



## The Impact of Innovation, Performance, and E-Commerce Development in the Online Shop on Online Marketing: A Case Study in the Industry

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### ABSTRACT

**Background and objective:** Today, online business flows are considered one of the most important subjects of empirical studies. Therefore, investigating the influence of factors, such as innovation, organizational performance and e-commerce on online marketing will be extremely important in online marketing. For this purpose, a conceptual model has been presented to investigate the impact of innovation, performance, and e-commerce in the development of online shops, which has been conducted using structural equations modeling (SEM) and LISREL software. According to the research objective, the main contribution of the current study is developing a model that illustrate the effect of online marketing in providing an efficient framework for controlling the performance of companies. Then, we demonstrated that online marketing is important for companies, primarily in e-commerce, to face marketing challenges and gain a competitive advantage in the online environment.

**Method:** To examine and analyze the interrelationship among influencing factors, DIGIKALA Company, the largest online retail store in Iran, was determined as a case study. Subsequently, a sample of 178 managers of this company was selected for the survey. Then, statistical analyses based on t-test, p-value, and calculation of measurement errors, such as RMSEA, have been calculated for the effects of the factors. **Findings:** According to the results, the key components affecting the objective of the study were identified, and the final model was developed. According to the results, innovation, with a coefficient of 0.91, and performance, with a coefficient of 0.54, play significant roles in online marketing. Nevertheless, e-commerce, with a coefficient of 0.28, doesn't have a significant effect on online marketing. Furthermore, using the path analysis model, their indirect effects on the dependent variable and the direct effects of influencing variables on the dependent variable were analyzed. **Conclusion:** Therefore, current research has a critical role in strategic decision-making for businesses operating in the digital landscape. Managers should recognize that fostering innovation, optimizing performance metrics, and continuously evolving e-commerce platforms are essential for staying competitive in the online market.

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## Introduction

Recently, in a rapidly changing world, gaining a competitive advantage while addressing challenges has become extremely difficult. In particular, when examining the characteristics of the Iranian market, several factors emerge: the effective and long-term emergence of foreign competitors, the attractiveness and strong growth of this market over the past decades, fundamental changes in the consumer behavior and purchasing preferences, changes in products, and the introduction of new technologies (Kurniawati et al. 2020). Information and communication are thrown into this field, and it's clear that, in this situation, it's impossible to stay in the competition without employing modern science and technology. Despite all external economic pressures, Iran is witnessing a significant increase in online small and medium-sized businesses (Ashoka & Keihani, 2020). This development is partly due to the government's support to increase the speed of the Internet in Iran, as well as the occurrence of the Corona pandemic, which made most people use online markets instead of visiting in person. For example, in 2020, these industries contributed about 60% to Iran's GDP and helped the government by about 80% in job creation. Therefore, during the actions taken in the last 10 years for the development of digital companies by providing foreign examples of online businesses in the domestic markets of Iran, it has found a significant role in the economy (Ministry of Industry, Mine and Trade<sup>1</sup>). Rapid changes in customer demand in the world have presented companies with various challenges. Meanwhile, some companies have achieved success by using new management tools and emerging technologies (Tolstoy et al., 2021). Considering the importance of social media and the Internet, which people have recently welcomed, direct and indirect relationships between organizations and people as customers have become possible. Researchers believe that the relationship created between the company and customers through social networks will benefit companies (Vaseei et al., 2024). With the growing acceptance of the Internet among ordinary people in society, the importance of social media as one Internet marketing tool is increasing (Tolstoy et al. 2022). The available evidence indicate that in consumer markets, social networking sites have become an informal operating method for users to spread information about businesses (Tolstoy et al., 2020).

While traditional models of business internationalization emphasize that the importance of physical presence in foreign markets increases the organization's performance, new research and reports from industry centers show that business in today's world requires a presence in the Digital market (Gu, 2022). The digital market can be a growth factor even in the international arena for small and medium-sized companies (Hånell et al., 2019). Online marketing is an example that can provide such a capability for businesses. Because online marketing is growing, and due to efforts and application of new regulations, it can improve performance (Ashoka & Keihani, 2021). For businesses to take advantage of these situations, they are required to improve their digitalization functions. They should utilize these functions to analyze market interpretation trends and develop technical solutions that support e-business (Witek-Hajduk et al., 2021). Of course, developing strategic capabilities in small businesses may not be as competitive compared with large companies. However, by providing digitalization capabilities, businesses can have good access to market information. Moreover, they can accurately fill in market information. To achieve these goals, researchers have reached a consensus that online marketing capability is the capacity of a company to use internet resources (Glavas, 2017). Research shows that a company's market orientation is a key strategic factor in strengthening business performance. Market orientation is based on a market-oriented approach to a business (Putra et al., 2020; Zandbiglari et al., 2021). If a company shows market-oriented behavior in addition to market orientation, it will be more efficient in using resources and in dealing with possible market conditions (Ernawati, 2021). In this case, companies with such capabilities can operate in a wide range of strategic factors, discover new opportunities for improvement, and take necessary advantage of existing opportunities (Nugroho, 2022). Businesses can simultaneously accomplish dual goals by using market-centricity and market orientation in online marketing (Nozari and Chobar, 2024). That is, by doing this, they effectively engage with customers and take appropriate actions to build relationships with them. In this case, they use their resources economically. When online marketing in a business works correctly, businesses can identify new customer experiences (Mawo & Abdollah, 2021). Some researchers believe that paying attention to e-commerce plays a key role in developing small and medium businesses. For example, Chen (2019)

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1. <https://en.mimt.gov.ir/>

showed in his study that companies active in the apparel field in Taiwan tend to supply more foreign brands. Moreover, Lanz et al. (2018) indicated that small and medium-sized companies tend to source more foreign products to reduce technological barriers.

Recently, online marketing has created new relationships between the components of a chain, from retailers to customers, which has led to more opportunities for small businesses to reach more customers because digital marketing can change consumer behavior by proposing interactive channels along with product information available. Based on past research results, digital marketing in small or medium businesses can increase profits by 26% and reduce costs by 22% (SNC, 2018). Accordingly, by providing interactive channels between the customer and the company, the specific information available is constantly changing with the use of digitalization (Lanz et al. 2018). Today, e-commerce is used by many businesses to strengthen economic strategies, change customer behavior, and improve logistics and technologies.

