THE ROLE OF ARTIFICIAL INTELLIGENCE IN BUSINESS MANAGEMENT SYSTEM

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Abstract

The concept of artificial intelligence is accepted as one of the important research areas in the field of computer engineering and the driving force of technology since the first half of this century. Artificial intelligence is a research area that aims to examine and formulate mental functions related to intelligence in humans with the help of computer models and to apply them to artificial systems. According to a broader definition, artificial intelligence is computers equipped with human intelligence capabilities such as acquiring information, perceiving, seeing, thinking and making decisions. Although important developments in the field of artificial intelligence (AI) have been achieved today, the level of research is still in the incubation phase. With each passing day, artificial intelligence researchers introduce new inventions and innovations that will help redefine artificial intelligence. Some even say that Artificial Intelligence is an absolute concept that cannot be defined by looking at these developments.

Keywords: *artificial intelligence; business; computer; human; management.*

JEL Classification: M10

Introduction

It can even be said that each of the studies on Artificial Intelligence raises more new questions than answers. In this regard, Manvin Minsky, the pioneer of

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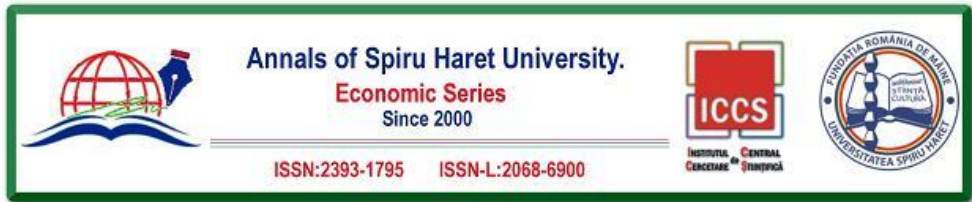
Artificial Intelligence studies in the MIT (Massachusette Technical University} research group, states that Artificial Intelligence is like a "moving horizon". Although studies on Artificial Intelligence have been on the agenda since the 1960s, artificial intelligence applications are enormous. Due to the need for computer power, the efforts of most of the researchers to reveal something new in this field have been inconclusive.

It is predicted that artificial intelligence will change our world more than most people think today. Artificial intelligence gives machines the power to see, hear, taste, smell, touch, speak, walk, fly and learn. This means businesses can develop entirely new ways to interact with their customers, offer them smarter products and service experiences, automate processes, and improve business performance. (Marr, Bernard ve Matt Ward (2019))

Research methodology

This study was conducted to analysis impact of Aİ for business management process by using descriptive method and secondary and primary data. In the application part, the the effect of Aİ on performance of business management system were tried to be measured. In theoretical part, literature review was analysed and then practical effect of this study was discussed in the context of review secondary data. And results was focused to analyze how effective of AI for business management process in different context.

Theoretical perspectives of motivation and its scope

Today, thanks to the cheap and powerful computers provided by the developments in computer technology, it has become economically possible to conduct large-scale research in the field of artificial intelligence. As a result of this, significant developments have already been achieved in expert systems, a sub-field of artificial intelligence, and it is observed that the business world benefits from expert systems in the decision-making process. (http://members.tripod.com/~Bagem/bagem/index.html) With today's technology, it does not seem possible to handle this issue. Not only fear, but also joy, longing, etc. This example shows us what can be computerized and what cannot be computerized. One of the most important issues is the difference between reason and intelligence. Animals can be as smart as humans, and in some ways even more intelligent than humans. But they have no mind. They make decisions only in the world (feelings, emotions, abilities, etc.) they have created based on the information they have. Most of the time, they

also make mistakes. For example, people never think of living together with predators in forests.

