

**ISTANBUL SABAHATTIN ZAIM UNIVERSITY
GRADUATE EDUCATION INSTITUTE
DEPARTMENT OF BUSINESS ADMINISTRATION**

**THE EFFECTS OF ARTIFICIAL INTELLIGENCE (AI) ON THE
FUTURE JOBS WITHIN THE GOVERNMENTAL
ORGANIZATIONS IN ISTANBUL – TURKEY**

MA THESIS

Noha DIAB

Istanbul

January-2022

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MA THESIS

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January-2022

This study has been approved in partial fulfillment of the requirements for MA Degree in Business Administration.

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DECLARATION OF SCIENTIFIC ETHICS AND ORIGINALITY

This is to thereby certify that this thesis of MA titled “The Effects of Artificial Intelligence (AI) on the Future Jobs within the Governmental Organizations in Istanbul – Turkey” is my own work. I hereby indicate that during this thesis duration I have acted as per the academic rules and scientific ethics. The data and the information used in the thesis are as per the scientific guidelines and ethics on thesis writing pertinent to Sabahattin Zaim University. The text and the bibliography are fully reference while all the indirect and direct quotation has been written with source to maintain credibility.



Noha DIAB

Istanbul, January 2022

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Noha DIAB

Istanbul, January 2022

ABSTRACT

THE EFFECTS OF ARTIFICIAL INTELLIGENCE (AI) ON THE FUTURE JOBS WITHIN THE GOVERNMENTAL ORGANIZATIONS IN ISTANBUL – TURKEY

Noha Diab

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Background: Modern technological evolution, such as mobile phones, internet, and economic development alongside with the financial crises has largely modified the need and the behavior of the customer at large scale. Such that these all has put increased pressure over the economy of the world and has enforced government to undertake several initiatives. The study background displays the fact that the Istanbul has notably started the utilization of AI in their human resource on routine basis. This is largely assisting them in making their work more manageable and easier to deal with the customer in governmental organization.

Aim: The aim of current study is determining the impact of AI over the future of job in governmental organization at Istanbul-Turkey. The study aimed at analyzing the impact of AI by considering the period of COVID-19.

Method: The current study has utilized pragmatism philosophy and the research has been undertaken through mixed method. The data has been conducted from the employee working in different governmental organization at Istanbul where AI is being used on routine basis. The data has been collected through primary data collection method via online surveys and telephonic interviews. The sample size for survey was 100 employees while an interview has been conducted from 10 employees through purposive sampling. The quantitative data has been analyzed on SPSS through Demographic, Frequency Correlation analysis. The qualitative data has been analyzed through thematic analysis.

Findings: The research considered four independent variables i.e., organization sustainability, customer, Human resource, and future of jobs. While utilization of AI during COVID-19 was considered as dependent variable. The findings of the study claimed that the AI encompasses potential impact over the sustainability, human resource, and future of jobs. However, no impact has been found over the customer of governmental organization.

Conclusion: From the research findings it can be concluded that AI encompasses significant influence over the future of jobs. This impact can be seen in the form of organization sustainability and better operation of Human resource.

Keywords: *Artificial intelligence, Government organization, Istanbul, Future of Jobs*

ÖZET
EKA'NIN (YZ) İSTANBUL – TÜRKİYE'DEKİ KAMU
KURUMLARINDAKİ MESLEKLERİN GELECEĞİ ÜZERİNDEKİ
ETKİLERİ

Noha DIAB

Yüksek Lisans, İşletme

Tez Danışmanı: Dr. Öğr. Üyesi Nicoleta Isac

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Arka plan: Cep telefonları, internet ve ekonomik kalkınma ile birlikte finansal krizler gibi modern teknolojik evrim, tüketicinin ihtiyacını ve davranışını büyük ölçüde değiştirmiştir. Öyle ki, tüm bunlar Dünya ekonomisi üzerinde artan bir baskı yaratmış ve hükümeti çeşitli girişimlerde bulunmaya zorlamıştır. Çalışmanın arka planı, İstanbul'daki kamu kurumlarının insan kaynakları alanında yapay zekayı rutin olarak kullanmaya başladığı gerçeğini göstermektedir. Bu, kamu kurumlarından hizmet alanlara ile daha iyi ilgilenmek için işlerini daha yönetilebilir ve kolay hale getirmelerine büyük ölçüde yardımcı olmaktadır.

Amaç: Bu çalışmanın amacı, İstanbul-Türkiye'deki kamu kurumlarında YZ'nin mesleklerin geleceği üzerindeki etkisini belirlemektir. Çalışma, COVID-19 dönemini dikkate alarak YZ'nin etkisini analiz etmeyi amaçlamaktadır.