Based on what mentioned above, this research shows how empowerment in marketing capabilities among companies affects their growth. Therefore, our study is expected to provide two main contributions. First, we examine the relevance of using a conceptual model to explain online marketing performance among online stores involved in e-commerce. Specifically, we suggest that innovation, performance, and e-commerce factors are important for this online stores to face the challenges of online marketing and navigating the online environment. Second, by placing capabilities in the broader strategic context, we develop a model that examines the impact of online marketing orientations on online store performance.

Therefore, the main objective of the current research is to determine the effect of online marketing on the innovation, performance, and sales of DIGIKALA's online shop in Iran. Other objectives of the current research include determining the effective factors of online marketing aspects separately and developing a comprehensive model that simultaneously measures the impact of innovation, performance and sales factors on online re-evaluation in a real case study, namely, DIGIKALA online shop in Iran.. Finally, according to research objective, the main research question is, what is the effect of online marketing on each of the factors of innovation, performance, and e-commerce in DIGIKALA online shop in Iran? Therefore, the main contribution of the present research is:

- Developing a model for using online marketing to gain competitive advantage through e-commerce.
- Evaluating the marketing performance of companies through e-commerce and innovation to gain a competitive advantage.

The rest of the paper is as follows: Section 2 presents a literature review. Section 3 discusses the research methodology. Section 4, provides a case study finding. Section 5, provides the main managerial insights. Section 6 presents an overall conclusion and suggestions for further study in the future.

## **2. Literature review**

Previous research has demonstrated the advantages of making online marketing decisions for diverse businesses. For example, Mokhtar et al. (2014) show that business managers using online marketing can satisfy the needs of their consumers when products are produced to meet those needs. The ability to identify tasks, react appropriately, and participate in new market trends helps businesses build competence and permanent success. Abdul-Halim et al. (2019) experimentally investigated the effect of three influencing factors on innovation culture. These three considered factors include organizational culture, organizational learning, and market orientation. A qualitative study was conducted in Malaysia, where a questionnaire was distributed to numerous companies. A total of 183 responses were received and path analysis was employed to analyze the data. The findings of the study indicate that organizational culture has an impact on the culture of innovation. Moreover, organizational learning influences innovation through behavioral and cognitive information. Shaher and Ali (2020) conducted a study on the relationship between entrepreneurship, knowledge management, and innovation performance, with marketing as a mediator. The study involved 221 participants from small and medium-sized companies in Kuwait. The findings highlighted the impact of entrepreneurship and knowledge management on innovation, as well as the influence of marketing

on innovation performance. Tolstoy et al. (2021) explored factors affecting performance in e-commerce companies, emphasizing the importance of online marketing and market-oriented approaches. The study involved 99 Swedish SMEs using e-commerce. The results indicated that effective online marketing significantly improves performance, and a two-way marketing approach based on market orientation enhances the effectiveness of online marketing. Dadova and Soviar (2021) examined the impact of marketing channels on the online tourism market during the COVID-19 pandemic in Slovakia. The study recommended utilizing multiple marketing channels, with a focus on web pages, SEO, and social media platforms like Instagram and Facebook. Al-Qershi et al. (2021) investigated the relationship between human capital, innovation, and performance in Yemeni companies, finding that human capital serves as a mediator between innovation and performance, and an increase in human capital leads to enhanced internal human knowledge and innovation. Awaja and Fatoki (2021) studied the impact of online marketing on the development of companies in Nairobi, Nigeria. The research revealed the significance of digital financial services, digital content, digital skills, and digital advertising on company development, with financial services playing a vital role. Dimitrova and Yosifov (2021) examined the innovation performance of leading biotech companies in Bulgaria. The findings revealed a weakness in the use of new biological technologies, highlighting the need to promote the development of this field for proper production. Zhang and Erturk (2022) explored the potential for improving online marketing among New Zealand companies, drawing insights from Chinese experiences. The research suggests the transfer of digital marketing technology from China to New Zealand despite existing barriers. Su et al. (2022) investigated the impact of innovation on online marketing in the supply chain of head product packages. The study utilized diffusion theory and data from 581 participants in Seoul, revealing that marketing innovation positively affects customer participation in product recycling. Stocker and Varkoni (2022) examined the competitiveness of small and medium-sized companies in European markets, highlighting the influence of competitiveness on market orientation. Notably, paying attention to competitors had the greatest impact on competitive ability. Khamaludin et al. (2022) studied the effect of online marketing and service innovation on marketing performance. The findings showed the positive impact of online social networking and service innovation on marketing performance. Singtragnarn et al. (2022) provided a framework for increasing competitiveness through online marketing, focusing on engineering schools in Thailand. The research demonstrated the impact of online marketing on competitiveness among engineering schools. Nunden et al. (2022) aimed to assess the management skills of SMEs in capital budgeting planning and practices. Specifically, it seeks to determine the influence of management skills and owners on current capital budgeting planning and practice. To achieve this, the study used a quantitative method, administering questionnaires to 108 owners and managers in the Springfield Industrial Park. Yahaya and Nadarajah (2023) developed a systematic literature review to establish a comprehensive framework based on a resource-based view and institutional theory. By identifying 469 articles from reputable databases and conducting a one-sample T-test, the study narrowed down to 16 papers that were most relevant for building the conceptual framework. Tajeddini and Tajdini (2023) explored the viewpoint of an entrepreneur investigating the inner workings of an e-commerce platform, while serving as the marketing manager of the company. Employing an inductive method, the study assessed the effects of corporate entrepreneurship on organizational performance amid a turbulent and uncertain pandemic environment. The results suggested that entrepreneurial initiatives and the utilization of corporate websites and Instagram may impact the company's overall performance positively.