But chickens live in the regions where people live at the expense of frying in a pan. They also produce protein for the person who will fry them and produce eggs on time. Would they do this if they were smart? Yes, the robot will be made. The robot will be able to learn. The robot may have thinking abilities. He will be able to develop himself and create new knowledge on his own. He will be able to adapt himself to the environment he is in. Although he cannot do some of these now, it is possible to do it in the future. Technological developments give many lights on these issues. But it will not be possible for a robot to have intelligence. One of the reasons for this is that the different factors of the mind cannot be defined mechanically. The mind is an event related to the soul and the heart. It is not just a function of the brain. Intelligence, on the other hand, is a mechanical faculty under the umbrella of reason. It works based on knowledge. It is possible to computerize it. It will also be possible to improve. The difference between mind and intelligence is so subtle that it requires a lot of thought. (Yapay zeka ne kadar yapaydır?,Kasım 2002)) In his article, the views that deeply examine the idea that computers can think and oppose this idea (for example, machines cannot think because human nervous systems can work according to analog principles, computers can only work according to digital principles; or, machines cannot think because thought and consciousness are not specific to human-made devices, but only to God-made creatures. , etc.) under nine main headings, it is possible to think of Turing as the creator of artificial intelligence. The term "Artificial Intelligence" itself belongs to John McCarthy, the creator of LISP, the most widely used functional programming language in the field. The most important feature of the entrepreneurship period we are in is the attempts to adapt it to the needs of the real world, which will be taken out of the laboratory of artificial intelligence.

What can be said to be new here is the emergence of wider areas of use, thanks to more economically suitable software and equipment, of users whose needs were met with traditional processing methods. The basic program developed for Artificial Intelligence is the LISP program developed by John McCarthy in 1957. Unlike programs such as Basic, Fortran, Cobol, and Pascal, LISP is also concerned with other detailed topics such as sentences, rules, names. For LISP users, the main equipment is the so-called LISP machine or symbolic processor. This symbolic processor is a kind of computer system and a logical system designed to effectively and efficiently support the development and implementation of artificial intelligence programs. (HARP Akademileri Komutanlığı Yayınlarında, Mart-1996)

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Comparing Artificial Intelligence and Natural Intelligence

The potential value and future horizons of AI can be more clearly perceived by comparing AI with natural intelligence in some areas:

a) Artificial intelligence is more permanent: Natural intelligence may change over time as employees change places, or people with natural intelligence may forget the information they have. Artificial intelligence, on the other hand, is permanent and it is not lost or forgotten as long as computer systems and programs do not change.

b) Artificial intelligence can be easily copied and broadcast to large audiences: In the case of natural intelligence, transferring a specialization from one person to another requires a long apprenticeship. Even if this is achieved, expertise cannot be fully transferred to the other person. But if information is inserted into a computer system, it can easily be copied from one computer to another and its use can be expanded.

c) Artificial intelligence can be obtained more cheaply than natural intelligence: In many areas, the purchase and use of computers can be obtained much cheaper in most areas than human training and use.

d) Artificial intelligence as a computer technology is completely consistent, there is no inconsistency in it: On the other hand, nature intelligence is unstable, variable and irregular. This is due to the nature of man, who is the owner of natural intelligence.

e) Artificial intelligence can be documented: Decisions made by the computer can be easily documented by following the activities of the system. Natural intelligence is difficult to reproduce. For example, a person cannot reach a decision he has reached again after a certain period of time; He may not remember how he came to this decision and what assumptions he started from. Despite all this, there are situations and areas where natural intelligence is superior to Artificial Intelligence. We can show these examples.

Artificial Intelligence (AI) and Conceptual Framework

Although the concept of artificial intelligence (AI) has been examined more frequently in recent times, it was actually the famous English mathematician, computer scientist and cryptologist Alan Mathison Turing, who was first recognized in 1950 as one of the greatest pioneers of modern computer and information sciences, both theoretically and practically. and Intelligence", in other words, it was mentioned in the article "Computer Machines and Intelligence". The

