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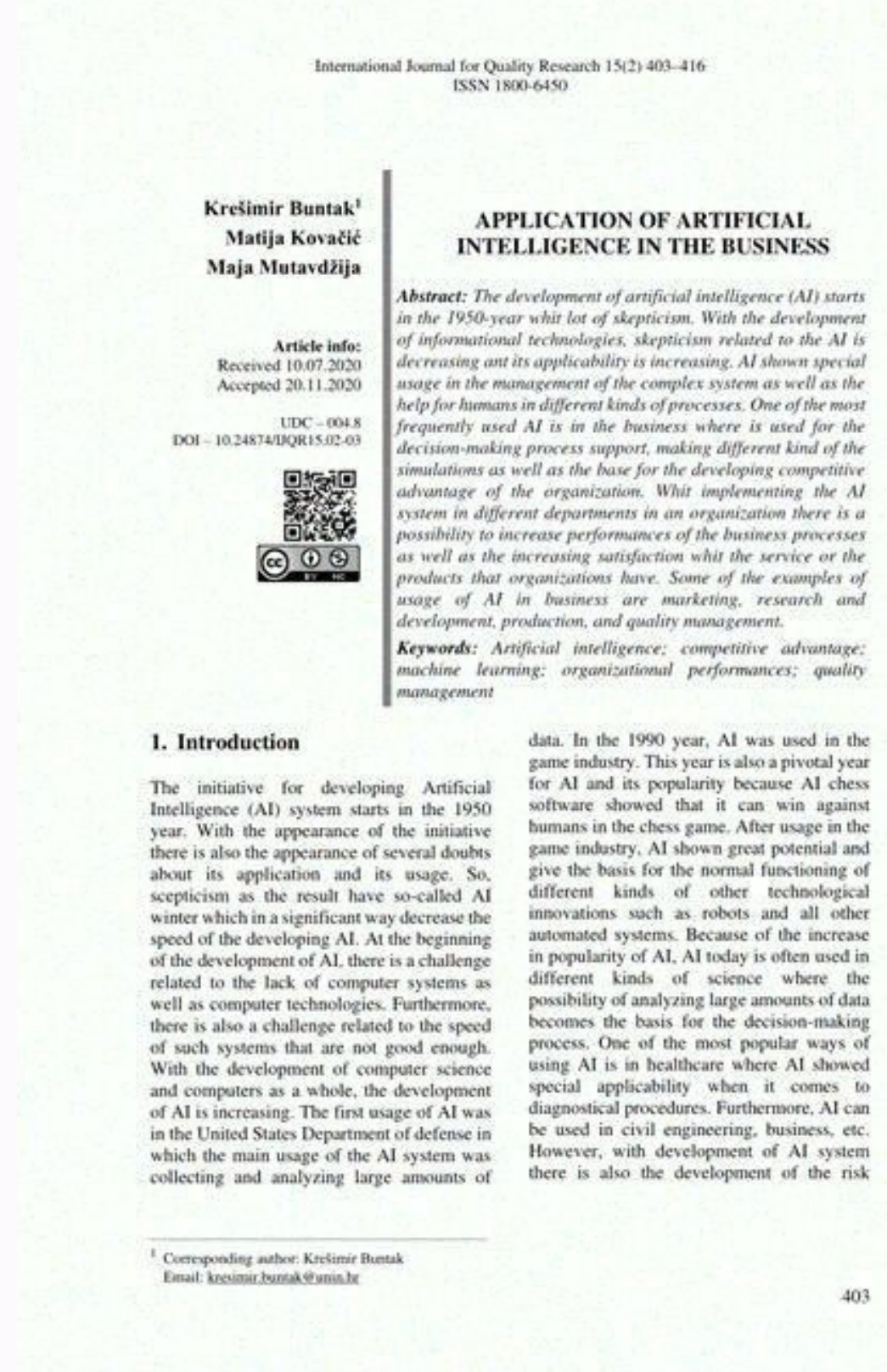
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What is ai in business. What is artificial intelligence in management.

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APPLICATION OF ARTIFICIAL INTELLIGENCE IN THE BUSINESS

Abstract: The development of artificial intelligence (AI) starts in the 1950-year with lot of skepticism. With the development of informational technologies, skepticism related to the AI is decreasing ant its applicability is increasing. AI shown special usage in the management of the complex system as well as the help for humans in different kinds of processes. One of the most frequently used AI in the business where it used for the decision-making process support, making different kind of the simulations as well as the base for the developing competitive advantage of the organization. Whit implementing the AI system in different departments in an organization there is a possibility to increase performances of the business processes as well as the increasing satisfaction whit the service or the products that organizations have. Some of the examples of usage of AI in business are marketing, research and development, production, and quality management.