## **2. 1. Research gap**

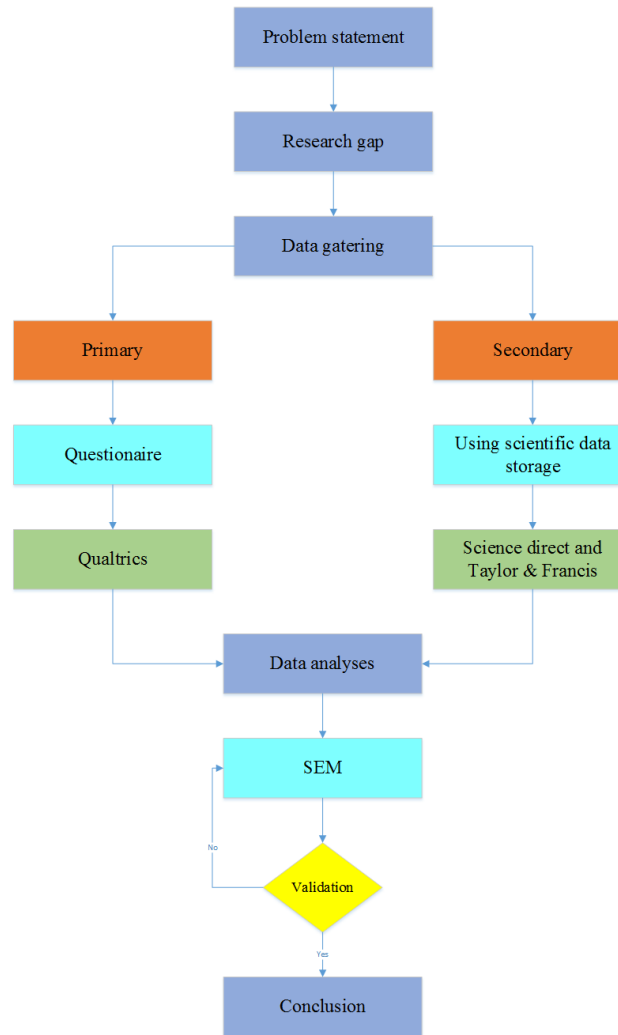
In the previous studies mentioned above, structural equations, regression, and path analysis have been emphasized and recommended to identify the influence of factors on online marketing. Therefore, in this research, relying on past experiences using structural equations, we examine the influencing factors on online marketing. It is noteworthy that in the studies mentioned above, the influence of factors, such as innovation, performance, and e-commerce alone have been investigated. Therefore, research that considers the effects of all the mentioned factors together has been neglected. In Table 1, the previous studies are categorized.

**Table 1. Literature Review Classification**

References	Main factor	Sub-factor	Method	Case
Shaher & Ali (2020)	Innovation	<ul style="list-style-type: none"> <li>• Entrepreneurship</li> <li>• Knowledge management</li> </ul>	SEM	Kuwait
Tolstoy et al (2021)	Performance	<ul style="list-style-type: none"> <li>• E-commerce</li> </ul>	Linear regression	Sweden
Dadova & Savioar (2021)	Online Tourism market	<ul style="list-style-type: none"> <li>• Social media app</li> </ul>	SEM	Slovakia
Al-Qershi et al. (2021)	<ul style="list-style-type: none"> <li>• Human capital</li> <li>• Production performance</li> </ul>	<ul style="list-style-type: none"> <li>• Innovation</li> <li>• Performance</li> </ul>	Modern economy	Yemen
Awnja & Fatoki (2021)	Online Marketing	<ul style="list-style-type: none"> <li>• Digital finance service</li> <li>• Digital content</li> <li>• Digital skill</li> <li>• Digital advertising</li> </ul>	Questionnaire	Nigeria
Stocker & Varkoni (2022)	Competitiveness	<ul style="list-style-type: none"> <li>• Competitive factor</li> <li>• Competitive ability</li> </ul>	Diffusion theory	European market
Khamaludin et al (2022)	Online Marketing	<ul style="list-style-type: none"> <li>• Digital media</li> </ul>	PLS-SEM	-
Aqit (2023)	Online business	<ul style="list-style-type: none"> <li>• Design of promotion site,</li> <li>• Quality of services,</li> <li>• Method of payment</li> </ul>	SEM	
The current study (2023)	Online Marketing	<ul style="list-style-type: none"> <li>• Innovation</li> <li>• Performance</li> <li>• E-commerce</li> </ul>	SEM	Iran

### 3. Research methodology

Data collection in this research is classified into two dimensions: primary and secondary data. In secondary data, we collect information about research literature by referring to reputable databases such as Science Direct and examining the subject within previous studies. In addition, the primary data for the research will be collected by designing a questionnaire. According to this questionnaire, first, the demographic data of the participants, including age, gender, education, occupation, will be collected. Then, the effect of innovation, performance, and online business on online marketing in the DIGIKALA online store company will be evaluated, using the Structural Equation Model (SEM). Therefore, among the different types of information collection methods, a questionnaire has been used in this research. Furthermore, the data has been obtained through reliable and official databases related to institutions, and searching in reliable scientific databases of domestic and foreign theoretical sources. The method of collecting information in this research has two dimensions, namely field, and library. Collecting field information refers to participants who are directly involved in the research process. During the research, these participants are treated fairly, and the researchers are required to adhere to the law and professional ethics in their interactions with them. Furthermore, ethical aspects such as anonymity and confidentiality of participants' opinions are considered during the research. The responsibility for maintaining the confidentiality of the interviewees' identity information during the research lies with the researcher, who undertakes not to publish the details of the participants. In addition, literature collection is done from the study of domestic and foreign theoretical sources. Therefore, quantitative studies are designed to collect real and correct data in this study. Quantitative data are of the structured and statistical type and are used to obtain a general result of the research. On the other hand, the qualitative study in this research aims to collect information that is needed to describe the research topic of the effect of innovation, performance, and sales on online marketing. A qualitative survey is less structured and more about an in-depth investigation of available topics to get information about people's attitudes, thinking, and motivation. However, although this type of survey provides a deep understanding of the research questions, it will also make it more difficult to analyze the results. In Figure 1, research methodology framework is depicted.