Yöntem: Bu çalışmada pragmatizm felsefesi kullanılmış ve araştırma, karma yöntemle gerçekleştirilmiştir. Veriler, yapay zekanın rutin olarak kullanıldığı İstanbul'da farklı devlet kurumlarında çalışan bazı görevlilerden elde edilmiştir. Veriler, çevrimiçi anketler ve telefon görüşmeleri yoluyla birincil veri toplama yöntemiyle elde edilmiştir. Anket için örneklem büyüklüğü 100 kişi olup, amaçlı örnekleme yoluyla 10 çalışanla görüşme yapılmıştır. Nicel veriler SPSS üzerinde demografik, frekans, korelasyon ve regresyon analizi ile analiz edilmiştir. Nitel veriler tematik analiz yoluyla analiz edilmiştir.

Bulgular: Arařtırmada, organizasyon srdrlebilirlięi, hizmet alıcıların tercihleri, İnsan kaynakları ve mesleklerin geleceęi olmak zere drt baęımsız deęiřken kullanılmıřtır. YZ'nın COVID-19 sırasında kullanımı baęımlı deęiřken olarak alınmıřtır. alıřmanın bulguları, yapay zekanın srdrlebilirlik, insan kaynakları ve mesleklerin geleceęi zerindeki potansiyel etkiye sahip olduęunu gstermektedir. Ancak, kamu kuruluřlarından hizmet alanlar zerinde herhangi bir etkiye rastlanmamıřtır.

Sonu: Arařtırma bulgularından, YZ'nın mesleklerin geleceęi zerinde nemli bir etkiyi kapsadığı sonucuna varılabilir. Bu etki, organizasyonun srdrlebilirlięi ve insan kaynaklarının daha iyi alıřması řeklinde grlebilir.

Anahtar Kelimeler: Yapay zeka, İstanbuldaki Kamu Kuruluřları, Mesleklerin Geleceęi

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CHAPTER I

INTRODUCTION

1.1 Contextual Background

The evolution of the modern technology, internet and mobile alongside with the economic development and financial crises has modified the behavior and the needs of customer. These all are putting immense pressure over the world economic along with the budget deficit (Wirtz & Müller, 2019, pp. 1077-1010). While the recent global financial crises have thereby accelerated the entry of human to the novel age by encompasses potential impact on the global economy. Such that, according to Natale and Ballatore (2020), the digital age which had begun with mobile and internet technologies has thereby begun to open their stores in web and cloud to mobilize the base of the customer. As indicated by Rossi (2016) it drags the government for launching and initiating their e-governmental initiatives. More recently, it has been found that Istanbul has become increasingly significant on the utilization of AI to be the part of the human resource in their daily work. This would further assist in easing their work by easing the dealing of customer in the governmental organization. However, in certain cases AI are being developed largely to enable innovating the machineries so that they can work like the human forces' jobs (Natale and Ballatore, 2020, p. 5).

On the other hand, it has been further found that the amount of which business receive information tend to get bigger by each single day which led toward the environment of business to analyze the big data. As indicated by Stiglitz (2014), with the technological age the utilization of AI is also increasingly. Another research conducted by Desouza et al. (2020), indicated that there is different definition of AI which are largely based on the discipline where they can apply the phases of AI lifecycle. Moreover, the research further claimed that the vital characteristic of AI system tends to lie under the component of technology which offer it with the capacity for processing the insight as well as the data in way which comprises the behavior of individual. This capacity of organization consists of prediction, planning, learning and control. Such that in practical means, the system of AI is largely consist of model and algorithm which generate the abilities (Desouza et al, 2020, pp. 206-210).

Thus, by design according to Kuziemski and Misuraca (2020), these components offer the system of AI with the potential ability toward acting with certain extent of autonomy. Similarly, it has been found that the technological development specially the digitalization encompasses potential impact for the labor market. Therefore, assessing the influence of AI is critical in order to develop relevant policies which promote efficient market of labor for the benefit of societies, employers and the worker as a whole. For this purpose, the rapid technological innovation and progress can thereby employment at large.

According to the research conducted by Aoki (2020), artificial intelligence allows the task automation which require the human intelligence. Some of the potential utilization of AI includes being able to translate the language spoken by the human in the set of instructions. Similarly, the research of Hernández-Orallo (2014), claimed that the object tracking and computer vision from video also enable the organization with increased benefit. Additionally, one of significant use of AI is that regarding the control of robotics in the production and manufacturing. The research conducted by Etscheid (2019), claimed that presently the artificial intelligence utilizes mathematic tool and large amount of computer power for learning how they can do the single task. Hence, this has made the artificial intelligence very powerful to undertake a specific task. However, it has also been found by the research of Kankanhalli et al. (2019), that the upcoming generation of AI will be able to learn how they can utilize AI efficiently. It is because this generation is the one which makes the utilization of the machine more powerful and useful for augmenting the learned capabilities. These also makes the organizational ability more productive. This also lead toward larger number of wealth and productivity (Desouza et al, 2020, pp. 206-210).