Keywords: Artificial intelligence; competitive advantage; machine learning; organizational performances; quality management

1. Introduction

The initiative for developing Artificial Intelligence (AI) system starts in the 1950 year. With the appearance of the initiative there is also the appearance of several doubts about its application and its usage. So, scepticism as the result have so-called AI winter which in a significant way decrease the speed of the developing AI. At the beginning of the development of AI, there is a challenge related to the lack of computer systems as well as computer technologies. Furthermore, there is also a challenge related to the speed of such systems that are not good enough. With the development of computer science and computers as a whole, the development of AI is increasing. The first usage of AI was in the United States Department of defense in which the main usage of the AI system was collecting and analyzing large amounts of

data. In the 1990 year, AI was used in the game industry. This year is also a pivotal year for AI and its popularity because AI chess software showed that it can win against humans in the chess game. After usage in the game industry, AI shown great potential and give the basis for the normal functioning of different kinds of other technological innovations such as robots and all other automated systems. Because of the increase in popularity of AI, AI today is often used in different kinds of science where the possibility of analyzing large amounts of data becomes the basis for the decision-making process. One of the most popular ways of using AI is in healthcare where AI showed special applicability when it comes to diagnostical procedures. Furthermore, AI can be used in civil engineering, business, etc. However, with development of AI system there is also the development of the risk

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What is artificial intelligence in business management. Benefits of artificial intelligence in business pdf.

Volume 80, Part 3, 2023, Pages 2610-2613Author links open overlay panel, , , , , rights and contentArtificial intelligence usually refers to the artificial fabrication of human minds that can learn natural language, plan it, perceive it or process it [1]. It is the theory and development of computer systems that can generally carry out activities requiring human intelligence, such as visual perception, recognition of speech, decision-making and language translation [3]. Artificial intelligence is an IT industry that mostly works with machines which are built to operate like a human being.
John McCarthy (AI's dad) described AI as "the scientific and technical knowledge of developing smart computer programs in particular".Machine learning and profound learning are two of the most often utilized AI methods. These models learn from data and are used for predicting by individuals, firms and government organizations.
Machine learning models for the complexity and diversity of data in the food business are nowadays being developed [2], [3].In e-commerce and financial industries with a major aim to design standard, reliable product quality control methods and the search for new ways of reaching and serving customers, while at the same time maintaining low cost, has required deployed AI in order to achieve better customer experience, efficient management of the supply chain, improved operational efficiency, reduced mate size.This article presents applications of machine learning and artificial intelligence in e-commerce, business management and finance. Major applications include sales increase, profit maximization, sales prediction, inventory management, security, fraud detection and portfolio management.Section snippetsMachine learning is the most important AI technique. Relationship between machine learning and artificial intelligence is shown below in Fig. 1. This section contains prominent machine learning techniques.Machine learning (ML) [4] is a new area of data mining that allows a computer program to grow increasingly accurate in predicting outcomes without explicitly programming it. These ML techniques are often divided into two types: supervised and unsupervised learning techniques employ labeledApplications of Artificial Intelligence and Machine Learning in Business management, e-commerce and finance are discussed in this section [10], [11], [12], [13], [14], [15].Most of the E-commerce and financial web sites are using chatbots to improve customer satisfaction and provide enhanced services to customers. These chatbots are developed using artificial intelligence and machine learning techniques. They are capable of behaving like humans. These chatbots have learning capability;AI has been used in the e-commerce and financial industries to improve customer experience, efficient supply chain management, operational efficiency, and mate size, with the main goal of designing standard, reliable product quality control methods and the search for new ways of reaching and serving customers while keeping costs low. Deep learning and machine learning are two of the most popular AI techniques.

