Architecture
Image Studies

Vol.6, Issue 4, pp.516-531, 2026
DOI: https://doi.org/10.62754/ais.v6i4.626

https://journals.ap2.pt/index.php/ais/index

Effects of Artificial Intelligence on People and Organization

Olalekan Paul Albert[1]

Abstract

Artificial intelligence is one of the widely used digital technology, which has laid the foundations for digital transformation in companies and has changed the traditional landscape of businesses. AI is a broad field, which consists of several other technologies like machine learning, deep learning, artificial neural networks, etc. and enables the people or organizations to rethink and re-establish their innovative solutions and existing decision-making processes. On the other hand, AI is being used in several domains such as healthcare, business, manufacturing, education, etc. providing numerous societal and economic benefits to the individuals. The organizations that use AI-based solutions. AI-empowered solutions help business organisations to gain a competitive edge in the market by improving their service quality and customer satisfaction. AI also helps the organizations in resolving technical, developmental and other issues related to service delivery as well as providing recommendations to protect human and business values. To cover all these aspects related to AI, the current study is emphasized by exploring its effects on people and organizations. The main reason behind conducting this study is to establish a deep understanding of the subject matter so that companies and individuals can have a deep understanding of the dark side of AI involving over the years. To achieve the objectives of the current research, a theoretical examination is performed, in which a review-based analysis is conducted with the help of several secondary sources of information. For carrying out this examination in an effective manner, various digital repositories such as MDPI, research gate, science direct, UNSW Library etc. are used, which include various relevant academic sources of information. Using a keyword-based approach, the most relevant studies required to perform this task are collected and reviewed thematically. As per the reviewed papers, it is found that AI's dark sides are either unnoticed or overlooked because of the overwhelmed benefits. However, the negative impacts on individuals and organizations cannot be ignored. It found that the AI involved has drastically replaced the humans in many organizations which led to the situation of unemployment, made the humans lazy and inactive, over-dependency which decreased interpersonal interaction and social support from the use of electronic performance monitoring systems (Carayon, 1993). Meanwhile, the psychological effects on individuals such as computer anxiety (Heinssen et al., 1987) digitization of communications introduced new security threats as data transmitted on electronic devices or networks becomes susceptible to third-party interception and breaches, sometimes unnoticed.Also, the harmfulness of technostress and IT on IT users have become more evident since IT has transmuted into a major component of humans' job routines and private lives (Henri Pirkkalainen, Markus Salo. 2016).

Introduction

Artificial intelligence is one of the hottest research topics as well as a revolutionary in the technological world. It is undeniable that AI offers various benefits such as automation of tasks, reduction in human errors, including automation, Natural Language Processing, self- driving car, robotics, Machine Learning, and vision which it is used by various organizations (Tai, 2020). In this era of technological enhancement, automation has become a widely accepted concept which helps in increasing the productivity at lower cost, better quality of product, effective use of materials, reduced factory time and improved safety. According to McKinsey, AI and automation play a significant role in contributing towards the overall growth of economy (Manyika and Sneader, 2018). Artificial intelligence is considered the latest technological innovation that provides new opportunities and brings notable changes in organizations, businesses, and the overall economic system. Artificial Intelligence is expected to enhance digital technologies from the two-dimensional outlook to the three-dimensional

[1] University of New South Wale Sydney, SW, 2052 +6293851000

outlook. In the research study, by reviewing various research articles it is found that Artificial Intelligence is known as the simulation of human intelligence through machines, in which the machines and computers are programmed to think and mimic human beings. Artificial Intelligence is also known as any type of computer and machine software that performs various activities like humans including learning, problem-solving, planning, decision making and many more. AI technology helps in processing and analysing the data to present it to human users. Several broad areas like computer vision, text analysis, speech recognition and game playing use artificial intelligence through deep learning algorithms. Artificial intelligence is also known as a supporting tool in various business activities and most organizations are adopting AI in their businesses to experience the next level of technological development in their organizations. In a study, statistics related to the adoption of chatbots in business firms for various purposes such as reduction of operational costs increased adoption of chatbots than the mobile applications, (figure 1) etc.

It is undeniable that the implementation of AI has various benefits in relation to people and organizations whereas 24/7 support, improved workplace efficiency, accurate and fast diagnostics, enhanced tailoring, improved quality and reduced human errors are some of the benefits of AI in association with people and organization. However, there are some of the drawbacks too which are required to be addressed for which the current research study is conducted. It helps in elaborating detailed information in association with negative impact of AI on organizations and people. It has been widely used in businesses and leads to various direct and indirect negative impacts on people, society, and organizations in many ways. The problem to be considered in the current study is related to the analysis of the negative impacts of AI on human lives and business organizations. AI leads to various negative impacts such as employment due to autonomous working of machines, higher costs on installing, maintaining, and updating hardware and software, limited thinking, and privacy and safety issues due to transparency of data and algorithms (kumar, 2019). As per a study conducted by Accenture, it has been reported that AI can lead to some negative impacts for individuals such as technostress which can lead to poor job engagement or even burnout (Srivastava et al., 2015) and unemployment due to loss of jobs to machines. In a study, it has been reported that over 7 million jobs in the UK are expected to be replaced by implementing AI solutions by the year 2017-2037. In addition, AI can be used for tracking and monitoring people in real-time, which may affect the privacy and security of users (Hyperight, 2021). However, it leads to various concerns related to the security and privacy of users. Organizations can face various challenges in implementing AI-enabled solutions such as data security and privacy, biasedness, limited implementation, more transparency of data and algorithms, etc.

All these challenges may become a hurdle in its adoption and implementation in business use cases. In the current study, all these major aspects and multifaceted implications of implementing AI in organizations as well as in real life will be discussed in a detail and due to these challenges, companies and individuals are facing certain issues in adopting such digital solutions.

