

The Reality of Using Artificial Intelligence Applications in Developing E-Marketing in the Kingdom of Saudi Arabia

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Abstract

The current study aimed at identifying the reality of using artificial intelligence applications in developing E-marketing in the Kingdom of Saudi Arabia. The study used the descriptive approach, and a questionnaire was prepared to measure the reality of using artificial intelligence. It was administered to a sample of (202) in dairy companies (Almarai, Nadec, Saudi Arabia, Al Safi). They were selected in a stratified random way. The study concluded that the reality of using artificial intelligence was achieved to a high degree in the E-marketing of the website; obtaining 80.1%, the pivot of encouraging senior management to use artificial intelligence in E-marketing obtained 82%, the pivot of social communication obtained 81.5%, the pivot of providing an information system obtained 80.7%, and after-sales service pivot obtained 80.0%. The current study recommended the need to enhance the role of artificial intelligence to improve marketing decisions and increase productivity, encourage scientific research and establish a department for using artificial intelligence to activate E-marketing in companies and make use of artificial intelligence applications in marketing services to improve service within the framework of the global trend.

Keywords: Artificial Intelligence and E-marketing.

1. Introduction

Technology has a crucial role in directing marketing policies and developing future plans for agencies and organizations. Therefore, most companies and commercial institutions turned to marketing their products electronically because they sensed the interest of consumers or customers towards E-marketing.

The technological revolution has significantly changed consumers' perceptions of business strategies and how to obtain information and communicate with the world

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around them. Technology has shaped individuals' perceptions and benefited from them by creating an advanced digital environment. Individuals now live in technological bubbles designated for them where they can customize content and interact with their communities through the Internet. This reflects a major development in how news and information are used and how we interact with the digital world. (Ghotbifar et al., 2017)

Artificial intelligence is an essential tool to help make the various types of data collected, whether ordered or unordered, from various digital points of sale understandable and logical in their context. This is in order to quickly implement marketing decisions, provide personalized customer service, and simplify marketing efforts; thus providing an advantage over competitors. (Salah, 2020, 485)

Artificial intelligence is considered a revolution in E-marketing. The results of a study indicated that artificial intelligence has a strong impact on E-marketing, especially in the areas of visual recognition and voice search, and allows marketers to carry out tasks that cannot be easily implemented using traditional methods (Mozeryte, 2019, 39-43). It also emphasized that enhancing learning and identifying the capabilities of this technology is also beneficial in content marketing by helping marketers customize visual content according to the preferences of each individual. Many studies confirmed the importance of using artificial intelligence applications in e-marketing, as the study by Salah (2020) confirmed that artificial intelligence has made social networking sites (Facebook, Twitter, and Instagram) a means of advertising various products offered by companies as well as owners of small projects. This is a strong competitor to traditional marketers who have not been able to keep up with this development and are vulnerable to the deterioration of their trade and loss of their jobs.

Artificial intelligence has become more advanced and widely adopted in marketing, as a study by Cannella (2018) proved that it offers tremendous benefits to marketers, consumers, and society as a whole by facilitating the ability of marketers to distribute value on a large scale to the right people at the right time, and the quality of data used within organizations. Another study also showed that the use of artificial intelligence helped increase job satisfaction and enabled creative thinking for societal benefit in general.

Moreover, the results of applying artificial intelligence appear in the correct prediction of demand and supply for various products, as artificial intelligence techniques can help develop the accuracy of forecasting sales volume and consumer trends more accurately, and achieve a greater opportunity to manage warehousing and logistics operations more efficiently when using smart robots (Bolton et al., 2018)

From the previous presentation, it was found that the use of artificial intelligence applications had an effective role in developing E-marketing globally, which made the Kingdom of Saudi Arabia aware of the importance of artificial intelligence and ranked second in awareness of artificial intelligence according to the Stanford University International Index for Artificial Intelligence. Hence, this study came to identify the reality of using artificial intelligence in improving and developing E-marketing in the Kingdom of Saudi Arabia.