Major applications include sales increase, profit maximization, sales prediction, inventory management, security, fraud detection and portfolio management.Section snippetsMachine learning is the most important AI technique. Relationship between machine learning and artificial intelligence is shown below in Fig. 1. This section contains prominent machine learning techniques.Machine learning (ML) [4] is a new area of data mining that allows a computer program to grow increasingly accurate in predicting outcomes without explicitly programming it. These ML techniques are often divided into two types: supervised and unsupervised learning techniques employ labeledApplications of Artificial Intelligence and Machine Learning in Business management, e-commerce and finance are discussed in this section [10], [11], [12], [13], [14], [15].Most of the E-commerce and financial web sites are using chatbots to improve customer satisfaction and provide enhanced services to customers. These chatbots are developed using artificial intelligence and machine learning techniques. They are capable of behaving like humans. These chatbots have learning capability;AI has been used in the e-commerce and financial industries to improve customer experience, efficient supply chain management, operational efficiency, and mate size, with the main goal of designing standard, reliable product quality control methods and the search for new ways of reaching and serving customers while keeping costs low. Deep learning and machine learning are two of the most popular AI techniques.Harikumar Pallathadka: . : Conceptualization, Methodology. Edwin Hernan Ramirez-Asis: Data curation. Telmo Pablo Loli-Poma: . : Visualization, Investigation. Karthikeyan Kaliyaperumal: Writing - review & editing. Mohd Naved: . : Writing - original draft, Supervision.The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.There are more references available in the full text version of this article.This research is of great importance because it applies artificial intelligence methods, more specifically the Random Forest algorithm and the Anfis method to research the key factors that influence the success of students in vocational schools. Identifying these influencing factors is not only useful for improving curriculum and practice but also provides valuable guidance to help students master the material more effectively. The main goal of this research is to penetrate deeply into the core of the factors that influence the success of students in vocational schools, using two different methods. Each of the factors represented as input is mutually independent and does not affect each other, but each of them affects the output variable. The parameters considered as input variables are prior programming knowledge and pretest requirements. Then, by finding one factor that has the greatest influence, the factor of pre-exam obligation was investigated in more detail, using the Anfis method, which was broken down into several input parameters. These results emphasize the importance of the combination of the Random Forest algorithm and the ANFIS method in the statistical evaluation and assessment of student achievement in vocational schools. This study provides useful guidelines for improving education and practice in vocational schools to optimize educational outcomes.Biometric technology has drawn increasing attention and significance importance in recent years. In biometric security systems, personal identification and verification rely on their physical, behavioral, and biological characteristics. In this study, a new hand-based modality called dorsal finger creases is proposed for biometric classification. This modality is located on the dorsal surface of the finger, between the proximal knuckle and distal knuckle of the finger. However, it requires a specific feature extraction approach to extract the modality information on the selected region. Therefore, we have proposed a method for extracting the underlying features of the dorsal finger creases, called circular shift combination local binary pattern (CSC-LBP). The concept of CSC-LBP is to compute the local binary pattern within a 3 × 3 spatial window for each neighborhood pixel separately. Further, the concept of combination approach is applied on the individually computed eight LBP values to obtain the more discriminative feature vector. A multiclass support vector machine classifier is used for evaluating the effectiveness of the proposed CSC-LBP operator. Extensive experiments on self-collected datasets demonstrate the high classification accuracy and effectiveness of the proposed CSC-LBP method and confirm the usefulness of dorsal finger creases for personal recognition.The COVID-19 pandemic has significantly influenced the global economy, international travel, global supply chains, and how people interact, and subsequently affect globalization in coming years. In order to understand the impact of COVID-19 on globalization and provide potential guidance to policymakers, the present study predicted the globalization level of the world average and 14 specific countries in scenarios with and without COVID-19 based on a new Composite Indicator method which contains 15 indicators. Our results revealed that the world average globalization level is expected to decrease from 2017 to 2025 under the scenario without COVID-19 by −5.99%, while the decrease of globalization under the COVID-19 scenario is predicted to reach −4.76% in 2025. This finding implies that the impact of COVID-19 on globalization will not be as severe as expected in 2025. Nevertheless, the downward trend of globalization without COVID-19 is due to the decline of the Environmental indicators, whereas the decline under the COVID-19 scenario is attributed to Economic aspects (almost −50%). The impact of COVID-19 on globalization varies across individual countries. Among the countries investigated, COVID-19 had a positive impact on the globalization of Japan, Australia, the United States, the Russian Federation, Brazil, India and Togo. In contrast, the globalization in the United Kingdom, Switzerland, Qatar, Egypt, China and Gabon are expected to decrease. The variation of impact induced by COVID-19 on those countries is attributed to the weighting of economic, environmental and political aspects of globalization is different across these countries. Our results can help governments take suitable measures to balance economic, environmental and political policies, which may better support their decision-making.The e-commerce industry has seen significant growth over the past decade as it focuses on convenience and accessibility, leading to a surge in online shopping with more and more consumers opting for it. At the same time, the e-commerce industry faces various challenges. In order to fully harness the potential of this industry, it is important to identify its benefits and challenges and focus on pathways to mitigate the challenges and harness its growth. This study utilizes the Delphi approach and involves experts from the e-commerce domain to get their opinions to identify the top ten benefits, challenges, and pathways for the e-commerce industry. Analytic Hierarchy Process (AHP) and Criteria Importance Through Intercriteria Correlation (CRITIC) methods are subsequently, employed to prioritize the identified factors. Results of the study revealed that factors such as affordable advertising & marketing; availability and product variety; and Global reachability are the most important benefits, while technological upgradation; returns or refunds; and counterfeit products posed the greatest challenges for the industry. Government compliance check; better relationship with delivery partners; and strong data privacy and online security policies emerged as the best pathways. This study also provides valuable insights to businesses, policymakers, and researchers in the e-commerce industry on how to navigate the benefits, challenges, and pathways of this rapidly growing sector.View all citing articles on ScopusView full text