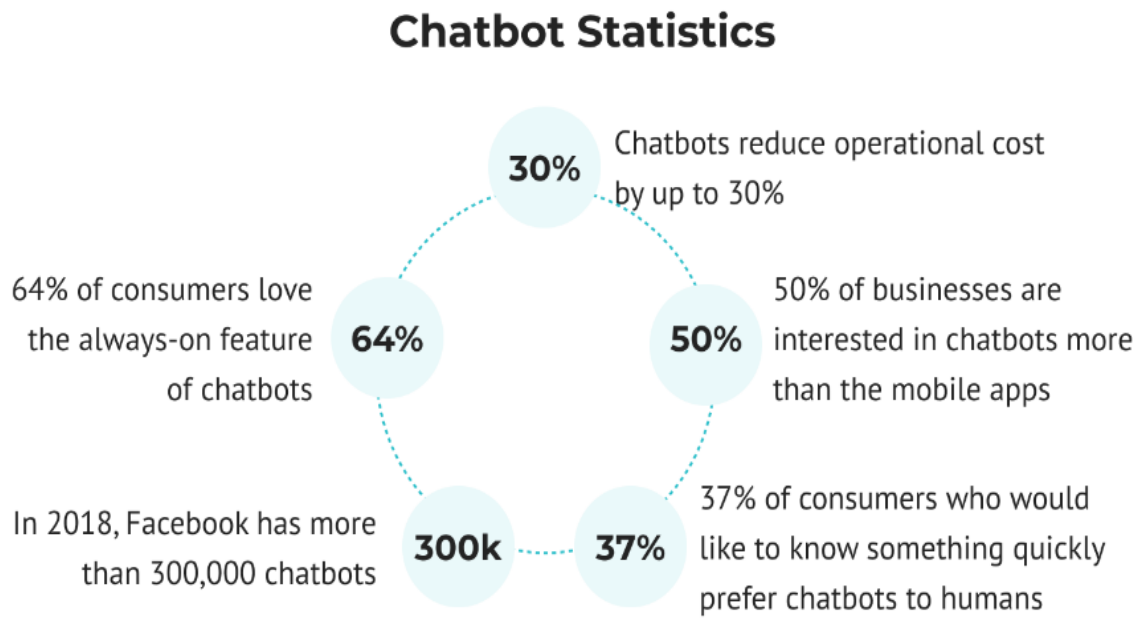

Figure 1: Statistics Related to Chabot Adoption

Background

Artificial Intelligence Overview

Artificial intelligence enables machines and robots to mimic human intelligence such as learning and problem solving to complete a task. Artificial intelligence is also known as machine intelligence or industrial revolution 4.0. Artificial intelligence facilitates the ability to imitate the intelligence of the human brain and perform complex tasks (Alaa, 2021). Machine intelligence and the human brain learns and analyzes data in different ways. Human brain perceives information in the form of patterns whereas the machines perceive information in the form of a set of rules and data. Also, the human brain can recognize an object even if its few parts are missing whereas it is difficult for machines to recognize incomplete objects. A major area of AI is to develop computer functions that are interlinked with human intelligence which may include learning, reasoning and problem solving. There are numerous fields that can contribute to the development of intelligent systems such as psychology, computer science, sociology, mathematics, biology, philosophy and neuroscience (Dcpehvpm, 2022). There are several traits of AI such as capability to make automation, predictions, adaptability, decision making and continuous learning (Mohammed, 2019). Mainly, there are four components of artificial intelligence which are expert systems, Heuristic problem solving, natural language processing and vision. Expert systems depend on large databases which store specialized knowledge of different domains. Furthermore, there are numerous applications of AI in distinct fields which may include medical diagnosis, troubleshooting systems, forecasting, electronics, and diagnosis of locomotion systems, science and space. As well as it can be used for performing experiments in biology, chemistry, and molecular genetics and to identify the structure of chemical compounds (Singh, Mishra & Sagar, 2013). In addition to this, AI has dominance in following fields- gaming, natural language processing, expert systems, vision systems, speech recognition, handwriting recognition and robotics (Dcpehvpm, 2022). AI is categorized into two branches that are applied AI and generalized AI. Applied AI branch is based on the principles of stimulation of human thought processes to perform a specific task, whereas, generalized AI is based on development of machine intelligence systems that can help in making decisions and predictions like a real human (Reddy Nadikattu, 2016). Applied AI is also called weak AI which is normally used to perform narrow tasks and known as narrow AI. Narrow AI is being used in systems like face recognition, personal assistants and self-driving cars etc. Generalized AI is also known as artificial general intelligence which has capability to learn any intelligent human task. Weak AI can outperform humans in various tasks like equation solving or playing chess games etc. whereas

AGI can outperform humans in every cognitive task. Apart from this, there is one more type of AI which is strong AI which is programmed like an actual human brain, and it can also have perceptions, intelligence, and cognitive capacities (Tai, 2020).

Role of Artificial Intelligence in Human Society

In today's era of technology, humans are surrounded by artificial intelligence enabled machines which may include IoT devices, virtual personal assistants, machine translation, image analytics, graph analytics, social network analytics, audio analytics and many other AI-based devices. The emergence of AI has tremendously impacted society in a positive aspect as well as some challenges and threats are also arising day by day. It is providing facilities in the healthcare industry, agriculture sector, weather forecasting, natural disaster prediction and enhancement of work efficiency (K. Chattopadhyay & Majumdar, 2020). In the agriculture sector, artificial intelligence can be used for proximity sensing, harvesting, airborne surveillance, advisory services, pest and weed control and remote sensing etc. In this context, (Naidu, 2019) described that Microsoft is providing advisory services to the farmers of Andhra Pradesh regarding usage of fertilizer, sowing seeds and weed control and it has resulted in 30% higher yield per hectare on average crop production than previous year. In addition to this, it has been analyzed that artificial intelligence will create more job opportunities by 2025. Accenture has predicted that artificial intelligence can facilitate increased economic growth by 2035. Apart from this, AI technology helps in the diagnosis of cancer and acute abdominal pain. Further, it facilitates diagnosis and treatment for diseases, as well as AI technology contributes in the research of medicine and examination of new phenomena. According to a research survey, (Naidu, 2019) observed that 48% of the experts stated that AI will lead to unemployment whereas 52% of experts stated that AI technology will create more job opportunities by2025. Further, it has been analyzed that work done by machine will increase from 25% to 50% by 2025. Apart from this, in the industrial sector there are major five key elements of artificial intelligence such as big data technology, cyber or cloud technology, evidence, domain knowhow and analytics technology. Artificial intelligence has been transforming and its applications are evolving day by day.

Artificial intelligence plays a vital role in the digital transformation of a country. It facilitates numerous services to the modern society such as self-parking, self-driving cars, surveillance, chatbots for translation purposes, digital assistants, solving crimes and healthcare facilities (Reddy Nadikattu, 2016). AI is transforming our surroundings that can lead to both positive and negative impacts on society. The major positive influence of AI is its advancement in the healthcare to diagnose disease and medicinal research. AI can enhance the efficiency of the workplace and it can take over dangerous tasks and repetitive tasks. Further, it can lead to innovation of new technologies and devices which can increase productivity. Apart from this, AI can also cause political, economic, legal, and regulatory implications in society. Humans are generating tremendous amounts of data every day from social media platforms and mobile devices which are further used for training models and algorithms through which user privacy is being compromised (Marr, 2022). Along with this, there are numerous legal challenges of artificial intelligence- data privacy, security threats, reduced employment, and cyber-attacks (K. Chattopadhyay & Majumdar, 2020). In a research, (Tai, 2020) highlighted negative impacts of AI on human society which are- (i) AI can disrupt the social interactions in human community because there will be no need for people to interact with one another when AI can fulfill all of their needs. (ii) AI can widen the gap between rich and poor people which will lead to social inequality or wealth inequality. (iii) AI machinery can take over human tasks that can lead to mass unemployment. Also, there are many positive impacts of AI on society especially in the healthcare sector which may include fast and accurate diagnostics, socially therapeutic robots, reduced errors, artificial intelligence based surgical contribution, improved radiology, and virtual presence.

Influence of Artificial Intelligence on Organizations

In business organizations, artificial intelligence facilitates numerous opportunities and efficient solutions to the organizations. But most of the business organizations are still relying on the human workforce for the development of products and services. However, implementation of artificial intelligence technologies can help to generate more revenue and complete tasks efficiently. Advent of artificial intelligence in business organizations has changed the process of decision making. The process of decision making consists of following steps- identification of solutions, choosing the alternatives, estimating the consequences of the solutions and comparing the efficiency and accuracy of each solution and their consequences. Both human decisions making, and AI based decision making has its own pros and cons. In this context, (Shrestha, Ben-Menahem & von Krogh, 2019) proposed a framework which combines both human and AI decision making. It consists of three structures which

are- full human to AI delegation: aggregated human-AI decision making and hybrid- human-to-AI and AI-to-human-sequential decision making. This integration of human and AI decision making can be advantageous for the organizations to make better and efficient decisions. In addition to this, artificial intelligence and robotics has influenced the hospitality industry to a great extent. This advanced technology has provided a personalized and convenient environment to the lodging guests of hotels as well as it facilitates AI-based automated solutions to the hoteliers and workers (Li, Bonn & Ye, 2019). It has been analyzed that business organizations are no longer seen as industrial aspects but from the perspective of knowledge. Knowledge is an integral part of market organizations which helps the organization to identify what products and services they can offer to attract the consumers as well as what are the consumer requirements (Paschen, Kietzmann & Kietzmann, 2019).