"imitation/imitation game" that Alan Turing developed in this article has also been referred to as the "Turing test" in today's literature. In this test, Turing put forward a criterion for whether machines and computers can think, in other words, "Can machines think?" It can be said that the first steps have been taken about the functional definition of artificial intelligence. (Turing, Alan M. (1950); Russell, Suart ve Peter Norvig (2016)). However, the term "artificial intelligence" was first used on August 31, 1955, by American computer and information scientist John McCarthy and her team's proposals for the 1956 summer project of Dartmouth University in Hanover, New Hampshire, USA. (AI Magazine, 27 (4), 12-14; Sterne, Jim (2017)). There are many definitions proposed in the literature about what artificial intelligence is. Each of them is important in that it reflects different features of the related phenomenon. Most, however, are centered around the concept of creating computer software or behavior-capable machines that we would consider intelligent. It is also difficult to define artificial intelligence in general, but different definitions have been made with different approaches. Nadimpalli (Nadimpalli, Meenakshi (2017)) stated that artificial intelligence is "exclusive technologies that process processes such as machine learning, natural language processing, perception and reasoning". According to Shankar (Shankar, Venkatesh (2018)), in its simplest form, artificial intelligence means "software, algorithms, systems or machines that make up artificial intelligence". More generally, it is used to denote a set of tools that can increase the intelligence of a product, service, or solution. According to Sterne (Sterne, Jim (2017)), artificial intelligence is "to make a computer behave like a human in general". According to Akerkar (Akerkar, Rajendra (2019)), artificial intelligence "decision-making, learning and self-suggestion, in other words, the ability to instill knowledge depends on previous experiences and acting very diligently". According to Kaplan (Kaplan, Jerry (2016)), the essence of artificial intelligence is "the ability to make timely generalizations based on limited data." The wider the field and structure of the artificial intelligence application, the faster the processes such as perception and reasoning work with a smarter behavior. In the research report of IBM and NRF,
(https://cdn.nrf.com/sites/default/files/201901/The%20coming%20AI%20revolutio n.pdf) artificial intelligence is expressed as "the ability to think logically, remember information, learn and identify new information in machines through data discovery".

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Table 1. Artificial Intelligence Definitions in Four Different Categories

Thinking Humanely	**Thinking logically**
"Excitement to make computers think It is a new effort. . . They are intelligent machines that think close to the full and real senses." "Decision making, problem solving and learning It is the automation of activities associated with human thought, such as."	"It is to develop mental skills using computer models." "In the field of computing to enable perception, reasoning, and the like. is to examine."
Acting Humanely	**Acting Logically**
"Creating machines that do functions that require intelligence when done by humans. is art." "Computers are better than humans right now. It is the work of getting them to do what they are."	"Computer intelligence is the study of designing intelligent agents." "Artificial intelligence (AI) is an effort to exhibit intelligent behavior through artificial neural networks."

Source: Russell, Suart ve Peter Norvig (2016), Artificial Intelligence: A Modern Approach (3. Baskı), Essex: Pearson.

Artificial neural networks

In order to understand the modern machine learning techniques that are at the center of the artificial intelligence system, it is useful to get an idea about the artificial neural network. Artificial neural networks, together with artificial intelligence, is another topic that has been frequently examined and discussed both in the scientific world and by many practitioners recently. An artificial neural network contains a number of computational units (cells or neurons) and are connected to these units by a series of one-way data links. (Krycha, Karl A. ve Udo Wagner (1999)). The relationship between artificial neural networks and biological neural networks is a subject that attracts attention in the scientific community. In order to understand how biological brains work, some researchers in cognitive neuroscience/neuroscience are trying to directly understand the actual structure of brains and emulate them on a computer. But most AI researchers don't

care if the software they develop actually mimics the biological brain, as long as it solves the practical problems of interest (Kaplan, Jerry (2016)).