The problem of the current study is determined by the following questions:

- What is artificial intelligence?
- What is E-marketing?
- What is the reality of using artificial intelligence in developing E-marketing in the Kingdom of Saudi Arabia?
- What are the difficulties facing the use of artificial intelligence in E-marketing?
- What are the suggestions for developing E-marketing using artificial intelligence?

This study may benefit officials in the Ministry of Commerce and Industry and all sectors of society in identifying the reality of using artificial intelligence applications in developing E-marketing in the Kingdom of Saudi Arabia, to benefit from the tremendous development in artificial intelligence applications in e-commerce, specifically in E-marketing.

In the end, the current study aims to determine the reality of using artificial intelligence applications in the Kingdom of Saudi Arabia and benefit from it in improving and developing E-marketing.

2. Conceptual Framework of the Study:

The concept of artificial intelligence:

Technology is considered the language of the era in the world with its impact, as it has entered into all aspects of life, whether educational, commercial, or ordinary life. It has become necessary to learn about everything new in this field. Recently, a new concept has emerged, which is artificial intelligence. It has become used in education as well as in the field of E-marketing. It represents the future of marketing in the current era in our Arab world; especially in the Kingdom of Saudi Arabia.

There have been many names given to artificial intelligence; some of whom define it as a set of technologies that enable machines to simulate human administrative functions necessary to perform intellectual tasks, such as problem-solving and logical thinking independently and effectively. (De Bruyn et al., 2020)

Some view it as the science that is concerned with developing computer systems that operate with high efficiency similar to the efficiency of an expert human. A machine can imitate and simulate the algorithmic and mental processes of a human being, and the way his mind works in thinking, deducing, responding, and benefiting from previous experiences and intelligent reactions. (Qatami, 2018, 14)

Russell (2009) defined it as those systems that mimic human intelligence to perform tasks and that can improve themselves through the information they collect. It is related to the ability to think superiorly and analyze data more than it is related to a specific job. It is also used in many jobs: such as using chatbots to process natural languages to understand customers and allow them to ask questions and obtain information. These robots can also have automatic conversations with customers, which increases interaction and provides more efficient answers to customers.

Characteristics of Artificial Intelligence:

Artificial intelligence has unique characteristics when applied in programming computer systems, and these characteristics include the following:

1. Ability to learn: through the ability to act intelligently, characterized by the ability to learn from previous experiences and practices while improving performance and taking into account previous mistakes.
2. Using the optimistic experimental method: as the focus is on adequate solutions and not optimal or accurate solutions.
3. The possibility of representing knowledge: Artificial intelligence programs contain a method for representing information, as its structure is used in particular to describe knowledge and link facts and information within the company.
4. Ability to deal with missing information: Artificial intelligence programs can find some solutions even if the information is not completely available. (Bakr, 2008; Al-Hawamdeh, 2019)

Using Artificial Intelligence in E-marketing:

Artificial Intelligence offers a wide range of solutions to the digital marketing industry. These solutions can contribute significantly to the development of online marketing strategies, including:

1- Deepening Consumer Understanding:

Artificial intelligence technology helps marketers deepen their understanding of consumers and provide detailed information about them by analyzing customer segments. There are tools to monitor social networks and analyze what people say on social networks about the brand and the extent of their acceptance or rejection of it. (Novak & Hoffman, 2019)

2- Voice Artificial Intelligence and Automated Chat Bots:

There has been a development in voice artificial intelligence technologies. We can now communicate by voice using artificial intelligence with a voice that is completely similar to the human voice. Many global technology companies are working on developing this technology, such as Apple and Google, to increase its use in electronic marketing.