(Makridakis, 2017) has performed analysis on the predictions made in 1995, when the digital revolution was still progressing, in relevance to technological advancement. As well as examined the process of industrial revolution to digital revolution to AI revolution. The AI has reshaped the habits of humans in terms of performing day-to-day tasks relevant to work, home, shopping, and entertainment. Above we discussed in the role of artificial intelligence in human society that AI is being used in smart cars, speech-based assistants, face recognition systems, drones, voice recognition systems and healthcare equipment, adoption of AI based technology has been increased in business organizations.

it is found that many organizations are using AI among various sectors and the global market revenue of AI is almost half a trillion US dollars and is forecasted to grow further ("Artificial Intelligence market size/revenue comparisons 2021 | Statista", 2022). As per the report by IBM (figure 2), it is found that the AI adoption rate is continuously growing and it is found to be 35 per cent, which is almost four points more compared to the previous year and almost 45 per cent of the companies are exploring AI to use it in their business operations. It is further explored that almost 7500 businesses across the globe are using Artificial Intelligence in their business operations. In addition to this, it is also explored that the larger companies are using AI technology in their business operations and the smaller companies are still exploring the AI technology and not pursuing its use of the same. The below figure shows the deployed and exploration rate of AI in several countries ("IBM Global AI Adoption Index 2022", 2022).

AI is being used to perform numerous tasks in an organization which may include financial transactions, analytics, selection of applicants based on their skills for organizational positions, advisory purposes, tracking criminal activities and forecasting the technical development. Mainly, there are four key attributes that led to rapid adoption of artificial intelligence which are- (i) Open license of advanced technologies such as Google's TensorFlow, Microsoft computational network toolkit has increases their adoption; (ii) increased efficiency of task relevant data storing which has enabled machines to perform automated tasks; (iii) decreased hardware cost and (iv) advancement of science and technology in AI methods such as recurrent neural networks, long short-term memory units and convolutional neural network (von Krogh, 2018). In the last decade, there has been significant advancement due to the multilayered neural networks in distinct areas which includes machine translation, image recognition and speech recognition (Agrawal, Gans & Goldfarb, 2019). Apart from this, artificial intelligence has contributed to the innovation of new products and services which has helped many business organizations to generate more revenue and make investments in technological developments. Also, it is helping in enhancing the economies of countries, especially the developing countries where new start-ups are being financially supported by business giants. Along with this, developed countries are deploying their subsidiaries in the developing countries which generates more job opportunities for humans and helps in stabilizing the economies of developing countries (Agrawal, Gans & Goldfarb, 2019). This tremendous transformation and advancement caused by digitalization, science and technology and artificial intelligence has facilitated abundant services that has made human lives convenient and comfortable, but it can lead to certain implications and uncertainties to the society and organizations in terms of privacy and other ethical concerns.

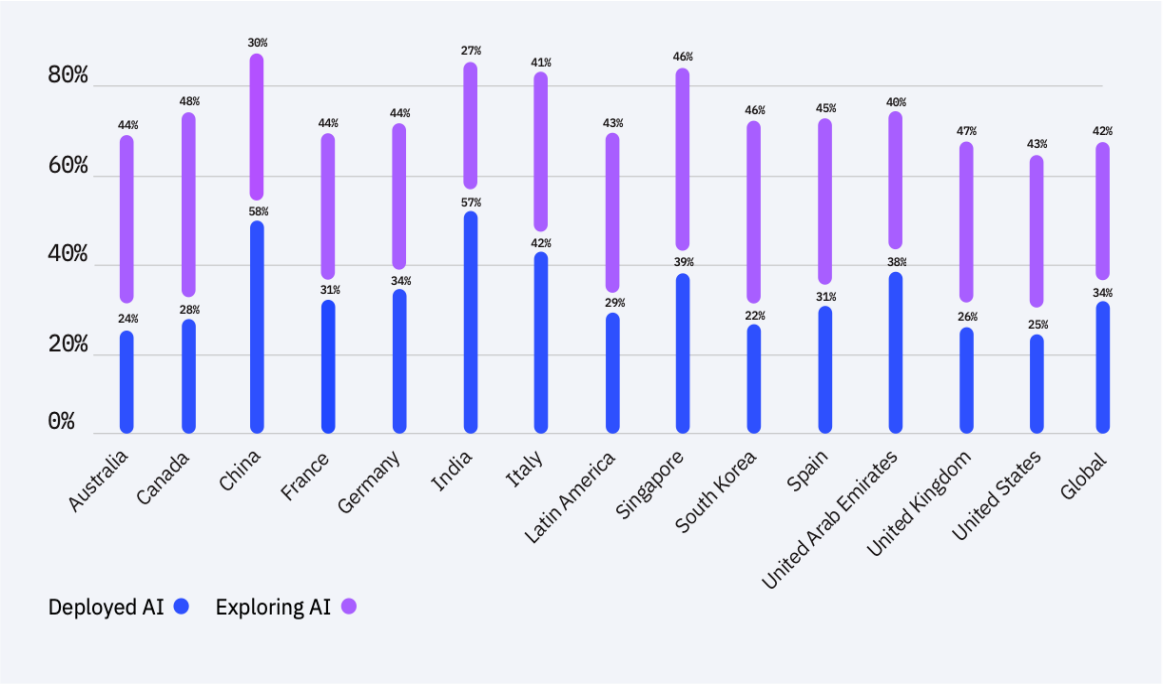

Figure 2: An Adoption Rate of AI In Different Countries

Source: ("IBM Global AI Adoption Index 2022", 2022).

Ethical Concerns of Artificial Intelligence

Main reason behind the advancement of artificial intelligence is the abundance and availability of data. In today's era of technology, a human generates data in bulky units which is further used by developers and scientists for training the AI-based algorithms to learn new patterns and explore human behavior. This data is useful for the evolution of AI-based algorithms, but it is a concern of human privacy. AI has several capabilities which provide numerous ethical benefits to many domains such as finance, healthcare, manufacturing and education (Alaa, 2021). As well as there are numerous ethical concerns and issues interlinked with artificial intelligence. In this reference, (Stahl, 2021) identified the ethical issues of artificial intelligence which includes the following- lack of trust, lack of quality data, innovation cost, harmful to physical integrity, security issues, negative influence on human health, negative influence to the environment and living beings, unemployment, lack of privacy and transparency, bias and discrimination, social inequality, reduced human interaction and lack to access and freedom to information, psychology effects on individual such as computer anxiety(Heinssen et al.,1987), technostress, intellectual privacy, identity theft, ergonomics- related injuries, automation-induced unemployment and software-related accidents(King, 1996) etc. All these issues pose a lot of uncertainties and risks to humanity, society, developers and users. So, it is necessary to frame ethical rules, guidelines and principles for the regulation of AI. The ethics of AI is focused on the ethics of artificial intelligence and advanced technology. Ethical AI is categorized into two parts- roboethics and machine ethics. Roboethics deals with the moral ethics of humans during the designing and developing stage that includes maintenance of data privacy and transparency. Whereas machine ethics are concerned with the moral ethics of artificial moral agents (Siau & Wang, 2020). Furthermore, it has been determined that there are different concerns with the distinct types of artificial intelligence. In narrow AI, there are specific issues arising in relevance with machine learning such as reliability, transparency, safety, privacy and data protection. In general, AI metaphysical questions based in abstract reasoning are emerging which may include Awakening of AI, super-intelligence, singularity, changes in human nature and machine consciousness. Whereas strong AI leads to the questions of living in the digital world and many ethical concerns regarding justice and fairness, economic issues, freedom uncertainty issues and broader social issues (Carsten Stahl, 2022). Apart from this, there are various features that