Artificial Neural Networks (ANN), inspired by the way the human brain works, consists of a structure that works in parallel, transmits and receives information to each other. Artificial nerve cells, which are connected to each other in the form of a network, are used for problem solving. The values of the connections that provide the flow of information between the cells are shown with relations, and the learning ability and intelligent behavior of the system are provided by using connection values. (Tekin, Mahmut (2008); Zontul, Metin ve Ayhan Yangın (2017); Kaplan, Jerry (2016)). The artificial intelligence platform "IBM Watson", which is very popular in this field, compares a piece of information with an existing data set to process it. In this process, it works by adhering to deep learning algorithms and artificial neural networks. The more data the system is exposed to, the more it learns and the more effective it becomes over time. An artificial neural network can also be expressed as a complex "tree" of decisions that the computer can make to reach an answer or a solution. (Marr, Bernard (2016)). The use of artificial neural networks has recently been increasingly used in management, marketing and retailing. Among these application types, it can be expressed as market forecasting, consumer preference forecasting, tourism marketing, buyer and seller relationship analysis and market segmentation analysis. (Alon, Ilan, Min Qi ve Robert J. Sadowski (2001)). In order to understand artificial intelligence and how it works, the artificial intelligence system can be shown as a whole in a big structure that includes big data (Big Data), machine learning and artificial intelligence functions as in Figure 1. (Shankar, Venkatesh (2018)).

Artificial intelligence in Sales and Customer Relationship Management

The question of how best to analyze and use individual customer data is an important issue on the agenda of managers. In the current era of big data, most businesses can learn about customers and the market. Still, smart companies are striving to get more information at every possible customer touchpoint. These touchpoints include communication between customers and businesses of all kinds, such as customer exchanges, information provided by the sales force, service and support calls, web and social media site visits, satisfaction surveys, credit and payment interactions, market research studies. By using customer relationship management (CRM) to better understand customers, businesses can provide a higher level of customer service and develop deeper customer relationships.

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Businesses can use customer relationship management to identify high-value customers, target them more effectively, cross-sell the company's products, and create recommendations tailored to specific customer needs. (Kotler, Philip ve Gary Armstrong (2018)). Artificial intelligence is already penetrating the sales funnel significantly, including writing emails, managing calendars, and managing leads. However, at the center of all these activities of artificial intelligence should be improving customer relations. Amazon's Alexa, Apple's Siri, and Google's smart personal assistant serve users to answer questions, make suggestions, and perform actions on web services. Chatbots, which provide communication with audio/voice or textual methods in artificial intelligence sales, marketing and customer service areas, are used intensively through chatbots. According to the Gartner research firm, most new generation customers demand self-service. These new generation customers are against putting an intermediary person for a job or service that they can do on their own. Artificial intelligence has a key role in the development and effective use of the customer relations platform. (Smith, Anthony (2018)). Retail businesses use artificial intelligence to determine and implement growth, new revenue sources, profitable customer relationship management and strategies. AI can help automate routine sales, serve as a virtual assistant, dynamically segment customers, and personalize recommendations. To take full advantage of AI in today's retail environment, customer relationship management strategies need to be region-specific, time-specific, and channel-specific, as well as customer-specific. (Shankar, Venkatesh (2018)).

Artificial intelligence applications in In-Store Customer Experience Management

According to Schmitt, (Schmitt, Bernd H. (2003)) customer experience management is "the process of strategically managing a customer's entire experience with a product or a company". According to Grewal et al., (Grewal, Dhruv, Anne L. Roggeveen ve Jens Nordfält (2017),) customer experience includes all the stages that the customer comes into contact with from the moment he interacts with the shopping, good or service. Customer experience management represents a business strategy designed to manage the customer experience. It represents a strategy that provides a win-win value exchange between the retailer and its customers. Torlak and Altunışık (Torlak, Ömer, Remzi Altunışık ve Şuayıp Özdemir (2006)), stated that consumption is not only a functional benefit-oriented activity, but should be considered in the context of the general consumption

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experience, where emotional and aesthetic elements are also taken into account. Varinli (Varinli, İnci (2012)), stated that experiential marketing is the method with the highest return on marketing investment for a brand.Grewal vd.'nin (Grewal, Dhruv, Anne L. Roggeveen ve Jens Nordfält (2017)) According to Grewal et al., customer experience and customer loyalty are among the most important goals of managers. It is also cited as one of the most important agenda and challenges in the coming years.