Chatbots have developed amazingly, as they have been used to talk to consumers and chat with them through marketing pages. They can also write specifications related to products on e-commerce sites successfully and at the lowest cost as well. (Salah, 2020, 495-496). An example of an automated chatbot used by pizza company Domino's is to automatically respond to potential buyers and answer open questions from website visitors. (Andrew, 2018, 74-75)

3- Increasing the Intelligence of Programmed Advertisements:

Using artificial intelligence, the performance of advertisements can be enhanced and increased exponentially by using a successful promotional strategy through planning and scheduling promotional content and managing advertising campaigns. Traditional promotional campaigns have turned into digital promotional campaigns through digital marketing and marketing campaigns using social media. The roles have changed and the customer has become in control of the content, place and time he buys. (Verma & Tripathi, 2017)

4- Improving Options with Better Visitor Analysis:

Artificial intelligence analyzes website visitors, sends accurate reports to improve performance and suggests ways to improve the website. It also enables users to get accurate answers about their websites. One study indicates that about 58% of consumers follow brands via social media (Salah, 2020, 498). Artificial intelligence technology also helps identify recurring problems and patterns and predict the causes of visitor problems on a daily basis, which helps save time and human resources. (Chaffey & Ellis-Chadwick, 2019, 251)

5- Automatically Increase the Number of Transformations:

Major companies use programs supported by artificial intelligence to improve conversions on their sites and increase sales on their platforms. Through these programs, they learn about consumer behavior and collect data on the things that most increase consumer conversion. Thus, artificial intelligence makes simple adjustments to websites and conducts an evaluation process to identify the result of the transformations increased or decreased, and with time it can identify the best ways to improve the site and apply them. (Salah, 2020, 498)

Applications of Artificial Intelligence in E-marketing:

1. Chatbots:

They are programs developed to interact with customers online, answer their questions, and assist them in the purchasing process. Chatbots can be integrated into websites and social media pages to help customers interact with the brand, as they deal with many customers at the same time. Therefore, many companies have adopted chatbots to provide support to their customers; Because of its low cost and great effectiveness. (Ma & Fildes, 2021)

2. Dynamic Pricing:

The price is determined according to demand, product stock, and the customer's profile. Artificial intelligence programs can analyze the customer's profile through the history of visits, searches, and other digital activities he performs on the Internet, and accordingly, product prices are determined automatically. This technology is used by hotel reservation sites and airline companies to automatically raise and lower prices according to room occupancy rates, the tourist season, previous reservations, and the customer's experience and data. (Misra et al., 2019)

3. Targeted Offers:

Artificial intelligence can send advertisements to targeted customers using cookie information and site browsing history to send offers directed to targeted customers. These offers rely on data analysis and understanding customer behavior to provide customized and attractive content based on their personal interests and needs, and based on criteria such as geographic region, age, gender, etc. This can be seen in Google ads and social media ads. It is noted that the ads appear to you are always related to what you were searching for on Google, through the use of artificial intelligence algorithms. (Berger et al., 2019)

4. Data Analysis:

Data analysis is considered one of the most important applications of artificial intelligence in E-marketing as all marketing decisions require data. Therefore, artificial intelligence analyzes customer data and uses the analysis results to formulate attractive and effective marketing messages (Ismail, 2021, 1088).

5. Understanding Customers:

Artificial intelligence helps marketers know what consumers are saying about their brands in real-time. There are tools for monitoring social networks that analyze what people are saying on social networks about the brand, and determine the extent of customers' acceptance or rejection of the brands offered. Thus, marketers can modify and formulate their marketing messages to achieve maximum effectiveness. (Novak & Hoffman, 2019)

6. Content Recommendation:

E-commerce sites and many social networks analyze the activities of their visitors on the Internet, provide suggestions and recommendations that suit them to increase conversion rates and make them spend more time on their sites or applications. Therefore, content recommendation is one of the best applications of artificial intelligence. It provides the visitor with content, products, and services that suit his interests based on his online activities and searches. (Marchand & Marx, 2020)

The Concept of E-Marketing:

The concept of E-marketing is considered one of the modern concepts. There are many definitions; including the optimal use of digital technologies, including information and communication technologies, to activate marketing productivity and its operations,

represented by organizational functions, operations, and activities directed to identifying the needs of target markets and providing goods and services to customers and stakeholders in the organization. (Hajjaj, 2021, 394)

The Pillars of E-marketing:

E-marketing depends on several basic pillars, which are:

- Search engine optimization (SEO): By placing the website in the first search lists with free search results.
- Content marketing: Delivering information in a way that is beneficial to both parties by offering offers targeting a specific group.
- Digital advertising: By offering products on digital marketing platforms and search engines to promote and advertise various products.
- E-mail: To exchange messages digitally through the Internet.
- Create an easy-to-use website: Designing websites or electronic pages that can be easily accessed and used.
- Distinctive marketing performance: By achieving goals and making optimal use of available financial and human resources.
- Opening new markets: Products can be displayed on websites and Internet pages, thus opening new markets that attract new customers from distinguished young practitioners on the Internet.
- Reducing costs: E-marketing helps reduce costs and eliminate logistical obstacles
- Improving the service: E-marketing enables the design and delivery of the service well from the first time and better than previous times, achieving customer satisfaction and thus achieving competitiveness, quality, speed of delivery, and improving added value.
- Diversifying the services provided: Diversifying the services to achieve customer satisfaction and satisfaction with the products offered and the marketing sites available.
- Strengthening the relationship with customers: Trying to create effective and interactive channels with customers to gain their trust and satisfaction and thus form strong relationships with them. (Al Ajal et al., 2015; Mohamed, 2020)

3. Artificial Intelligence Study Results:

3.1 Study Methodology:

Study Method: The descriptive survey method was used as it is suitable for the current study.

3.2 Study Sample:

The study sample consists of employees in dairy companies (Almarai, Nadec, Saudi Arabia, Al Safi) in the Kingdom of Saudi Arabia, with a total number of (878). A stratified random sample of (233) administrative employees was selected, and the correct responses electronically were (202), which is the sample of the current study. It included administrative employees in the companies concerned, divided into (2) sales managers, (8) commercial marketing department managers, (122) sales employees, (66) human resources employees, and (4) programmers.

Table (1) Distribution of Sample Participants in Companies and by Job Title

Company	Sales Manager	Marketing Department Manager	Sales Employee	Human Resources Employee	Programmer	Total
Nadec	-	2	17	12	2	33
Saudi Arabia	1	3	28	17	1	40
Al Safi	-	2	32	10	1	45
Almarai	1	1	45	27	-	75
Total	2	8	122	66	4	193

3.3 Study Instruments:

To achieve the study aims, two questionnaires were designed about the reality of using artificial intelligence in E-marketing in the Kingdom of Saudi Arabia after reviewing a group of studies such as the following studies: Ismail, 2021; Al-Astal, 2009; Salah, 2020; Al-Sumaili, 2023; Al Masry, 2022. The questionnaire consists of 26 items distributed over five main pivots: the first is the reality of artificial intelligence for the website to develop E-marketing, which is (5 items), the second pivot is encouraging senior management (8 items), the third pivot is social communication (4 items), and the fourth pivot is providing an information system (5 items), on a five-point Likert scale (strongly agree, agree, neutral, disagree, strongly disagree) and a rating of (5, 4, 3, 2, 1) was used. Therefore, statistical tools were used: Percentages, frequencies, arithmetic mean, and relative arithmetic mean.

Validity:

The validity of the questionnaire was calculated by presenting it to a group of 16 jury members in the study fields: commerce, statistics, and education. They recommended deleting and amending some of the wording, which was amended, and the agreement was more than 85%.

After admen string the questionnaire to a pilot sample consisting of (35 employees), the internal consistency of the questionnaire was calculated between the statements and sub-dimensions and was as follows: The correlation degree of the statements of the first pivot with its overall score ranged between (0.888 - 0.792), the correlation degree of the statements of the second pivot with its overall score ranged between (0.664 - 0.814), the correlation degree of the statements of the third pivot with its overall score ranged between (0.709 - 0.791), the correlation degree of the statements of the fourth pivot with its overall score ranged between (0.746 - 0.953), and the correlation degree of the statements of the fifth pivot ranged between (0.713 - 0.817). The correlation coefficient of the dimensions with the overall score of the questionnaire was also calculated, and they were as follows: (0.605, 0.918, 0.653, 0.848). All of them have high consistency coefficients and are significant at a significance level of (0.05), which means the significance of the questionnaire results.

Reliability:

The reliability of the questionnaire was calculated using Cronbach's alpha coefficient, and the reliability coefficient of the questionnaire as a whole was (0.938), which is a highly significant reliability coefficient, which means the significance of the questionnaire results.