lead to emergence of ethical issues which includes responsibility, autonomy, intentionality, transparency, data security and privacy. Also, there are some human factors that are responsible for the rise of ethical issues such as accountability, ethical standards and human right laws. These ethical issues can severely influence the society which may include accessibility to systems, products and services to only specific people of society; automation of technology leads to unemployment; and unethical behavior of AI leads to the violation of civil rights and democracy (Siau & Wang, 2020). Decreases interpersonal interation and social support from use of electronic performance monitoring systems (Carayon,1987). Risks and ethical issues of artificial intelligence cannot be ignored even if its probability of its occurrence is extremely low. “Awakening” of AI can have a devastating impact on human civilization, environment and can lead to the end of human supremacy where machines developed by humans are smarter than the humans (Makridakis, 2017). Apart from this, the advocates for the ethics of AI states that AI should be responsible, and developers should consider transparency, fairness, sustainability, accountability and privacy as the crucial components of the design of AI. Along with this, it is necessary to explore the nature of artificial intelligence and how AI algorithms work for a better understanding of the actual concerns (Alaa, 2021). Artificial intelligence can be trained or educated to be ethical AI in three ways- implicit ethical agents, explicit ethical agents and full ethical agents. In training AI, the implicit ethical agent refers to compelling the machine from doing the actions that can lead to unethical outcomes. Explicit ethical agents refer to describing explicitly to the machine about what actions are allowed and what are forbidden. And full ethical agents refer to the machines which have their own consciousness, intentions and free-will like humans (Siau & Wang, 2020). Some of the issues and concerns are involved in most of the machine such as privacy, data security and threats. But it is quite a challenging and nearly impossible task to make a machine ethical. In the Current AI, there are only a few ethical issues which are not present or seen in the design of cars and power plants. But we cannot avoid them due to enhancement and evolution of artificial intelligence and it is predictable that we will encounter them soon (Bostrom & Yudkowsky, 2020).

Research Methodology

The primary aim of this research study is to elaborate different effects of Artificial Intelligence on organization and people. Also, it helps in the identification of certain factors that play a key role in the adoption of Artificial Intelligence. In other to successfully accomplishing the current research study, there is a requirement of adopting an appropriate methodology which illustrates the main direction for conducting this research study, Herein, qualitative research methodology is selected which is further followed with a literature-based analysis. The primary motive behind the selection of this methodology is to elaborate the beliefs, opinions, experiences, and expectations of existing researchers regarding a particular research study. To perform literature-based analysis, secondary data is collected from various secondary data sources which are available online on digital repositories. In addition to this, to collect the accurate information, an appropriate method or strategy is selected such as keyword-based strategy. Moreover, to successfully analysed the collected data, so that efficient solution could be provided to identified research problem, thematic analysis is used. In addition to this, to sequentially complete the research in systematic manner, different steps are followed which are described as follows:

- The initial step is to identify and defined the research problems and consider research topic. Meanwhile, existing research articles, journals, government publications and news articles are addressed, determining the main problem faced by organizations and individuals in a digitalized world in context with the latest technologies.
- Upon identification of research problem, research aims, objectives and questions will be formulated to elaborate the primary goal and action to achieve that goal in an efficient and effective manner.
- The next step is to perform literature review in which different articles and journals are reviewed to understand the work of existing researchers on a particular topic. Also, to help in the demonstration of research gap. This research gap further helps in successfully completing the research in an efficient and effective manner.
- The next step is to identify and define the research methodology to provide a structural view for providing a solution to the defined research problem. Meanwhile, appropriate methodology from qualitative, mixed and quantitative methodology is selected, different data collection and analysis methods also highlighted.

- Following the selected methodology, collection of data is initiated whereas in this current research study, secondary data is collected from research articles, journals and other relevant sources. This data is further analysed using selected research methodology.
- After analysing the collected data, the results are elaborate to ensure that all the defined research objectives are achieved or not.
- The last step is to derive an appropriate conclusion to ensure that the accurate solution is provided in context with defined research problem. In addition, recommendations are highlighted for the researchers interested in conducting research on similar type of the research domain.
- These steps when followed sequentially help in answering all the defined research questions to ensure that appropriate solution is provided to defined research problem.

Data Collection and Analysis

Secondary data is collected in this research study which is available in the form of secondary data sources including research articles, peer reviewed papers, scholarly journals, conference papers, governmental publications, official reports, documents, and other official websites. Most of the information regarding the effects of Artificial Intelligence on people and organization are obtained from secondary data sources present on online digital repositories such as ScienceDirect, SpringgerLink, Mdpi, Emerald, Taylor & Francis and others. To collect this data, keyword-based strategy is used in which different keywords based on research topic are selected and explored for gathering accurate information. Some of the keywords used in this research study include “Impact of AI on organizations and people”, “issues faced by organizations while implementing AI”, “challenges by using AI”, “Artificial Intelligence and its impact” and various others. The information collected with the use of these keywords help in achieving all the defined research objectives and demonstrate the areas where AI is used and highlight the issues faced due to the implementation of AI within the organization. Data analysis is further performed to ensure that only accurate and reliable information is used for obtaining results in this research study after data collection. The information collected from these keywords help in gaining deep insights about the impact of AI on organization, society, and individuals. To analyze this collected data, thematic analysis is used which allow the identification of different patterns and themes which may include, “Artificial Intelligence overview”, “Role of Artificial Intelligence in human society”, “Influence of Artificial Intelligence on organization” and “Ethical concerns of artificial Intelligence”.

Findings and Analysis

The latest technological development and introduction of innovations have changed the scenario of organizations to a large extent. The emergence of industry 4.0 introduces several technologies like cloud computing, big data analytics, data science, the Internet of Things (IoT), and artificial intelligence. Artificial intelligence is considered the latest technological innovation that provides new opportunities and brings notable changes in organizations, businesses, and the overall economic system. Artificial Intelligence is expected to enhance digital technologies from the two-dimensional outlook to the three-dimensional outlook. In the research study, by reviewing various research articles it is found that Artificial Intelligence is known as the simulation of human intelligence through machines, in which the machines and computers are programmed to think and mimic human beings. Artificial Intelligence is also known as any type of computer and machine software that performs various activities like humans including learning, problem-solving, planning, decision making and many more. AI technology helps in processing and analysing the data to present it to human users. Several broad areas like computer vision, text analysis, speech recognition and game playing use artificial intelligence through deep learning algorithms. Artificial intelligence is also known as a supporting tool in various business activities and many organizations are adopting AI in their businesses to experience the next level of technological development in their organizations.

Areas where AI is implemented

AI is a vast concept that is being implemented in various areas such as agriculture and farming, manufacturing and production, retail, shopping, livestock and inventory management, virtual assistants, sports analytics, and autonomous flying to enhance various involved operations and processes which further enhances the overall productivity. It has been demonstrated that AI has transformed the way various sectors or areas perform their operations as well as it is defined as the most relevant data venture to be used in the future by 61% of the businesspeople in the United States (Surya, 2017). The use of AI-enabled systems has reduced the work of employees as machines replace human beings for

repetitive tasks so that more attention is provided to the important and necessary activities or tasks. it is explored that 50 per cent of the respondents agreed that their companies are using AI in one and the other business functions and the AI technology is adopted more in product or service development and service-operation functions. Companies are using AI in several business functions like IT, customer services, sales and marketing, R&D, Manufacturing, Human resources and many more based on their industry type (Balakrishnan, et al., 2020). It is explored that the insurance companies and the consumer-packaged goods companies are using AI for customer service-based functions and automotive and industrial manufacturing are using the same technology in the R & D department. Along with this, it is identified that companies are using AI technology in service operations, product and service development and sales and marketing (Figure 4).