Creating a superior customer experience seems to be one of the main goals of today's retail environments. Retailers around the world have embraced the concept of customer experience management, and many have associated it with their mission statement. For example, Starbucks' success relies on creating a distinctive customer experience for its customers. (Verhoef, Peter C., Katherine N. Lemon, A. Parasuraman, Anne Roggeveen, Michael Tsiros ve Leonard A. Schlesinger (2009)). Customers' past experiences, store atmosphere, service interface, and store brands all play an important role in their future customer experience. Customer experience can be expressed as a holistic retailer response, taking into account the customer's subconscious, feelings, emotions, social and physical factors. (Grewal, Dhruv, Anne L. Roggeveen ve Jens Nordfält (2017)). If consumers are better understood, customer satisfaction and retail sales performance will increase. (Puccinelli, Nancy M., Ronald C. Goodstein, Dhruv Grewal, Robert Price, Priya Raghubir, ve David Stewart (2009)) Retail is not just about selling products, it is also directly related to experience. Because new consumers tend to acquire entertainment, education, emotion, loyalty and more information outside of normal shopping. (Deloitte (2015)). The consumer's in-store experience can be enhanced with an AI-based humanoid robot concierge (who welcomes customers) or robotic sales representative interacting directly with customers. An AI-based robot can help customers find what they're looking for or point them in the right direction. (Shankar, Venkatesh (2018)). Artificial intelligence-based robots are being adopted and actually used by some retailers to improve efficiency, in-store experience and customer service levels. Lowe's, the leading company of home improvement and DIY store retailing in the United States, uses the artificial intelligence-based "LoweBot" robot, which it started to use in the store, by communicating with customers, enabling them to more easily find the products they are looking for in the aisles, scan them and get information about the stock status of the product. In Russia, Lenta has implemented the "Promobots" robot, which will provide supermarket customer service, in the store. (Deloitte (2018); Gülşen, İzzet ve

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Şuayıp Özdemir (2018)). A similar artificial intelligence application, the electronics retail leader amazon.com, has recently introduced the "Amazon Go" application with the shopping slogan "grab & go" (Grab & Go). Customers enter the store with the "Amazon Go" application they download to their smartphones. He buys the products he needs during the shopping process and leaves the store. In other words, he leaves the store without waiting in line or scanning the products at the checkout. The shopping amount is also automatically sent to your amazon account. All these processes are performed using advanced artificial intelligence, computer technology, sensors, and advanced learning algorithms. (Gülşen, İzzet ve Şuayıp Özdemir (2018)).

Artificial Intelligence in Customer Service and Payment Management

Customer service is all activities done for customers to improve the customer experience. Customer service is more important than ever. Businesses have realized that the product or service offered in the fierce competition environment is not sufficient on its own. Another area where AI can be useful is in customer service. Customer service is very important to retailers because more than half of all consumers, especially the millennials born between 1980 and 2000, tend to leave the retailer altogether in case of poor customer service. (Shankar, Venkatesh (2018)). Chatbots, which provide communication with artificial intelligence, audio/voice or textual methods, provide retailers with the benefit of increasing both efficiency and satisfaction in the customer service experience. Working 24x7, retailers can provide a strong customer experience by eliminating waiting times through this system. Another area where AI is improving in the context of customer service is payment processing. PayPal's artificial intelligence system, for example, uses a deep learning model based on years of digital transactions to proactively detect and prevent transaction fraud. (Shankar, Venkatesh (2018)).

Artificial Intelligence Applications and Benefits

Artificial Intelligence Applications and Its Benefits When the literature on the subject is examined, it can be said that artificial intelligence applications benefit businesses operating in all sectors. However, the benefits of artificial intelligence, which is the subject of the study in this section, mostly to retail businesses and consumers, are compiled from the relevant literature and shown in Table 2 below.