**Fig. 1. Research Methodology Framework**

### 3. 1. Data Gathering

In the current research, primary data collection is done by administrating questionnaires among marketing managers in DIGIKALA. Considering all research objectives, the researcher has prepared clear questions for the relevant sample in advance. The questionnaire is designed in 5 sections, which are available in the appendix. It has been used to carry out secondary research using authoritative scientific sources such as Cardiff Metropolitan Library, Google Scholar, Research Gate, Science Direct, etc. For the primary research question, a questionnaire was developed in Qualtrics. The research population includes national, provincial, regional, and city marketing managers, as well as sales managers and consultants of the company. An anonymous online questionnaire will be designed in Qualtrics and in paper format. The link to the questionnaire will be provided to marketing or sales managers and consultants, or it will be distributed in paper format by visiting the central offices of DIGIKALA Company (depending on the preferences of the managers and consultants). I would expect to receive at least 150 completed questionnaires. The time required to answer the questionnaire is expected to be 15 minutes. The questions will be divided into 5 parts. In the first part, demographic information of the participants will be collected; in the second part the effect of marketing will be analyzed; in the third part the effect of performance and in part 4, the effect of e-business on the online marketing of DIGIKALA online store in Iran will be evaluated. Finally, in part 5, quantitative indicators of research are identified. The data collection will take approximately 25.06-20.07. The respondents' participation in the questionnaire will be voluntary. The questions will not contain abusive or discriminative content. Also, the questionnaire will be completely anonymous and there will be no personal identifying information.

### 3. 2. Solution Approach

In this research, the data were analyzed using a structural equations model (SEM) with LISREL software. In addition, some necessary calculations and statistical analysis will be performed using EXCEL software. The proposed framework for establishing in the considered case study, which is based on structural equations, is generally possible in four stages as described below.

**Phase 1:** Identify effective factors in online marketing, innovation, performance, and online sales.

**Tool:** Questionnaire

In this step, we first divide the influencing factors into two groups of observed and hidden variables. Observed variables are determined using an internal systematic study as criteria that can affect the organization's process. Studying the observed variables in organizations is important because it can always be useful for the analyst in identifying the hidden variables of the organization in question. However, to study and perform statistical analysis, we must divide these variables into groups, so that we put the observed variables that are related to each other in one category, which are the same hidden variables. In this case, the latent variables cover the observed variables. It should be noted that in conceptual model design, hidden variables are always like model nodes. To achieve these variables, the use of data collection tools is a key factor. Questionnaires in this field can be of great help to an analyst. Before preparing the questionnaire, the necessary information should be collected using the library method. To complete this section, by reading books, articles, and research in the relevant field, the most important obvious variables can be found in this regard.

**Phase 2:** Determine the impact of each factor on online marketing, innovation, performance, and online sales.

**Tools:** LISREL software

This stage provides a conceptual model of the organizational process that can clearly show the relationships between factors. In other words, at this stage, we seek to determine the logical relationships between the latent and other variables. Latent variables are divided into dependent variables and independent variables. Coefficients are the parameters we aim to calculate, based on which the relationships between the variables are measured. The coefficient of an independent latent variable is equal to  $\lambda$ ; the coefficient of an independent latent variable is equal to  $\gamma$ , and the coefficient of a latent variable is equal to  $\beta$ . If the coefficient is less than 0.3, the relationship is considered weak, and we ignore that relationship. A factor loading between 0.3 and 0.6 is acceptable, and a factor loading greater than 0.6 is considered very favorable. The purpose is to determine the coefficients between the variables identified in the organization. For this purpose, a preliminary conceptual model should be designed at this stage.

**Phase 3:** Calculate the degree of relationship between observed and latent factors.

**Tools:** LISREL software

After designing the initial model in LISREL software and running the implementation of the initial model, the coefficients are determined by the software provided that the variables and the model have adequate overlap. At this stage, it is necessary to report the output of the software in different modes, such as ESTIMATED and STANDARD, to check the estimated coefficients.

**Phase 4:** Introduce a structural equation model and how to convert the current situation to the proposed desired situation.

In this step, according to the output of LISREL software, the value of the P statistic for the model is calculated. Considering that the statistical analysis is performed in the 95% confidence interval if the P value is calculated to be less than 0.05, the model is statistically significant. In general, the lower the value of P, the better. Therefore, it can be concluded that the estimated model has good accuracy. In the ESTIMATED mode, we select and leave the other variables if the variables have the interval range specified in the second phase. Finally, the path that leads us to the goal is chosen as the dominant strategy over other strategies.

### 3. 3. Case study: DIGIKALA online shopping

DIGIKALA is a prominent online shopping platform based in Iran, offering a wide range of products to its customers. Established in 2006, DIGIKALA has become the go-to destination for online shopping in the country, with millions of registered users and a vast catalog of products across various

categories. As an online shop, DIGIKALA provides a convenient and user-friendly platform for consumers to browse and purchase products. From electronics, home appliances, and clothing to beauty products, books, and even groceries, DIGIKALA offers a comprehensive selection of items, catering to the diverse needs and preferences of its customers. DIGIKALA has established a robust logistics network to ensure swift and reliable delivery of orders across Iran. The company works closely with reputable shipping partners to provide a seamless experience for their customers. Additionally, DIGIKALA has introduced innovative features, such as same-day delivery and installment payment options to enhance customer satisfaction. DIGIKALA places a strong emphasis on customer satisfaction and has built a reputation for excellent customer service. They prioritize providing accurate product information, detailed descriptions, and high-quality images to help customers make informed purchasing decisions. Customer feedback and reviews are an integral part of the platform, allowing shoppers to share their experiences and guide others. DIGIKALA's success can be attributed to its ability to adapt and innovate in a rapidly evolving e-commerce landscape. Through its vast product range, reliable delivery service, and customer-centric approach, DIGIKALA has played a transformative role in shaping online shopping behaviors in Iran. It has not only provided consumers with convenient access to a wide array of products, but also opened up new opportunities for businesses to reach a larger customer base. Overall, DIGIKALA's growth and impact have positioned it as a leading player in Iran's e-commerce industry, revolutionizing the way people shop online in the country.

## 4. Finding

### 4.1. Demographic Analysis

First, we determine the level of satisfaction regarding participation in the research. A total of 179 individuals participated in answering the questionnaire, of which 178 people or 99.44%, expressed their satisfaction with completing the questionnaire, while only one individual, equivalent to 0.56%, expressed their dissatisfaction with not completing it. A chart of the frequency of participants by gender is shown in Figure 2.