Moreover, there are several large companies like IBM, Apple, Amazon, JP Morgan, and many more that are using AI technology for their general functions. Artificial Intelligence technology is being used by the retail giant Amazon to offer consumer and business-oriented AI products and services. The company is using Lex, Polly and a business version of Alexa which helps in speech recognition and image recognition services. Along with Amazon, Alibaba is using AI in understanding the customer preferences and to predict what customers want. Alibaba with the help of natural language processing can generate the description of the product automatically on the site for the convenience of the customers. Apart from this, the FaceID feature of Apple gadgets the AirPods and HomePod smart speakers are also AI enabled and the 'SIRI' feature of Apple is the best-known example of the AI technology by Apple gadgets (Painoli & Datrika, 2021). Additionally, there are many fashion companies which are using AI in designing their products and Amazon fashion is the best example of this, the company is using machine algorithms to design clothing by analysing the bunch of images to copy the style which helps in the decision-making process to customers. The same style is then applied to many new items with the help of the latest technology. Alongside, Nike is using the same technology as 'foot scanning application', this feature helps the customers to measure the full shape of customer's feet in just a second and later the customer with the help of AI can fit each Nike shoe style as per their size and can shop better product by sitting at home (Csanák, 2020).

Applications of AI technology has also been used in the food industry as well. Most of the food and agriculture companies faced the challenge of irregular availability of material, and manual sorting which resulted in the huge loss to food processing companies. AI intelligence is helping these companies through sensor-based optical sorting, along with the use of cameras, lasers and machine learning to enhance the efficiency.

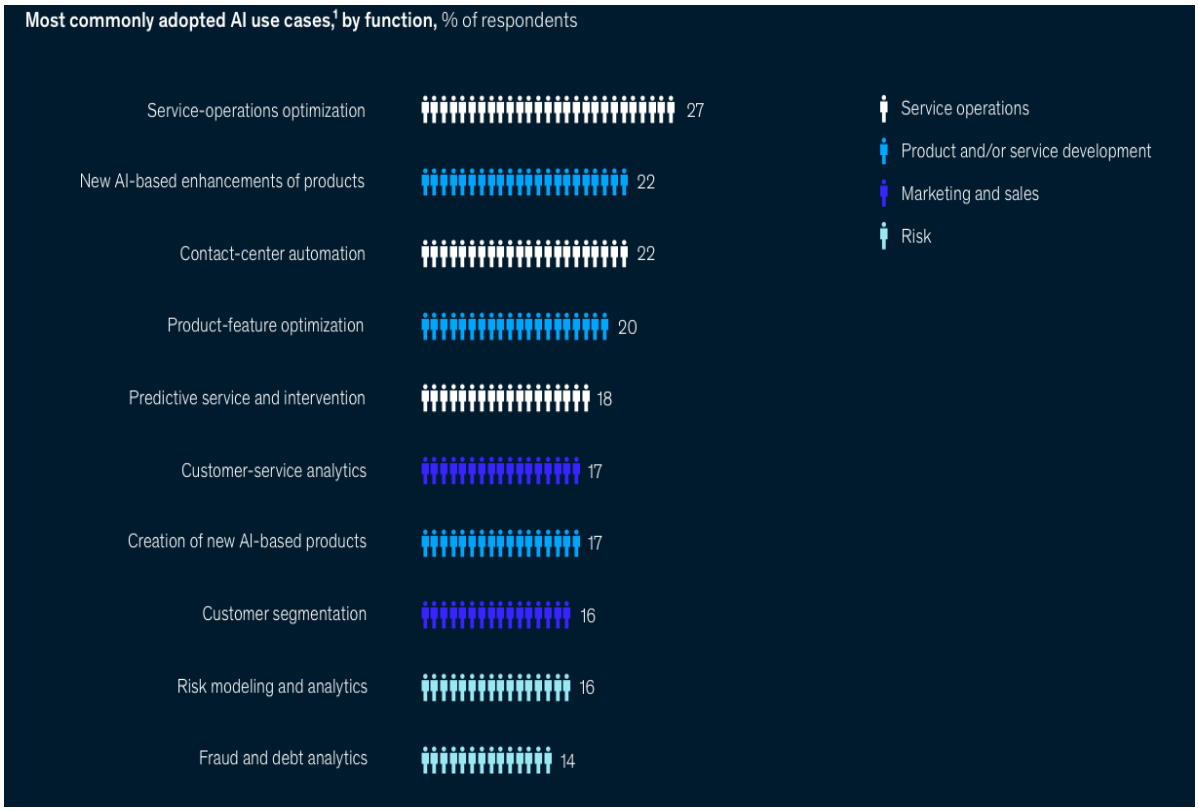

Figure 3: Functions of AI

Sources: (Balakrishnan, et al., 2020).

Challenges and Issues Faced by Organizations with the Implementation Of AI

Artificial Intelligence has been used immensely in this era of technology with a motive to improve various day-to-day operations of individuals and organizations. While conducting this research, it has been analyzed that various researchers have performed research highlighting the benefits and advantages of AI in the organization and very few have determined the challenges faced by the organizations with the same. Through this research study, it has been demonstrated that there are various challenges faced by the organization while implementing Artificial Intelligence which include resistance to change, data privacy and cybersecurity concerns, job insecurity among employees and lack of appropriate skills. The figure below illustrates the results of a survey conducted by (Thormundsson, 2022), to identify the perceptions of individuals from all over the world for not adopting AI technology. It has been analyzed that 64% share of respondents believe that lack of appropriate skills and talent within the organization is the main cause of not using AI in organizations.