Table 2. Benefits of Artificial Intelligence Applications in Retailing

Benefits to Retailer Business	Benefits to the Consumer
• Can automate processes • Increases efficiency and reduces costs • Increases sales • Provides competitive advantage • Improves customer satisfaction, loyalty and shopping experience • Provides supply chain and logistics optimization • Provides improved sales and stock management • It can make faster and more effective decisions on the collected big data. • Provides digital marketing optimization • Creates an unified channel experience • Provides real-like retailing in the virtual environment • Provides recognition of customers entering the physical store through face recognition and mobile technologies. • Provides personalized marketing activities in the physical and electronic store environment • Faster service and reduces customer waiting times in store • Provides more efficient and improved workforce allocation	• It can do unmanned shopping 24 hours a day, 7 days a week, anytime, anywhere and in any way. • Get service and shopping experience through chatbots, which are chatbots that communicate with audio/voice or textual methods. • You can do your shopping faster • Get an improved shopping experience • Provides improved service and convenience • Receive personalized marketing messages, coupons and price discounts • Be aware of suggestions, additional information and similar product information • Get a real-life shopping experience in the virtual environment without going to the physical store • Before purchasing products, you can see their appearance and functions in a virtual environment close to reality • It can reach its needs more easily with improved shelf layout and stock management. • The low costs that technology provides to the retailer can also be reflected in the product prices. • Over time, as the retail industry adopts artificial intelligence, it will provide different benefits.

Source: Gülşen, İzzet ve Şuayıp Özdemir (2018), "Technological Innovations and Applications in Retailing", Journal of Marketing Theory and Applications, 4 (1), 103-138.

When the benefits of artificial intelligence identified in Table 2 are examined, in addition to improved customer loyalty, customer experience, customer satisfaction; It has been determined that artificial intelligence is among the promises of making more informed business decisions, reducing costs, increasing revenues, increasing

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productivity, automating processes and works. According to research results of Infosys, (Infosys(2017)) it can be said that the benefits are similar to the ones in Table 2. In the Infosys research, "What are the benefits you provide in the use of artificial intelligence?" The results in Table 3 were obtained with the question.

Table 3. Proportional Benefits of Artificial Intelligence Applications in Retailing

Reducing costs	%49	Increasing employee knowledge and experience	%27
increase in productivity	%44	Faster service and product delivery	%26
Increase in revenues	%43	Descriptive and predictive analyzes	%24
More informed business decisions	%40	Testing and designing new ideas with consumers	%24
Solve business problems faster	%39	Increasing innovation	%22
Automate processes and jobs	%38	Opportunity to reach more experienced new employees	%11
Creating new sources of income	%35	I am not aware of any benefits	%1.0

As can be seen in Table 3, it seems that artificial intelligence is most effective on costs by automating processes and employing fewer employees at the rate of 49%. In the table, businesses have achieved an increase in efficiency with artificial intelligence applications by 44% and in the third place by 43% in revenues.

Looking at the rest of the table, the benefits of artificial intelligence are very important for retail businesses. It can be said that artificial intelligence applications provide a great competitive advantage to retail businesses both within the organization and within the sector in a sector where competition is very intense, profit margins are very low, and the features that distinguish one product from another are reduced.

