%	11.7%	8.3%				
4	The formation of working group for the Al-Khawlani coffee farmers to take over the aspects of supplying and selling coffee through e-stores	K	60	63	18	24	15	3.72	1.29	7.00	Agree
		%	33.3%	35.0%	10.0%	13.3%	8.3%				
5	The farmers to have a coffee factory owned by them and follow the unified online store	K	72	66	24	9	9	4.02	1.10	4.00	Strongly agree
		%	40.0%	36.7%	13.3%	5.0%	5.0%				
6	The presence of an annual marketing plan for coffee growers that contribute to the e-marketing of the coffee product	K	69	72	27	3	9	4.05	1.03	2.00	Agree
		%	38.3%	40.0%	15.0%	1.7%	5.0%				
7	The presence of	K	69	75	24	0	12	4.05	1.06	3.00	Agree

	an official body to supervise the marketing and selling of the Al-Khawlani coffee guarantees the right of each framer from the sell	%	38.3%	41.7%	13.3%	0.0%	6.7%				
8	Provide training courses for all farmers to establish and manage an e-store for displaying and selling coffee	K	81	60	24	9	6				
		%	45.0%	33.3%	13.3%	5.0%	3.3%	4.12	1.04	1.00	Strongly agree
								3.90	0.98		

The fourth dimension includes eight statements utilized to investigate the suggestions to improve the online displaying and marketing of the Al-Khawlani coffee product. The agreement of these statements was high with a weighted mean of (3.90) and a standard deviation of (0.98).

The most agreed suggestions by the respondents were to provide training courses for all farmers to establish and manage an e-store for displaying and selling coffee with a weighted mean of (4.12) and a standard deviation of (1.04). This is followed by the presence of an annual marketing plan for coffee growers that contribute to the e-marketing of the coffee product with a WAVG of (4.05) and a SD of (1.03). The statement that suggests the presence of an official body to supervise the marketing and selling of the Al-Khawlani coffee guaranteeing the right of each framer from the sell scores (4.05, 1.06) for the WAVG the SD, respectively. "the farmers to have a coffee factory owned by them and follow the unified online store" statement has ranked the fourth in the suggestions list with a WAVG of 4.02 and SD of 1.10. The fifth rank (3.83 WAVG and 1.08 SD) corresponds to the statement that suggests "all the Al-Khawlani coffee farmers in the mountainous governorates should have a unified online platform to display and sell their coffee product". This is followed by the suggestion of having "a unified team of coffee farmers and specialists in information technology undertake the task of e-marketing for displaying and selling Al-Khawlani coffee" with a weighted mean of (3.73) and a SD of (1.26). The last rank is preserved to "the formation of a working group for the Al-Khawlani coffee farmers to take over the aspects of supplying and selling coffee through e-stores" with a weighted mean of (3.67) and a standard deviation of (1.28).

F- Statistical tests to study the influence of demographic factors on the participants' responses:

First: Variance Analysis Test (ONE WAY ANOVA TEST):

To study the existence of statistically significant differences in the respondents' responses due to demographic factors, the ANOVA test was conducted to analyze the variance between the demographic variables (age, academic level, occupation, and income level) and the four dimensions of the research tool (i.e., The first dimension: online store management and development skills, the second dimension, the motivation factors in

building an online store, the third dimension: Obstacles to create an online store, and the fourth dimension: Suggestions that will improve the process of displaying and marketing Al-Khawlani coffee product online).

The results of the ANOVA test are presented in Table. 13. It can be noticed that there are no statistically significant differences in the participants' responses due to the age, academic level, and occupation for any of the four dimensions. However, there is an effect of income level on the third dimension (i.e., obstacles).

Table. 13 Variance Analysis Test (ANOVA)

Variable	Age		Academic level	
	F test	Significance level	F test	Significance level
First dimension	1.557	0.199	0.436	0.728
Second dimension	1.441	0.233	0.448	0.720
Third dimension	1.891	0.125	0.956	0.420
Fourth dimension	1.677	0.168	0.346	0.792
Variable	Occupation		Income level	
First dimension	2.267	0.113	1.239	0.304
Second dimension	0.705	0.499	1.247	0.300
Third dimension	0.031	0.969	**3.348**	**0.010**
Fourth dimension	0.403	0.670	2.258	0.062

The ANOVA test was carried out to study the presence of statistically significant differences in the respondents' responses due to thinking or establishing an online store to display and sell the coffee product. Table. 14 shows the presence of statistically significant differences in the participants' responses for the first dimension (i.e., the level of skills) due to thinking or establishing an online store to display and sell the coffee product. On the other hand, these significant differences are not present in the rest of the tool dimensions.