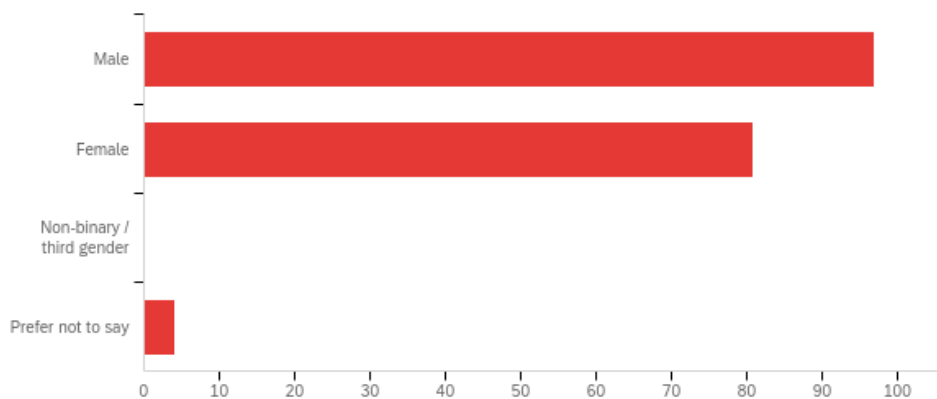


Fig. 2. Chart of Genders of Participants

Moreover, the age of participants and their education are shown in Figures 3 and 4. Based on the graphs presented, most participants are in the age group of 31-40 years, indicating that they have enough experience. Also, according to Figure 4, the highest frequency regarding education is for a bachelor's degree. It shows that most managers have a university education in Iran.

Figure 5 presents the job position of the managers of DIGIKALA Company who participated in this research. The diagram indicates that every job position has been included in this research. This suggests that the obtained results are not influenced by job discrimination.



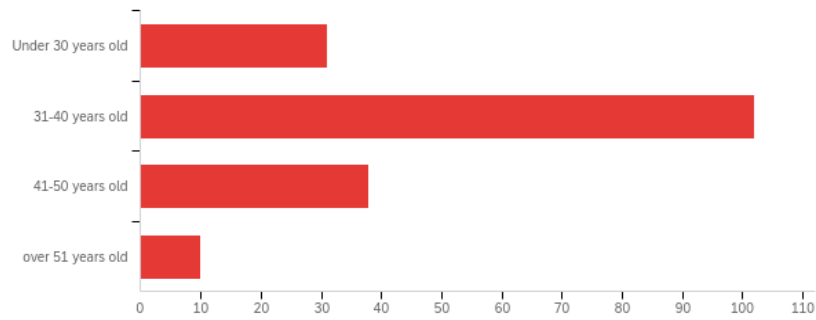


Fig. 3. Ages of Participants

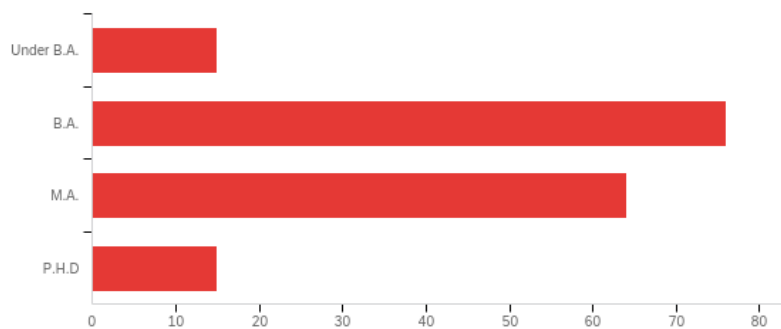


Fig. 4. Education of Participants

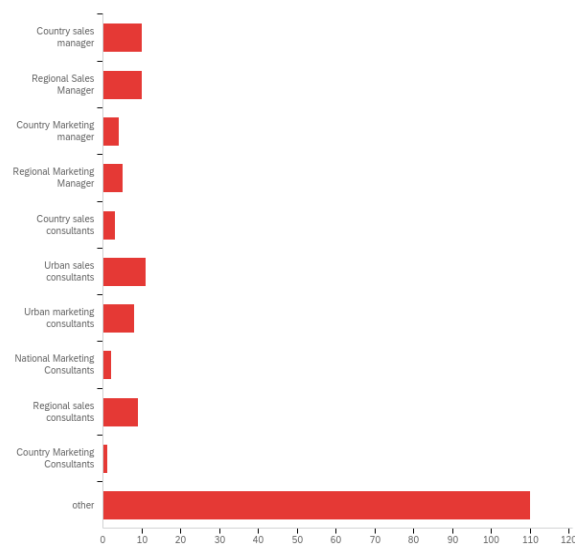


Fig. 5. Job Position of Participants at DIGIKALA

This part of the research analyses the results obtained from the proposed primary model to determine the effect of innovation, performance, and e-commerce on online marketing in the DIGIKALA online store. For this purpose, the initial model has been analyzed using statistical path analysis with LISREL software. In the remainder of this section, the analysis of the content related to the developed model will be discussed.

#### 4.2. Questionnaire Analysis

This section contains a questionnaire that includes frequently asked questions or general questions to measure the impact of innovation, performance, and e-commerce on online marketing in DIGIKALA online shopping in Iran. Tables 2-4 show the collected results related to each factor according to each question. Considering that all the participants have selected the necessity of the indicators by choosing the “yes” option, we conclude that the indicators are suitable for further analysis.