Conclusion and Discussion

The business sector has become one of the locomotive industries of the country's economies, which is constantly developing in the light of economic growth and new technologies. Its share and importance in both the global and national economy is increasing day by day. Adopting technological innovations in these businesses is very important for several reasons. Technological innovations can provide businesses with a sustainable competitive advantage in the new economy, as well as the growth of brands and opening up to new markets. Uzkurt (Uzkurt, Cevahir (2017)), Uzkurt's technological innovations show themselves especially in the design, production of a new product or in the provision of technology-related services. Lovelock and Wirtz (Lovelock, Christopher ve Jochen Wirtz (2004)), stated that businesses should have an innovative approach in order to automate processes, reduce costs, provide superior service and experience to consumers, add attractiveness to existing products and develop new service concepts. Renko ve Druzijanic'e (Renko, Sanda ve Mirna Druzijanic (2014)) According to Renko and Druzijanic, retailers can benefit from the implementation of technological innovations both administratively and in terms of reducing costs. Or they can increase their sales through improved customer service. According to Solomon, (Solomon, Michael R. (2007)) radical developments in digital technology are one of the most important factors affecting consumer behavior, and its impact will increase as the number of people connecting to the Internet in the world increases. At a time when digital transformation is increasing rapidly in all sectors, artificial intelligence applications remain at the top of the agenda of innovative enterprises. Retail businesses are not exempt from this phenomenon. The adoption of artificial intelligence has created great excitement for the future in many retail businesses. It is a known fact that the increasing costs of retail businesses, decreasing profit margins and increasingly intense competition force decision makers to discover innovative solutions. In this context, artificial intelligence applications for retail businesses, improved customer loyalty, customer

experience, customer satisfaction; It can be seen as a great opportunity to make more informed business decisions, reduce costs, increase revenues, increase productivity, automate processes and jobs. Artificial intelligence technology, mobile technology and applications that enable the digital transformation of businesses, Internet of Things (IoT), virtual reality (VR), augmented reality (AR), autonomous robots, blockchain, smart sensors, cloud computing, cyber physical systems, biometric and cyber security It can be said that technologies have a very important role in terms of providing holistic solutions. Undoubtedly, on the basis of the success of Amazon.com and Walmart, which are the inspiration for many e-retail business models in the digital economy, understanding consumer behavior, predicting, personalizing, product recommendation, excellent customer experience, fast payment method, stock optimization, supply and logistics, Along with other technologies, artificial intelligence technology plays a prominent role. The electronic retail company Amazon, which started a new era in the retailing sector by using advanced computer technology, sensors and advanced learning algorithms based on artificial intelligence, the "Amazon Go" application of unmanned stores, at least as a prototype, "autonomous retailing is possible". can be taken as an indication that Artificial intelligence applications are a technology that is still developing and adopted by a limited number of retailers. However, with the widespread use of artificial intelligence in the near future, it can be predicted that both physical (offline) stores and electronic (online) stores will create a transformational change or quantum leap effect in marketing activities, operational areas, stock optimization solutions, logistics and supplier relationship management throughout the industry. In addition, it can be said that in the near future, humanoid artificial intelligence-based autonomous expert systems that have the ability to learn, remember, feel, identify and solve problems through data discovery will take place in the near future.

To summarize the result, the possible effects and benefits of artificial intelligence technology on the retail industry are expected to be as follows:

- A higher level of experiential marketing and consumer experience
- Increased customer satisfaction and loyalty
- Media optimization
- Stock optimization
- Stronger supply, logistics, retail and consumer relationship
- Making more informed business decisions
- Higher sales

• Decreased transaction costs
 • Widely integrated channel (Omnichannel)
• Decreasing of traditional retailing
• Increasing autonomous retailing

A digital business platform that will provide more flexible, agile and 24/7 uninterrupted service for new consumers As stated in the report of the Accenture research firm, retailers reduce errors, reduce costs, increase profits, increase profits, reduce errors in transactions that require human judgment, with artificial intelligence-based autonomous systems. provides customer satisfaction, offers differentiated value propositions, and saves employees time for other business areas. (Spitz, Courtney, et. al. (2018)). Based on all these results, in today's market where the macro environment and micro environment are constantly changing, it is a necessity for the marketing management of retail businesses and especially senior managers to read the change well and to have digital awareness in the context of sustainable competition of the business. Digitally conscious organizations can anticipate the promises, benefits, threats and potential impacts of emerging new technologies. Managers with digital consciousness can analyze the internal and external environmental factors of the business better than their competitors, in the light of developing new technologies, and can make the digital business design of the business and the selection of strategies more successfully.

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