Table. 14 Variance Analysis Test (ANOVA)

Variable	Have you ever thought of or created an online store to display and sell coffee from your farm?	
First dimension	**3.489**	**0.037**
Second dimension	0.523	0.595
Third dimension	1.043	0.359
Fourth dimension	1.824	0.171

Second: Independent sample T-test

The independent sample T-test is carried out to study the presence of statistically significant differences in the respondents' responses attributed to attending introductory or training courses on how to create an e-store to display and sell Al-Khawlani coffee and supporting the idea that every coffee farmer should have an online store for his farm with the four dimensions of the research tool (i.e., The first dimension: online store management and development skills, the second dimension, the motivation factors in building an online store, the third dimension: Obstacles to create an online store, and the fourth dimension: Suggestions that will improve the process of displaying and marketing Al-Khawlani coffee product online).

The results of the performed independent sample T-test are presented in Table. 15. These results show no statistical evidence of significant differences in the respondents' responses attributed to the abovementioned statements on the associated four dimensions of the study tool.

Table. 15 T-test

Variable		Have you ever attended an introductory or training course on setting up an online store to display and sell Al-Khawlani coffee?				Do you support the idea that every coffee farmer should have an online store for his farm and his production of Al-Khawlani coffee?			
		Frequency	mean	tests	Significance level	Frequency	mean	tests	Significance level
First dimension	Yes	27	3.4040	-1.912	0.061	147	3.9184	-1.165	0.249
	No	153	4.0945			33	4.3140		
Second dimension	Yes	27	2.4365	0.535	0.595	147	2.2216	-0.920	0.362
	No	153	2.2479			33	2.5195		
Third dimension	Yes	27	2.7889	0.601	0.550	147	2.7061	1.584	0.119
	No	153	2.5882			33	2.2273		
Fourth dimension	Yes	27	2.4028	0.997	0.323	147	2.1837	1.369	0.176
	No	153	2.0490			33	1.7386		

6. Discussion

The Saudi Arabian economy has made great strides in transitioning from an oil-dependent one to other non-oil income sources over the past decade. The Kingdom must accelerate non-oil revenue even further to meet the Vision 2030 target, according to a recent report by Strategic Gears. There were 180 participants in the study, selected at random. Among the study population, 28.33% do not have a secondary education. A total of three groups of respondents were also included in the sample: farmers, government employees, and retirees. Based on income level, participants with incomes between 3001-6000 Riyals and 9001-15000 Riyals account for equal percentages of 20% of the participants. There are 25% of participants with incomes below 3000 Riyals and 15% with incomes over 16,000 Riyals. As part of the first dimension, there are 11 statements related to the management and development of e-stores. There are 14 statements in the second dimension focused on motivating the development of an e-store, 10 statements in the third dimension describe obstacles to the development of an e-store, and 8 phrases in the fourth dimension discuss how to enhance the presentation and marketing of Al-Khawlani coffee products online.

Using quick training courses to teach e-store creation and management skills, as well as to spread awareness of their importance and expected returns would be helpful, suggests the researcher. According to the findings of this research article, e-stores can be created and managed by coffee specialists, marketing opportunities can

be provided, and e-marketing training should be provided. According to the researcher, festivals like the Al-Khawlani Coffee Festival should be considered as distinct marketing channels. There are ten statements in the third dimension that address the obstacles associated with managing and developing an e-commerce site. A weighted mean of 3.38 and a standard deviation of 0.92 indicate high agreement with these statements. Al-Khawlani coffee's fourth dimension includes eight statements that can be used to improve its online display and marketing. As a result, there was a high degree of agreement with these statements, with a weighted mean of 3.90 and a standard deviation of 0.98. Based on the independent sample T-test, it was determined that there were no significant differences in respondents' responses to the above-mentioned statements on the study tool's four dimensions. Furthermore, in Saudi Arabia, demographics and cultural factors have a significant impact on the online sale of agricultural products, such as Al-Khalawani coffee beans. The research study analyzed various aspects that young adults are more familiar with new technologies, such as the internet, smartphones, e-commerce, email, and online stores, because they are graduates, moving into new types of jobs, having a good personal income, or are regularly exposed to new technology which they enjoy and use, including buying products online.