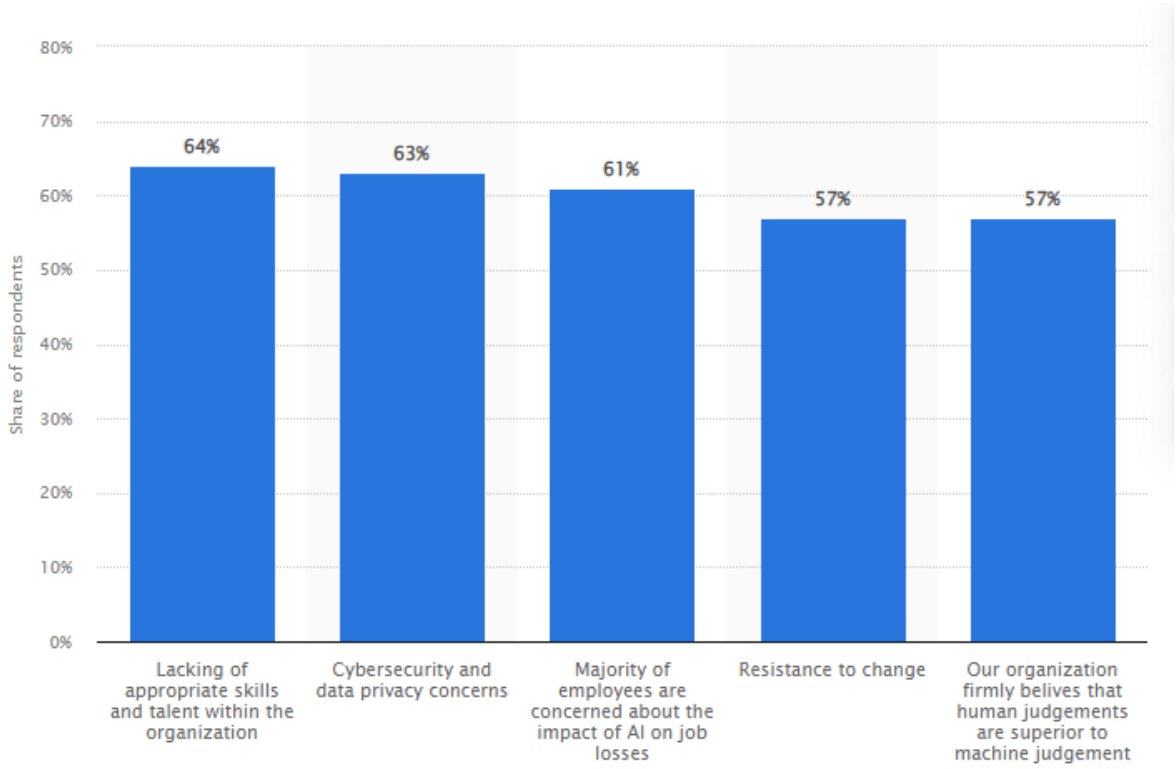

Figure 4: AI Challenges

Additionally, development of long- term strategy to integrate AI, building of talented and skilled team of AI researchers as well as developers, overhauling of the existing systems with an aim of incorporating Artificial Intelligence and getting organizations wide buy-in are some of the major challenges to AI adoption. It has been analyzed that finding the right talent having specific set of knowledge, attributes and skills are very difficult tasks. Also, concluded that majority of the AI talent pool is engaged with international corporations because they are the one who can financially afford AI talent; therefore, remaining organization are not able to attract them easily. Along with this, to use advance AI based application within an organization, require various new hardware and supporting platforms leading that will overhaul all the existing systems, strategies, and procedures. Meanwhile, huge investment is required for the adoption of AI in different business operations. Apart from this, (Wirtz, Weyerer and Geyer, 2018) presented four main dimensions of AI challenges such as: AI law and regulation, AI society, AI technology implementation and AI ethics as shown in the below figure.

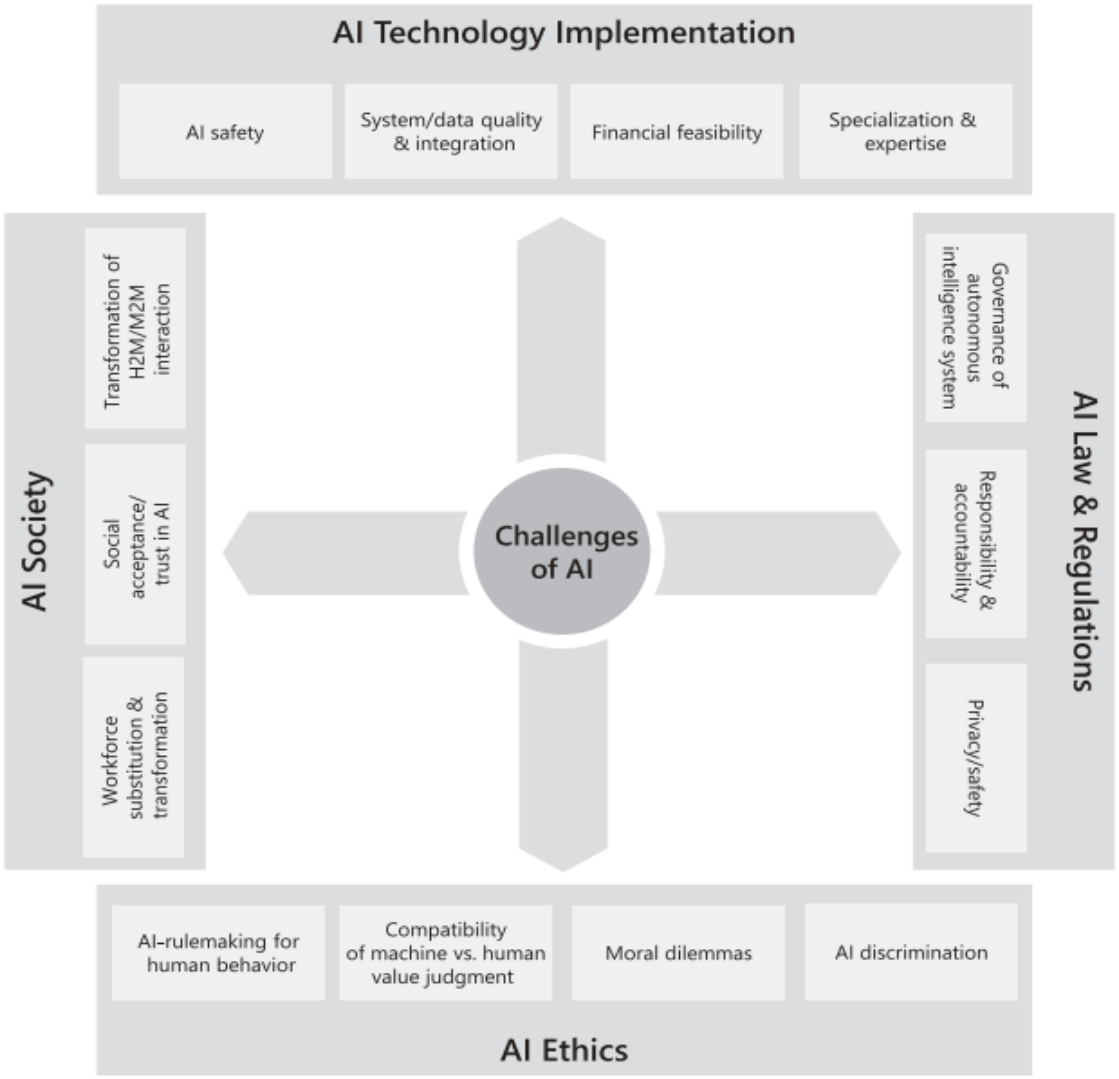

Figure 5: AI Challenges Model

AI technology implementation for public sector is associated with various challenges including AI safety, financial feasibility, system/ data quality & integration and expertise & specialization. These challenges affect the overall productivity of using AI technology in an organization as well as reduces its probability of being implemented by the businesses in the future.

Challenges and Issues Faced by People with the Implementation of AI

Through the conducted research study, it has also been demonstrated that AI is a technology that offers an efficient tool for solving various complex problems (Reim, Åström and Eriksson, 2020). Despite this, there are certain challenges too which come along such as transparency, analog processes, lack of trust for AI among employees and misunderstandings of AI. As AI is an advanced technology that is used by various organizations for making business operations easier and faster, but it also generates insecurity among the employees such as fear of losing their jobs. This further reduces communication and transparency which results in a lack of agility, responsiveness to changing conditions and reduced motivation. Moreover, it has been analyzed that there are various ethical issues identified concerning the impact of AI on the people such as technostress which are some stresses that associated with the use of AI technology and the need to know the reasons why individuals experience technostress and showed that technostress manifests its effects in the form of increased role overload, role conflict, exhaustion and burnout and decreased job satisfaction (Tarafdar et al., 2007; Ragu- Nathan et al., 2008; Ayyagari et al., 2011). It was further analysed that Its addiction over long period of time can be harmful to user and possible technostress which can be accumulated over the period because of the

extensive use of technology where user find it difficult to discontinue particular IS which can lead to poor job engagement or even burnout (Srivastava et al., 2015).