Table 2. Results of Innovation Factor

Main Factor	Sub-factor	Option		
		Yes	No	I Don't Know
Innovation	Q8	158	11	9
	Q9	118	40	20
	Q10	110	25	43
	Q11	148	5	25
	Q12	140	23	15

Table 3. Results of Performance Factor

Main Factor	Sub-factor	Option		
		Yes	No	I Don't Know
Innovation	Q13	140	20	18
	Q14	115	45	18
	Q15	104	25	49
	Q16	128	20	30
	Q17	128	20	30

Table 4. Results of E-Commerce Factor

Main Factor	Sub-factor	Option		
		Yes	No	I Don't Know
e-commerce	Q18	140	20	18
	Q19	100	48	30
	Q20	110	30	38
	Q21	138	22	18
	Q22	122	24	32

#### 4.3. Data Analysis Results

SPSS software was used for primary data analysis. These data have been provided as input to the path analysis software and the structural equations of LISREL software. LISREL is a powerful software whose student version with complete features is available to analysts for free. By bypassing many algebraic and matrix complexities in data analysis, this software provides suitable path analysis tests through which one can easily determine the direct and indirect effects of observed variables on the latent variables (the objective of the problem). Furthermore, it establishes the significance of all the effects of the variables on each other by providing the necessary statistical tests. To analyze the collected information, we first consider the initial conceptual model according to Figure 6 in the form of the initial research model and a conceptual model. The goal is to investigate each variable's effect on the problem's goal until reaching a final model. LISREL software has been used to estimate the coefficient of each factor. Observed variables, which include independent and dependent variables, as well as latent variables, are defined in Table 5. According to Table 5, observed variables are classified into three categories and latent variables into 15 rows.

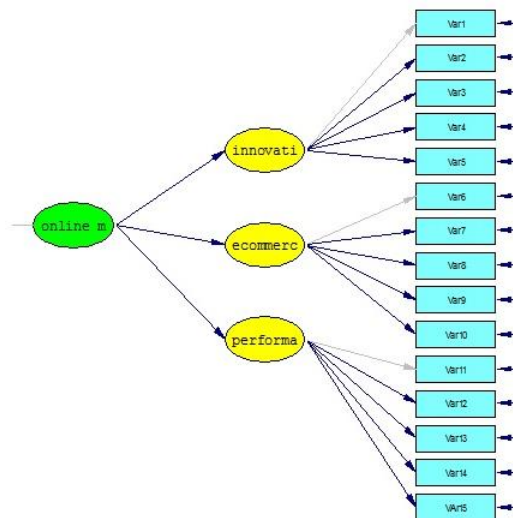
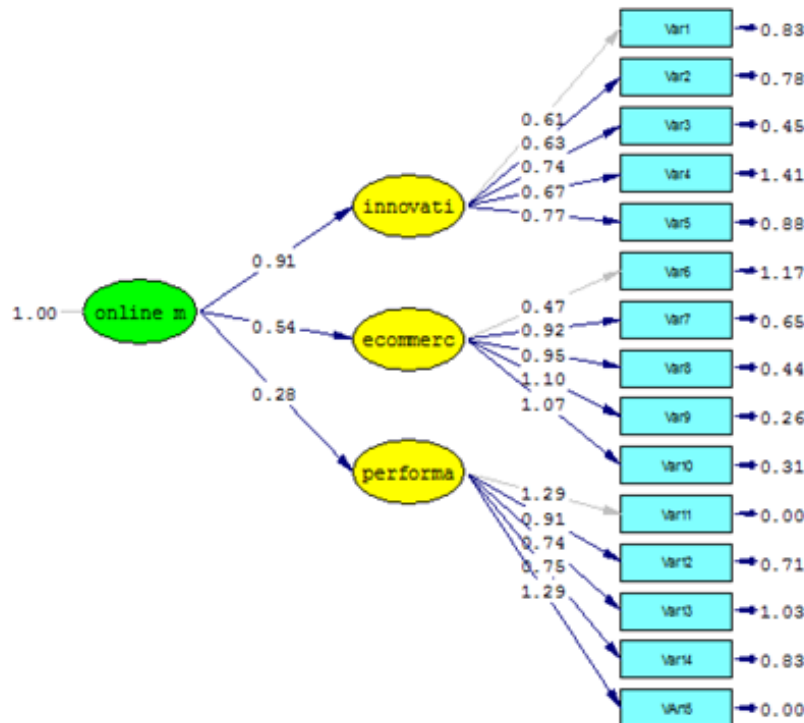


Fig. 6. Conceptual Model

**Table 5. Variable Definition**

Variables type	Variables name	ID
Goal (independent variable)	Online Marketing	Online m
	Innovation	innovati
Observed variable (dependent variables)	Performance	ecommerc
	E-commerce	Performa
	Innovation effective on digital marketing	VAR1
Latent Variables (independent variables)	Create desirable value without considering innovation	VAR2
	Understood innovation	VAR3
	The mediating factor of innovation	VAR4
	The ability of innovation to perform specific tasks	VAR5
	Performance effective in digital marketing	VAR6
	Create desirable value without considering performance	VAR7
	Understood performance	VAR8
	The mediating factor of innovation	VAR9
	The ability of performance for perform specific tasks	VAR10
	e-commerce effective on digital marketing	VAR11
	Create desirable value without considering e-commerce	VAR12
	Understood e-commerce	VAR13
	The mediating factor of e-commerce	VAR14
	The ability of e-commerce to perform specific tasks	VAR15

The factor loadings of the relations defined in the final model are determined by running the software under the initial model. Analyzing the factor coefficient makes it possible to determine the presence or absence of the considered factors in the final model. Figure 7 shows the estimated factor coefficient of the relationships between the factors and the target to specify a model to examine the influence of innovation, performance, and e-commerce on online marketing. The higher the estimated factor coefficient, the stronger the relationship between that category and its sub-criteria.