Conclusion

In this study, it was found that online sales of coffee beans have a high potential for adoption. Globalization requires consideration of several significant factors in order for products to be created and sold in a globalized market. Researchers examined several cultural factors related to users' age, gender, computer proficiency, and income level to understand how they influence major types of online shoppers in Saudi Arabia. We developed hypotheses for the demographic and cultural factors that influence Saudi Arabian online shopping adoption based on our literature review. In order to test the hypotheses, various methods were used, such as standard deviation for determining the degree of dispersion of the respondents' answers, Cronbach's alpha test for determining questionnaire reliability, Pearson correlation test used for validating internal consistency measurement, ANOVA for identifying variance between groups; and T-test for analyzing variance in means of two independent samples. A number of significant points have been agreed upon to facilitate the export of precious Saudi coffee bean products overseas. The testing population result showed that 66.67% of the participants thought Al-Khawlani coffee beans needed further promotion in order to reach the global market since they have high quality and have potential. Second, 81.67% of participants believe that establishing and selling Al-Khawlani coffee beans through on-line shopping will increase non-oil revenue and increase agro products potentiality.

References

1. Albassam BA, Economic diversification in Saudi Arabia: Myth or reality. Resources Policy, 44: 112-117, 2015.

2. S. Alam, N. Yasin, An investigation into the antecedents of customer satisfaction of online shopping, Journal of Marketing Development and Competitiveness, vol. 5, no. 1, pp. 71-78, 2010.

3. C. L. Chun, Y. W. Hsueh-Ying, F. C. Yong, the critical factors impact on online customer satisfaction, Procedia Computer Science, vol. 3, pp. 276-281, 2011.

4. L. W. Wang, Q. L. Le, Customer satisfaction towards online shopping at electronics shopping malls in Vietnam - A conceptual model to enhance business success through efficient websites and logistics services, Journal of Stock & Forex Trading, vol. 5, no. 1, pp. 1-10, 2016.

5. Kurniawan Arif Maspul, Coffee Acculturation in Saudi Arabia: Diversifying Local Wisdom and Strengthening Sustainable Economy in Coffee Value Chain, EKOMA : Jurnal Ekonomi, Manajemen, Akuntansi, Vol.1, No.2, June 2022.

6. Soliman Aljarboa, Online shopping in Saudi Arabia: Opportunities and Challenges, International Journal of Managing Value and Supply Chains (IJMVSC) Vol. 7, No. 4, December 2016.

7. Al-Hudhaif, S and Alkubeyyer, A. E-commerce adoption factors in Saudi Arabia, International Journal of Business and Management, vol. 6, no. 9, pp.122-133, 2011.

8. Al-maghrabi, T Dennis, C, What drives consumers' continuance intention to eshopping? Conceptual Framework and Managerial Implications in the Case of Saudi Arabia,International Journal of Retail and Distribution Management, vol. 39, no. 12, pp.899-926, 2011.

9. Al-Maliki, S. Q. A. K, Information and communication technology (ICT) investment in the Kingdom of Saudi Arabia: Assessing strengths and weaknesses. Journal of Organizational Knowledge Management, 1, 1–15, 2013.

10. Taneja, B. The Digital Edge for M-Commerce to Replace E-Commerce. In Emerging Challenges, Solutions, and Best Practices for Digital Enterprise Transformation; IGI Global: Hershey, PA, USA, pp. 299–318, 2021.

11. Ortiz, J. The global environment through the SLEPT framework. International Journal of Business Global Vol. 5, 475–492 2010.

12. Chaffey, D.; Edmundson-Bird, D.; Hemphill, T. Digital Business and E-Commerce Management; Pearson: London, UK, 2019.

13. Alzahrani, J. The impact of e-commerce adoption on business strategy in Saudi Arabian small and medium enterprises (SMEs). Review of Economics and Political Science, 73-88, 2019.

14. Ahlam Ali Baabdullah, Factors Influencing Online Buying Behavior of Customers in Saudi Arabia, Journal of Economic, Administrative and Legal Sciences, Volume (4), Issue (6) : 30, P: 146 – 159, 2020.

15. Ahmad M.A. Zamil, Ahmad Al Adwan, Al-Ahliyya, Ahmad Yousef Areiqat, Al-Ahliyya, Online Purchase Behavior of Generation X in Kingdome of Generation X in Kingdom of Saudi Arabia, Journal of Management Information and Decision Sciences Volume 24, Special Issue 1, 2021.

16. Aljarboa S. Online shopping in Saudi Arabia: Opportunities and challenges. International Journal of Managing Value and Supply Chains. 2016 Dec;7(4):1-5.