Furthermore, it can be divided into certain categories, including issues arising from Machine Learning which are further divided into transparency, privacy and data protection, safety, and reliability, living in digit world (economic issues, freedom, uncertainty issues, justice and fairness and broader societal issues) and metaphysical issues (Stahl, 2021). These issues further highlighted different issues that affect the lives of individuals such as lack of privacy, lack of quality data, misuse of personal data, harm to physical integrity, security problems, unfairness, lack of informed consent, loss of freedom and various others. Through this, it can be demonstrated that the implementation of AI has negative impacts on organizations and people.

Conclusion

The current research study is based upon the identification of different challenges faced by implementing AI technology in organizations and people to complete this research study, qualitative research methodology is implemented. With the help of this method, in-depth knowledge is obtained regarding the perceptions and behaviour of researchers regarding the considered topic. To do so, different research articles, academic journals and papers are addressed to collect valuable information for achieving the designed research objectives. From the above results, it has been determined that the implementation of AI is not an easy task and generates various problems or challenges in context with the organizations and people. Lack of appropriate skills and talent, development of a long-term strategy to integrate AI, overhauling of existing systems and cybersecurity, the dark side impacts on individual such as technostress are some of the problems identified through this research study on organizations with the implementation of AI. Furthermore, the Risks and ethical issues of artificial intelligence cannot be ignored and to understand some stress that associated with the use of AI technology and the need to know the reasons why individuals experience technostress and showed that technostress manifests its effects in the form of increased role overload, role conflict, exhaustion and burnout and decreased job satisfaction (Tarafdar et al., 2007; Ragu- Nathan et al., 2008; Ayyagari et al., 2011). It was further analysed that Its addiction over long period of time can be harmful to user and possible technostress which can be accumulated over the period because of the extensive use of particular technology where user find it difficult to discontinue particular IS which can lead to poor job engagement or even burnout (Srivastava et al., 2015). Meanwhile, these ethical issues can severely influence the society which may include accessibility to systems, products and services to only specific people of society; automation of technology leads to unemployment; and unethical behavior of AI leads to the violation of civil rights and democracy (Siau & Wang, 2020).

Furthermore, the fear of losing a job and the privacy of individuals are certain aspects that prohibit people to adopt AI technology. Overall, the current research study act as an efficient source of information for the researchers interested in analyzing different challenges faced while implementing AI in an organization. Along with this, it has been recommended that more accurate and relevant information could be collected in association with the selected research topic by considering different case studies of organizations or companies that implemented AI in their business operations. Therefore, it has been recommended that future researchers should perform research by analyze the issues faced while implementing AI with the help of different case studies of organization and people with consideration of geographical location.

Reflection on Plan and Execution

While initiating the current research study, I created an appropriate research plan which was to be followed to achieve the research objectives easily and efficiently. The first task of the research study is to identify and define the research problem for which I reviewed existing research articles, journals, news articles and other relevant sources to identify the main problem. After detailed research, the impact of AI on organizations and people was considered the research problem for executing the current research study. Following this, appropriate research aims, and objectives are designed to complete the research study. To ensure that appropriate objectives are created, I had taken advice from the project supervisor. After this, I performed an extensive literature review to elaborate on the work of existing researchers regarding the considered research topic. This helps in determining various sectors where AI is being used and how it is impacting organizations and people. The next step was to select an appropriate research methodology which was a tedious task for me as I did not have sufficient knowledge regarding different types of methodologies and their importance in conducting research. For this, I reviewed different website sources and selected an appropriate method that is a qualitative

research methodology for completing this research study. Herein, secondary data was collected from different online sources such as articles, journals, papers, and others that are available on online digital repositories including Mdpi, ScienceDirect and SpringerLink. Following this, valuable insights are created and listed in the results and findings section highlighting all the necessary and valuable information regarding the topic under consideration. Lastly, a conclusion is derived, and suggestions are provided for the researchers performing research in a similar domain. Overall, the current research study helped me in enhancing my research skills in an efficient manner which will further help in appropriately completing my future research.

References

[1] Accenture. (2022). What is Artificial Intelligence (AI) & Why is it Important? | Accenture. Accenture.com. Retrieved 18 June 2022, from https://www.accenture.com/us-en/insights/artificial-intelligence-summary-index.

[2] Agrawal, A., Gans, J., & Goldfarb, A. (2019). Artificial Intelligence, Economics, and Industrial Organization, 399 – 419.

[3] Agrawal, A., Gans, J., & Goldfarb, A. (2019). The Impact of Artificial Intelligence on Innovation: An Exploratory Analysis, 115 – 146.

[4] Alaa, M. (2021). Artificial intelligence: Explainability, ethical issues and bias. Annals Of Robotics And Automation, 034-037. doi: 10.17352/ara.000011

[5] Artificial Intelligence market size/revenue comparisons 2021 | Statista. Statista. (2022). Retrieved 18 June 2022, from https://www.statista.com/statistics/941835/artificial-intelligence-market-size-revenue-comparisons/.

[6] Balakrishnan,, T., Chui, M., Hall, B., & Henke, N. (2020). The state of AI in 2020. McKinsey & Company. Retrieved 17 June 2022, from https://www.mckinsey.com/business-functions/quantumblack/our-insights/global-survey-the-state-of-ai-in-2020.

[7] Bostrom, N., & Yudkowsky, E. (2020). The Ethics of Artificial Intelligence.

[8] Britton, B. (2019). AI and the impact on the organisation. capgemini.com. Retrieved 18 June 2022, from https://www.capgemini.com/gb-en/2019/08/ai-and-the-impact-on-the-organisation/#:~:text=Enhanced%20labour%20productivity%20%E2%80%93%20achieving%20more,up%20to%20ever%20higher%20standards. Carsten Stahl, B. (2022). Ethical Issues of AI, 35-53.

[9] Chidinma-Mary-Agbai. (2020). Application of artificial intelligence (AI) in food industry. GSC Biological And Pharmaceutical Sciences, 13(1), 171-178. https://doi.org/10.30574/gscbps.2020.13.1.0320

[10] Csanák, E. (2020). AI FOR FASHION. 13Th INTERNATIONAL SCIENTIFIC-PROFESSIONAL SYMPOSIUM TEXTILE SCIENCE AND ECONOMY 18Th September 2020, ZAGREB, CROATIA. https://doi.org/10.6084/m9.figshare.14540733Davis, F. (2019). The Top Prioritize of Implementing Marketing or Sales Artificial Intelligence Applications, 2019. Digital Marketing Community. Retrieved 18 June 2022, from https://www.digitalmarketingcommunity.com/indicators/marketing-sales-artificial-intelligence-apps-2019/.

[11] Dcpehvpm. (2022). Artificial Intelligence intelligent systems. Retrieved 17 June 2022, from https://www.dcpehvpm.org/E-Content/BCA/BCA-III/artificial_intelligence_tutorial.pdf

[12] Evolution, M. (2022). AI Marketing: Components, Benefits, and Challenges | Marketing Evolution. Marketingevolution.com. Retrieved 18 June 2022, from https://www.marketingevolution.com/marketing-essentials/ai-markeitng.

[13] Getting Smarter by the Sector: How 13 Global Industries Use Artificial Intelligence. Tata Consultancy Services. (2017). Retrieved 17 June 2022, from https://www.tcs.com/content/dam/tcs/pdf/Industries/global-trend-studies/ai/TCS-GTS-how-13-global-industries-use-artificial-intelligence.pdf.