**Fig. 7. Estimated Model**

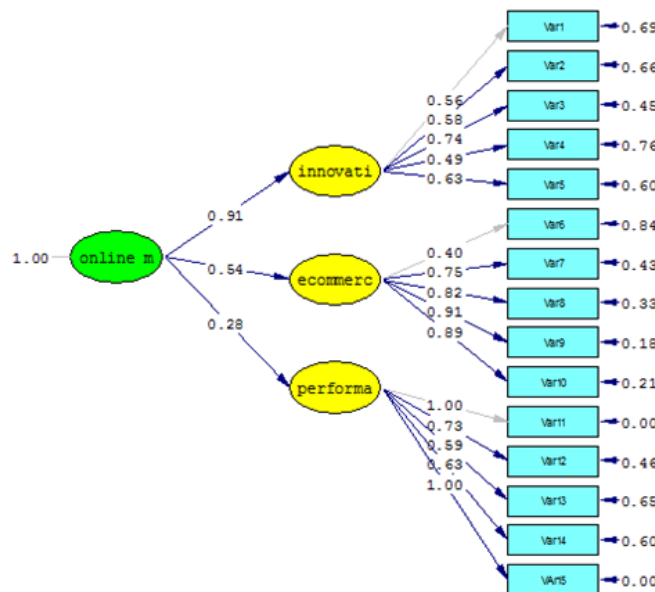
Moreover, in Figure 8, the standardized confirmatory factor coefficients are presented. In this case, all values of factor coefficients of defined relations are placed on the scale of zero and one. It is clear that the closer the factor coefficients are to one, the stronger the category's relationship with its sub-criteria. A factor loading of less than 0.3 is considered to indicate a weak relationship; therefore, the

relationship between performance and online marketing is dismissed, since its correlation value with the main goal is equal to 0.28. By adopting this decision, all the latent variables related to performance are discarded, even though they are significant. Meanwhile, the economic, political, geographic, and organizational criteria remain in the final model. In Table 6, the results of path analysis based on factor coefficient are shown.

**Table 6. Factorial Analysis Results**

		Relation	ID	Estimated coefficient	Standard coefficient	Status
Goal (Online marketing)		Innovation	innovate	0.91	0.91	Significant
		Performance	ecommerc	0.54	0.54	Significant
		E-commerce	Performa	0.28	0.28	Insignificant
Latent Variables (independent variables)	Innovation	Innovation effective on digital marketing	VAR1	0.61	0.56	Significant
		Create desirable value without considering innovation	VAR2	0.63	0.58	Significant
		Understood innovation	VAR3	0.74	0.74	Significant
		The mediating factor of innovation	VAR4	0.67	0.49	Significant
		The ability of innovation to perform specific tasks	VAR5	0.77	0.63	Significant
	Performance	Performance effective in digital marketing	VAR6	0.47	0.40	Insignificant
		Create desirable value without considering performance	VAR7	0.92	0.75	Insignificant
		Understood performance	VAR8	0.95	0.82	Insignificant
		The mediating factor of innovation	VAR9	1.10	0.91	Insignificant
		The ability of performance to perform specific tasks	VAR10	1.07	0.89	Insignificant
	e-commerce	e-commerce effective on digital marketing	VAR11	1.29	1.00	Significant
		Create desirable value without considering e-commerce	VAR12	0.91	0.73	Significant
		Understood e-commerce	VAR13	0.74	0.59	Significant
		The mediating factor of e-commerce	VAR14	0.75	0.63	Significant
		The ability of e-commerce to perform specific tasks	VAR15	1.29	1.00	Significant

According to Table 6, innovation, with a coefficient of 0.91, and performance, with a coefficient of 0.54, are significant in online marketing. But e-commerce has an insignificant effect on online marketing, with a coefficient of 0.28. Therefore, to evaluate the research hypothesis according to the obtained statistical results, only the effect of innovation and performance on online marketing is accepted, and there is no reason to reject this hypothesis. But, this hypothesis is rejected for the effect of e-commerce on online marketing.



**Fig. 8. Standard Model**

Therefore, by identifying the influencing factors on the goal of the problem, the final model is developed, as presented in Figure 9.

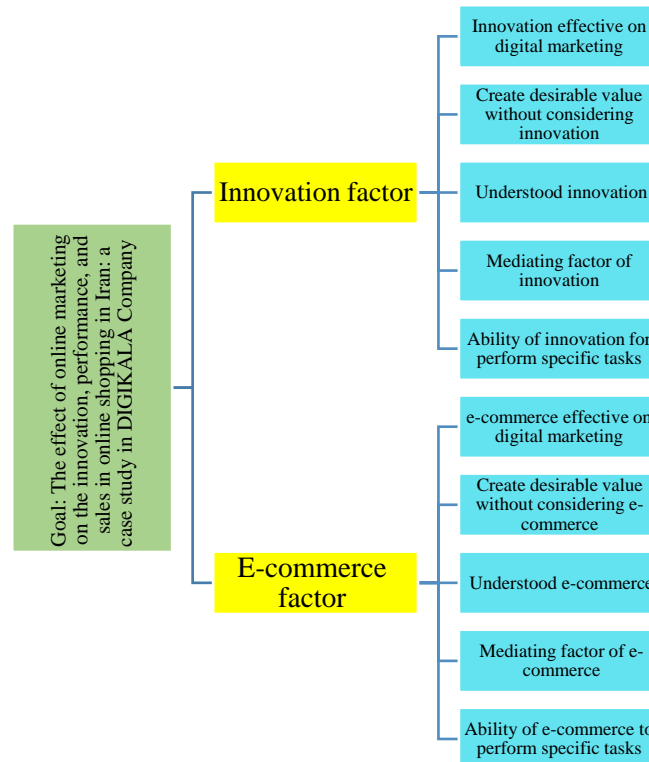


Fig. 9. Final Model

#### 4.4. Model Validation

To show the validity of the proposed model, the t-student has been used. Figure 24 presents the value of the estimated t-student for all relationships in the proposed model. According to the 95% confidence interval, if the value of the t statistic is estimated to be greater than 1.96, the internal validity of the model can be confirmed; otherwise, the validity of the relationship is questioned. As shown in Figure 10, the calculated t-student value for all relationships was determined to be greater than 1.96. Therefore, we can conclude that the internal validity of the proposed model is established. Consequently, the conceptual model can effectively cover all the considered concepts.