4. Results:

To answer the main question: "What is the reality of using artificial intelligence in E-marketing in the Kingdom of Saudi Arabia?", The arithmetic mean and the relative arithmetic mean were used.

Table (2) The Arithmetic Mean and the Relative Arithmetic Mean of the Website's Artificial Intelligence Reality to Develop E-marketing

No.	Statements	M	Relative Arithmetic Mean	Rank
1	The company's website is available in different languages.	4.05	81.1	5
2	Prices for products are displayed based on supply and demand.	4.02	80.4	3
3	The website is updated continuously.	4.02	80.4	3
4	The website has a distinctive brand for the company.	4.09	81.8	1
5	The company has a website that is easy to find in search engines.	4.07	81.5	2
The pivot as a whole		4.05	81.1	

It is obvious from the previous table that the arithmetic mean for the pivot as a whole is limited between (4.02 and 4.09). The responses of the study sample for this field exceeded the average degree of agreement, which is (3). This indicates that (81.1%) of the sample participants confirmed the availability of using artificial intelligence related to the website for developing E-marketing as designing a website or an electronic page helps access it and benefit from it. It helps introduce products and thus open new markets that attract customers. This is consistent with (Al Ajal et al., 2015). Statement number (4); which is: "The website has a distinctive brand for the company" obtained a relative mean of (81.8%), and statement number (5); which is: "The company has a website that is easy to find in search engines" obtained a mean of (4.07), indicating that (81.5%) of the sample acknowledged that. The two statements number (2, 3); which are: "Prices for products are displayed based on supply and demand." "The website is updated continuously." obtained the same high arithmetic mean (4.02). This shows the sample participants' conviction in updating the websites of these companies. Statement number (1), which is: "The company's website is available in different languages," obtained the lowest arithmetic mean (4.05) and ranked last.

Table (3) The Arithmetic Mean and the Relative Arithmetic Mean of the Reality of Artificial Intelligence to Encourage Senior Management to Develop E-marketing

No.	Statements	M	Relative Arithmetic Mean	Rank
1	Interest in price management using artificial intelligence according to market variables.	4.49	85.7	1
2	Training employees on artificial intelligence techniques.	3.98	79.6	6
3	Forming a committee to develop marketing services using artificial intelligence.	3.98	79.6	6
4	A strategic plan is being developed to use artificial intelligence.	4.14	82.8	4
5	Continuous monitoring of using artificial intelligence to make marketing decisions.	4.12	82.3	5
6	Partnerships are being concluded with marketing institutions to purchase artificial intelligence programs.	4.16	83.1	2
7	Providing incentives to employees to encourage using artificial intelligence.	3.95	79.1	8
8	The management is interested in solving problems that hinder the use of artificial intelligence.	4.16	83.1	2
The overall reality of artificial intelligence for encouraging senior management to develop E-marketing		4.10	82.0	

It is obvious from Table (3) that the arithmetic mean of the statements is limited between (3.95 - 4.49), and the responses of the study sample were in agreement, and the relative mean was limited between (79.1 - 85.7). This shows the convergence of the opinions of the study sample regarding the reality of using artificial intelligence to encourage senior management to develop E-marketing. Statements number (6,8); which are: “Partnerships are concluded with marketing institutions to purchase artificial intelligence programs.” and “The management is interested in solving the problems that hinder the use of artificial intelligence.” ranked second with an arithmetic mean of (M=4.16). The statement number (4); which is: " A strategic plan is being developed to use artificial intelligence" obtained a relative mean of (82.8%). Statement number (5); which is: “Continuous monitoring of using artificial intelligence to make marketing decisions” obtained an arithmetic mean of (4.12), as continuous oversight of business direction and improving the functional level of these activities have a positive impact on online buyer behavior (Al-Bakri, 2006). As for the two statements number (2,3); which are: “Training employees on artificial intelligence techniques.” and “Forming a committee to develop marketing services using artificial intelligence” obtained an arithmetic mean of (3.98). Statement number (7); which is: “Providing incentives to employees to encourage using artificial intelligence,” obtained the lowest mean and ranked last.