17. AlGhamdi R, Drew S, Alhussain T. A conceptual framework for the promotion of trusted online retailing environment in Saudi Arabia. arXiv preprint arXiv:1211.2396. 2012 Nov 11.

18. AlGhamdi R, Drew S, Al-Ghaith W. Factors Influencing e-commerce Adoption by Retailers in Saudi Arabia: a qualitative analysis. The Electronic Journal of Information Systems in Developing Countries. 2011 Jul;47(1):1-23.

19. Bosona T. Urban freight last mile logistics—Challenges and opportunities to improve sustainability: A literature review. Sustainability. 2020 Oct 22;12(21):8769.

20. Mak HY, Max Shen ZJ. When triple-A supply chains meet digitalization: The case of JD. com's C2M model. Production and Operations Management. 2021 Mar;30(3):656-65.

21. Mehrez Kh, Khemira H, Medabesh AM, Marketing strategies for value chain development: Case of Khawlani coffee-Jazan Region, Saudi Arabia. Journal of the Saudi Society of Agricultural Sciences. 2023 Oct 1;22(7):449-60.

22. Sarioglan m, Avcikurt C, A Research Towards The Identification of Local Foods Within The Scope of Cultural Heritage: The Case of Edremit Region. Livre de Lyon; 2024 Jul 20.

23. Cargill M, O'Connor P. Writing scientific research articles: Strategy and steps. John Wiley & Sons; 2021 Jun 8.

24. Makridakis S, Spiliotis E, Assimakopoulos V. M5 accuracy competition: Results, findings, and conclusions. International Journal of Forecasting. 2022 Oct 1;38(4):1346-64.

25. Lim WM, Kumar S, Ali F. Advancing knowledge through literature reviews:'what','why', and 'how to contribute'. The Service Industries Journal. 2022 Jun 11;42(7-8):481-513.

26. Casula M, Rangarajan N, Shields P. The potential of working hypotheses for deductive exploratory research. Quality & Quantity. 2021 Oct;55(5):1703-25.

27. Yi Jin Lim, Abdullah Osman, Shahrul Nizam Salahuddin, Abdul Rahim Romle, Safizal Abdullah, Factors Influencing Online Shopping Behavior: The Mediating Role of Purchase Intention, 7th International Economics & Business Management Conference, 5th & 6th October 2015.

28. Nebojsa Vasic, Milorad Kilibarda, Tanja Kaurin, The Influence of Online Shopping Determinants on Customer Satisfaction in the Serbian Market, Journal of Theoretical and Applied Electronic Commerce Research ISSN 0718–1876 Electronic Version Vol 14 / Issue 2, 70-89, May 2019.

29. Ngoc Thang HA, Thi Lien Huong Nguyen, Thanh Van Pham, Thi Hong Tham Nguyen, Factors Influencing Online Shopping Intention: An Empirical Study in Vietnam, Journal of Asian Finance, Economics and Business Vol 8 No 3, 2021, 1257–1266.

30. Saeed Q. Al-Khalidi Al-Maliki, Increasing non-oil revenue potentiality through digital commerce: the case study in KSA, Journal of Money and Business, Volume 1 Issue 2, 2021.

31. Mir Shahid Satar, Ghadah Alarifi, Factors of E-Business Adoption in Small and Medium Enterprises: Evidence from Saudi Arabia, Human Behavior and Emerging Technologies, Hindawi, Volume 2022.

32. Yahya AlQahtani, Natalia Beloff, Martin White, A Novel Model of Adoption of M-Commerce in Saudi Arabia, Position Papers of the Federated Conference on Computer Science and Information Systems, Vol.22, pp. 25–34, ISSN 2300-5963 ACSIS, Vol. 22, 2022.

33. Namreen, Panakaje, "A Review of the Factors Impacting Coffee Cultivators (Growers) and the use of Plantation Agriculture Schemes", International Journal of Case Studies in Business, IT, and Education. 107-140. 10.47992/IJCSBE.2581.6942.0249.

34. Ochago, Dentoni, Trienekens, "Unraveling the connection between coffee farmers' value chain challenges and experiential knowledge: the role of farm family resources", The Journal of Agricultural Education and Extension, 181–211. https://doi.org/10.1080/1389224X.2023.2169479

35. Khalid M. AL-Asmari, Isam M. Abu Zeid, Atef M. Al-Attar, Coffee Arabica in Saudi Arabia: An Overview, International Journal of Pharmaceutical and Phytopharmacological Research (eIJPPR) August 2020, Volume 10, Issue 4,Page 71-78.