[14] How Artificial Intelligence Improves Worker Performance. Gray. (2022). Retrieved 18 June 2022, from https://www.gray.com/insights/how-artificial-intelligence-improves-worker-performance/.

[15] How Artificial Intelligence Is Transforming Business - businessnewsdaily.com. Business News Daily. (2022). Retrieved 17 June 2022, from https://www.businessnewsdaily.com/9402-artificial-intelligence-business-trends.html.

[16] Hyperight. (2021). What Is The Impact Of Artificial Intelligence (AI) On Society? - Hyperight. Hyperight. Retrieved 18 June 2022, from https://hyperight.com/what-is-the-impact-of-artificial-intelligence-ai-on-society/.

[17] IBM Global AI Adoption Index 2022. Ibm.com. (2022). Retrieved 17 June 2022, from https://www.ibm.com/downloads/cas/GVAGA3JP.

[18] K. Chattopadhyay, H., & Majumdar, D. (2020). Artificial intelligence and its impacts on the society. International Journal Of Law, 6(5).

[19] kumar, s. (2019). Advantages and Disadvantages of Artificial Intelligence. Medium. Retrieved 18 June 2022, from https://towardsdatascience.com/advantages-and-disadvantages-of-artificial-intelligence-182a5ef6588c.

[20] Li, J., Bonn, M., & Ye, B. (2019). Hotel employee's artificial intelligence and robotics awareness and its impact on turnover intention: The moderating roles of perceived organizational support and competitive psychological climate. Tourism Management, 73, 172-181. doi: 10.1016/j.tourman.2019.02.006

[21] Makridakis, S. (2017). The forthcoming Artificial Intelligence (AI) revolution: Its impact on society and firms. Futures, 90, 46-60. doi: 10.1016/j.futures.2017.03.006

[22] Makridakis, S. (2017). The forthcoming Artificial Intelligence (AI) revolution: Its impact on society and firms. Futures, 90, 46-60. doi: 10.1016/j.futures.2017.03.006

[23] Marr, B. (2022). What Is The Impact Of Artificial Intelligence (AI) On Society? | Bernard Marr. Bernard Marr. Retrieved 18 June 2022, from https://bernardmarr.com/what-is-the-impact-of-artificial-intelligence-ai-on-society/.

[24] Marr, B. (2022). What Is The Impact Of Artificial Intelligence (AI) On Society? | Bernard Marr. Retrieved 18 June 2022, from https://bernardmarr.com/what-is-the-impact-of-artificial-intelligence-ai-on-society/

[25] Mohammed, Z. (2019). Artificial Intelligence Definition, Ethics and Standards.

[26] Naidu, A. (2019). Review: Impact of Artificial Intelligence on Society. Retrieved from https://csp.iisc.ac.in/wp/wp-content/uploads/2019/10/01A092019-Review-Impact-of-Artificial-Intelligence-on-Society.pdf

[27] Painoli, G., & Datrika, V. (2021). ARTIFICIAL INTELLEGENCE IN BUSINESS-BENEFITS AND CHALLENGES. Turkish Online Journal Of Qualitative Inquiry, 12(5), 1377-1388. Retrieved 18 June 2022, from.

[28] Paschen, J., Kietzmann, J., & Kietzmann, T. (2019). Artificial intelligence (AI) and its implications for market knowledge in B2B marketing. Journal Of Business &Amp; Industrial Marketing, 34(7), 1410-1419. doi: 10.1108/jbim-10-2018-0295

[29] Reddy Nadikattu, R. (2016). THE EMERGING ROLE OF ARTIFICIAL INTELLIGENCE IN MODERN SOCIETY. INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT), 4(4).

[30] Reddy Nadikattu, R. (2016). THE EMERGING ROLE OF ARTIFICIAL INTELLIGENCE IN MODERN SOCIETY. International Journal Of Creative Research Thoughts (IJCRT), 4(4).

[31] Shrestha, Y., Ben-Menahem, S., & von Krogh, G. (2019). Organizational Decision-Making Structures in the Age of Artificial Intelligence. California Management Review, 61(4), 66-83. doi: 10.1177/0008125619862257

[32] Siau, K., & Wang, W. (2020). Artificial Intelligence (AI) Ethics. Journal Of Database Management, 31(2), 74-87. doi: 10.4018/jdm.2020040105

[33] Siau, K., & Wang, W. (2020). Artificial Intelligence (AI) Ethics. Journal Of Database Management, 31(2), 74-87. doi: 10.4018/jdm.2020040105

[34] Singh, G., Mishra, A., & Sagar, D. (2013). AN OVERVIEW OF ARTIFICIAL INTELLIGENCE. SBIT JOURNAL OF SCIENCES AND TECHNOLOGY, 2(1).

[35] Soni, N., Sharma, E., Singh, N., & Kapoor, A. (2020). Artificial Intelligence in Business: From Research and Innovation to Market Deployment. Procedia Computer Science, 167, 2200-2210. https://doi.org/10.1016/j.procs.2020.03.272

[36] Stahl, B. (2021). Ethical Issues of AI. Springerbriefs In Research And Innovation Governance, 35-53. doi: 10.1007/978-3-030-69978-9_4

[37] Surya,, L. (2022). AI in information technology and its future in the United States. International Journal Of Creative Research Thoughts (IJCRT) Www.Ijcrt.Org, 5(4). https://doi.org/10.1729/Journal.25786

[38] Tai, M. (2020). The impact of artificial intelligence on human society and bioethics. Tzu Chi Medical Journal, 32(4), 339. https://doi.org/10.4103/tcmj.tcmj_71_20

[39] Tai, M. (2020). The impact of artificial intelligence on human society and bioethics. Tzu Chi Medical Journal, 32(4), 339. doi: 10.4103/tcmj.tcmj_71_20

[40] von Krogh, G. (2018). Artificial Intelligence in Organizations: New Opportunities for Phenomenon-Based Theorizing. Academy Of Management Discoveries, 4(4), 404-409. doi: 10.5465/amd.2018.0084

[41] Manyika, J. and Sneader, K., 2018. AI, automation, and the future of work: Ten things to solve for. [online] Mckinsey & Company. Available at: <https://www.mckinsey.com/featured-insights/future-of-work/ai-automation-and-the-future-of-work-ten-things-to-solve-for> [Accessed 25 July 2022].

[42] Tai, M., 2020. The impact of artificial intelligence on human society and bioethics. Tzu Chi Medical Journal, 32(4), p.339.

[43] Thormundsson, B., 2022. Global AI implementation challenges in organizations 2017 | Statista. [online] Statista. Available at: <https://www.statista.com/statistics/787086/worldwide-artificial-intelligence-implementation-in-companies-challenges/> [Accessed 25 July 2022].

[44] Wirtz, B., Weyerer, J. and Geyer, C., 2018. Artificial Intelligence and the Public Sector—Applications and Challenges. International Journal of Public Administration, 42(7), pp.596-615.

[45] Reim, W., Åström, J. and Eriksson, O., 2020. Implementation of Artificial Intelligence (AI): A Roadmap for Business Model Innovation. AI, 1(2), pp.180-191.

[46] Stahl, B., 2021. Ethical Issues of AI. SpringerBriefs in Research and Innovation Governance, pp.35-53.

[47] Surya, L., 2017. AI in information technology and its future in the United States. International Journal of creative research thoughts, 5(4).

[48] S, H. and Manikandan, L., 2020. A Study on Artificial Intelligence Technologies and its Applications. International Journal of Scientific Research in Computer Science, Engineering and Information Technology,.