In general, it can be said that the arithmetic mean for all items in the field is equal to (4.10); meaning that the relative mean of (82.0%) exceeds the average degree of agreement, which is (3). This indicates that (82.0%) of the sample participants affirmed the encouragement of senior management to develop electronic marketing using artificial intelligence, and this is consistent with (Shah, Mahmood & Siddiqui, 2006). One of the most important factors that contribute to the success of any commercial company is the availability of a distinguished administrative system, in addition to preparing the appropriate requirements and factors, good planning, solving problems that hinder marketing, and providing workers with the necessary skills.

Table (4) The Arithmetic Mean and the Relative Arithmetic Mean of the Reality of Using Artificial Intelligence to Achieve Social Communication to Develop E-marketing

No.	Statements	M	Relative Arithmetic Mean	Rank
1	Using automated chatbots on the marketing page.	4.23	84.6	2
2	Having a trained customer service team.	4.08	81.6	3
3	Providing advice and support to resolve customer complaints.	3.72	74.3	4
4	Automated response at any time for after-sales service, which achieves interactivity for consumers.	4.29	85.8	1
Total		4.08	81.5	

It is obvious from Table (4) that the arithmetic mean of the statements about the reality of using artificial intelligence to achieve social communication to develop E-marketing is limited between (3.72 - 4.29). The responses of the study sample were (agree). The relative mean was limited between (74.3 - 85.8); showing a convergence in the views of the study sample on the reality of using artificial intelligence to achieve social communication to develop E-marketing. The pivot as a whole obtained (M = 4.23) and a relative mean of (81.5%), which is the percentage approved by the sample. Statement number (4); which is: “Automated response at any time for after-sales service, which achieves interactivity for consumers.” ranked first with an arithmetic mean of (M=4.29), while statement number (1): “Using automatic chatbots on the marketing page” obtained a relative mean of (84.6%), as automated chatbots assist in the purchasing process to help customers interact with commercial websites (Misra et al., 2019). As for statement number (3); which is: “Providing advice and support to resolve customer complaints” received the lowest mean of (M = 3.72) and ranked last.

Table (5) The Arithmetic Mean and the Relative Arithmetic Mean of the Reality of Using Artificial Intelligence to Provide an Information System for Developing E-marketing

No.	Statements	M	Relative Arithmetic Mean	Rank
1	There is a technical support specialist to address any malfunctions in the information network.	4.12	82.3	1
2	The data is analyzed to be used to formulate attractive marketing messages.	4.03	80.6	3
3	The data and information available on the company page are constantly updated.	4.07	81.4	2
4	Providing an electronic security system to protect customer data and information.	4.00	80.0	4
5	There are specialists to provide and collect information for customers about marketing services.	3.97	79.4	5
Total of Reality		4.03	80.7	

It is obvious from Table (5) that the arithmetic mean for the pivot on using artificial intelligence to provide an information system for developing electronic marketing is limited between (3.97-4.12), and the relative mean is limited between (79.4-82.3), showing a convergence in the opinions of the study sample regarding the extent of risks awareness of financial crimes. Statement number (1); which is: “There is a technical support specialist to address any malfunctions in the information network,” ranked first with an arithmetic mean of (4.12), while statement number (5); which is: “There are specialists to provide and collect information for customers about marketing services.” had the lowest arithmetic mean of (3.97) and ranked last.

It can be said that the arithmetic mean for all items in the pivot is equal to (4.03), meaning that the relative arithmetic mean is (80.7%), which indicates that the average degree of response to this pivot exceeded the average degree of agreement, which is (3). This means that (80.7%) of the sample participants confirmed that the reality of using artificial intelligence to provide an information system for developing E-marketing is available to a large extent, and this is consistent with the study of (Al Bakri, 2006), as the marketing database can be used strategically to develop long-term relationships with the consumer effectively.