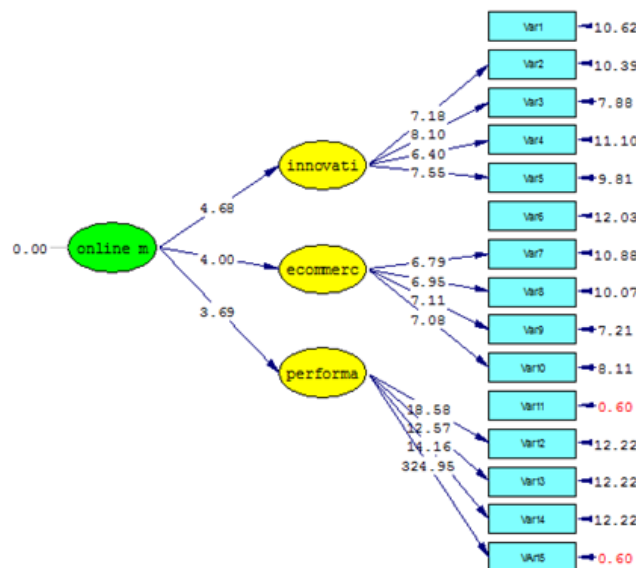


Fig. 10. Validation Model Results

In addition to calculating the value of the t-statistic for all the factors that comprise the model, the RMSEA value for the model is equal to 0.0137. Considering that a value less than 0.05 is appropriate, the estimated value for this model statistic is satisfactory. Moreover, the value of the P-value statistic is equal to zero. The P-value is acceptable if it is less than 0.05, assuming that we are in the 95% confidence interval. Table 7 summarizes the validation results.

**Table 7. Model Validation Result**

Statistical	RMSEA < 0.05	P-value < 0.05	chi – square/df > 5
Value	0.0137	0.000	6.601
Status	Significant	Significant	Significant

## 5. Managerial Insights

Based on the findings of the current research, several practical implications can be derived for managers and decision-makers. For example, encouraging a culture of innovation within the organization can foster creativity and drive continuous improvement in online marketing strategies. Managers should prioritize innovation in product offerings, marketing campaigns, and customer engagement initiatives to stay ahead in the competitive online market. Also, regularly tracking key performance indicators (KPIs) related to online marketing activities is essential for evaluating the effectiveness of campaigns and initiatives. Managers should use data analytics tools to measure performance, identify trends, and make data-driven decisions to optimize marketing efforts. Moreover, Continuous investment in e-commerce development is crucial for enhancing the online shopping experience and driving customer satisfaction. Managers should prioritize user-friendly website design, seamless navigation, secure payment options, and mobile responsiveness to attract and retain customers on the online platform. In the dynamic online market, managers should closely monitor shifts in consumer behavior and preferences. By staying attuned to customer needs and trends, organizations can tailor their online marketing strategies to meet evolving demands and maintain a competitive edge. Leveraging social media platforms, such as Instagram, for marketing purposes can significantly impact brand visibility and customer engagement. Managers should explore innovative ways to leverage social media channels to connect with their target audience, drive traffic to the online shop, and enhance brand loyalty.

According to the above practical implication mentioned, managers can enhance their online marketing strategies, improve customer engagement, and drive business growth in the competitive e-commerce landscape. Therefore, the main managerial insight into the impact of innovation, performance, and e-commerce development in the DIGIKALA online shop is to understand how these factors contribute to the success and growth of the business. By examining the effect of innovation, performance, and e-commerce development on the online shop, managers can gain valuable insights into improving their strategies and operations. This understanding can help them make informed decisions and implement effective measures to enhance customer experience, drive sales, and stay competitive in the online marketplace. Therefore, the main managerial insights of this research are as follows:

- The effect of innovation on online marketing is significant. Consequently, paying attention to innovation can create value for DIGIKALA. Furthermore, the company has fully understood the effect of innovation in online marketing, so by using it as an intermediate factor, the ability to perform certain tasks can be performed.
- The effect of performance on online marketing is insignificant. Therefore, paying attention to performance may not create value for DIGIKALA. Also, the company has fully understood the effect of performance in online marketing, so by using this understanding and employing it as an intermediate factor, the ability to perform certain tasks can be enhanced. However, we can't rely on it since it is insignificant.
- The effect of e-commerce on online marketing is significant. Therefore, paying attention to e-commerce will be able to create value for DIGIKALA. Furthermore, they have fully understood the effect of innovation in the digital goods collection; therefore, by using this understanding and employing it as an intermediate factor, the ability to perform certain tasks can be enhanced.

## **6. Conclusion and Future Suggestion**

Online marketing is important because it is where many of your target customers spend their time. With over 4.2 billion people living on the internet today, this can be a great opportunity for online businesses to achieve their desired success. Another importance of online marketing lies in its ability to create two-way communication. Managers can provide a way to connect with your customers. Moreover, by sharing a post on social media or any other type of marketing, managers can benefit from a great opportunity. As mentioned, it is very important for customers to feel that they are regarded important to the business. Online marketing on the internet allows the experience of each of these customers to be personalized. This enables businesses to tailor the audience's experience at the time of purchase, according to their tastes and needs. In other words, with the help of online marketing, businesses will be able to create an experience that suits their interests. When business owners want more people to check out the business, it's important to consider developing their business prospects. This is difficult to do using offline marketing tactics because you won't have much control over who discovers your business. With the help of online marketing, the business is exposed to hundreds of people. Finally, if businesses want to remain competitive in the market, it is very important to invest in online marketing. This is because competitors do not sit back and continually invest in this area through various techniques. To stay ahead of the competition, it is better to create an effective online marketing campaign. It helps businesses achieve their goals. To compare the current research with other research, in the study of Saher and Ali (2020), the factor of innovation, and in the study of Tolstoy et al. (2021), the factor of performance are considered as the main factors for evaluating the structure of online marketing, and in this research, both factors are considered more comprehensively. In addition, unlike previous studies, e-commerce has also been considered as the main factor in evaluating online marketing performance. Moreover, SEM has been used for statistical analysis in this study, as noted in Saher and Ali (2020), Dadova and Savioar (2021), and Aqit (2023).

According to the main research results and achievements in the proposed model, the main phenomenon and complementary phenomena are reviewed separately. Based on the results, it was found that the model of the effect of innovation, performance, and e-commerce on online marketing in DIGIKALA online shopping company is classified into two main categories, with five subcategories considered for each category. Moreover, in this research, the categories that have been completely identified for each main category are described below. Finally, the proposed model related to the realization of the relevant goal is presented, taking into account the determined factors that analyze the path of goal realization, and discarding the factors that have little influence. Additionally, some suggestions for further study in the future are as follows: determining the importance and the weight of indicators in decision-making, and prioritization of factors using multi-criteria decision-making.

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