5. Discussing and Interpreting Results:

The results for all pivots of the study indicated the reality of using artificial intelligence in the Kingdom of Saudi Arabia from the point of view of the study sample is high. This indicates the awareness of employees and administrators in charge of E-marketing; as artificial intelligence is applied to positive degrees in E-marketing. This is evident in the following:

The first pivot: “The reality of artificial intelligence related to the website for developing E-marketing,” obtained a relative mean of (81.1%). This indicates that (81.1%) of the study sample confirmed this reality. The statement: “The website has a distinctive brand for the company” obtained (81.8%); because (81.1%) of the sample is convinced that using the brand as it distinguishes the product and its marketing. As for the statement: “The company has a website that is easy to find in search engines” indicated that (81.5%) of the sample participants are convinced of the use and existence of the website.

The second pivot related to the reality that senior management encourages the use of artificial intelligence in E-marketing obtained (82.0%). This is because this percentage of the sample is convinced of the interest and support of management for artificial intelligence in marketing in the company. The statement “Interest in price management using artificial intelligence according to market variables” obtained (85.7%), and this is

because (85.7%) of the sample participants are convinced that senior management paid attention to the pricing of the product, based on which the appropriate decision regarding the final price is made.

(83.1%) of the sample responded to the statement, “Management is interested in solving the problems that hinder the use of artificial intelligence,” and this is because they are convinced that senior management is interested in solving the problems facing the use of artificial intelligence in E-marketing because of its good returns on the marketing process. As for the reality of the statement, “A strategic plan is being developed to use artificial intelligence”, (82.3%) of the sample responded that senior management is working in light of a specific and clear plan and strategy for using and supporting artificial intelligence in E-marketing.

The third pivot is: “The reality of using artificial intelligence to achieve social communication to develop electronic marketing.”, a percentage (81.5%) of the sample responded. This is high and indicates their conviction about the use of social communication methods through artificial intelligence to develop E-marketing and the role of social networking sites in the marketing process. Users spend many hours today on them and they are more interactive and responsive. Thus, the presence of companies on these social platforms has become non-negotiable, and their absence means more losses. The statement: “Automated response at any time for after-sales service, which achieves interactivity for consumers” obtained a relative mean of (85.8%). This is because this percentage is convinced that there is an automated response for after-sales service in these companies. It is based on interpretation and inference instead of semantic words and choices, and for this reason, it mostly gives responses to the user’s inquiries that are more logical and of higher quality. As for the statement: “Using automatic chatbots on the marketing page.”, (84.6%) of the sample responded to this because they are convinced of using chatbots as they are the only digital tool that can communicate with consumers and save a lot of time and effort in addition to the speed of response and interaction with them.

The fourth pivot: “The reality of artificial intelligence related to providing an information system for developing E-marketing,” obtained (80.7%), meaning that the reality of providing an information system from the point of view of the sample participants is high. This is due to the conviction of a large percentage of the sample participants that there is an interest in developing an integrated and effective marketing information system because it contributes to improving performance within companies by producing accurate and up-to-date information. The statement: “There is a technical support specialist to address any malfunctions in the information network.” obtained (82.3%). This is because a percentage of the sample is convinced that there are specialists to support the use and address any problems that hinder the use of artificial intelligence. The presence of specialists at present is important to ensure a competitive advantage within the organization compared to other competing organizations. The statement: “The data and information available on the company’s page are constantly updated” obtained a relative mean of (81.4%). This is because a percentage of the sample is convinced that continuous data is updated on the company’s page to follow developments and innovations in the field of E-marketing.

6. Recommendations and Suggestions:

- Developing the skills of employees in companies using artificial intelligence and how to deal with customers in real time for developing E-marketing.
- Providing distinguished systems of wages and incentives linked to the quality of interaction with customers and the contribution that marketing activity based on electronic methods contributes to achieving the company’s goals.

- Emphasizing the importance of digital promotional campaigns in E-marketing and marketing campaigns using social media to change roles, as the customer becomes responsible for the purchasing and marketing process.
- Promoting administrators' use of the English language in all company dealings.
- Continuously developing the company's website.
- The importance of expanding the use of artificial intelligence applications in E-marketing in these companies.
- Providing the infrastructure, material and human requirements to increase the uses of artificial intelligence applications.

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