1.2 Problem Statement

As indicated by the research of Montoya & Rivas (2019) the widening utilization of AI in the field of government is largely triggering numerous opportunities for the government across the world. There are several different conventional forms of service provision, enforcement, policymaking can be rapidly change with the initiation of AI in the public-sector eco-system and the practices. For instance, the research of Ojo, Mellouli, and Ahmadi Zeleti (2019) claimed that the governmental organization can utilize AI technologies to enhance the public service quality. The research of Toll et al. (2019) further claimed that AI is also utilized for enhancing trust among the citizens at large. While it also increases the effectiveness alongside efficiency in the service delivery sector (Kar, 2015; pp. 25-30; Dwivedi et al. 2019).

Moreover, AI can be utilized by the governmental bodies to develop accurate forecast and to operate the complex system more efficiently. This also enable experimentation with different policy options. The research of De Sousa et al. (2019) claimed that the values can be developed in different functional area of the governmental areas such as public health, transportation, decision-support, and enforcement of law (Margetts & Dorobantu, 2019). Similalry, the research conducted by Al-Mushayt (2019) demonstrated that the utilization of AI in the sector of government tend to create increased level of challenges. Such that the utilization of AI in the governmental sector enhance the trust of citizen and lower the trust in government and on the governmental decision (Sun & Medaglia, 2019). However, this decline might be because of the violation in the privacy of the citizen or the lack of fairness in the utilization of AI pertinent to public governance (Kuziemski & Misuraca, 2020).

The research of Ben et al. (2019) further indicated that there also arises enormous challenge pertinent to the utilization of AI such as lack of transparency in the decision-making by government (Dignum, 2017). Hence, such kind of realities has increased the stake for the government as the failures because of AI utilization in government might encompasses negative impact over the society and the government. For this purpose, the research aimed to address the need of the study by exploring the influence of AI on the

future of the job within the governmental organization. The study aimed to attain this by studying the case of Istanbul-Turkey.

1.3 Aims and Objectives

The aim of the current study is to emphasize on the influence of AI over the future of the jobs. The research aimed to determine which type of AI is being used by the governmental organization and how the employee is dealing with it. It aimed at discovering all these by considering the period of COVID-19. To attain the study aim, several objectives have been developed:

- To comprehend the notion of Artificial intelligence and its significance in general.
- To determine the different effect of Artificial intelligence over the human resources.
- To analyze the influence of AI on the customers.
- To examine the association among AI and COVID-19 pandemic.
- To evaluate the influence of AI over the organizational sustainability.
- To analyze the potential impact of the AI over the future of jobs.
- To recommend the governmental organization that how they can enhance the utilization of AI and deal with the pandemic through AI.

1.4 Research Questions

The research aimed at answering the following research question:

1. What is the influence of AI on human resources?
2. How utilizing AI will affect the future of jobs alongside employees in the governmental organization?
3. How AI is affecting customer on routine basis before and after COVID-19.

1.5 Rationale and Significance

The AI is perceived as the potential are of computer science. It belongs to the area where the computers are effective developed to behave like the humans (Aoki, 2020). However,

the aspect is attaining increased significance among the human resource and workforce and encompasses potential impact over the workforce. The notion of AI has assisted the human at wide scale. However, there is possibility that this might replace the human force soon in the future as the new generation is being completely dependent on it (Desouza et al., 2020, pp. 206-210). It has been further found that most of the governmental organization in Istanbul largely work toward offering distinct services toward the customer. However, now the modern organization is looking for different ways to fasten or ease the procedure of working and make it purely technology based. Thus, the research aimed to undermine this gap by studying the impact of AI on the governmental organization. The study aimed at exploring the aspect i.e., the influence over customer alongside the human force.

On the other hand, it is widely known that the pandemic has largely accelerated the transition period across the globe pertinent to AI to investigate the use of AI before and after COVID-19. It has been further found that different studies have been undertaken over the utilization of AI (Wirtz & Müller, 2019; Rossi, 2016; Natale & Ballatore, 2020). However, some of the streams in AI encompasses prolonged history (Desouza et al. 2020). Such that research has been undertaken over algorithms, chatbots and agent-based system. The research of Aoki (2020) claimed that though the AI is not perceived as the novel discipline of research still immense attention has been attained by AI research in the past few decades (Kuziemski & Misuraca, 2020; Aoki, 2020). The fact is that there is wide knowledge gap in the research field pertinent to the impact of AI.

Firstly, according to Desouza et al. (2020) since the past few years the AI adoption in the sector of public has been slower as compared to the private sector. As an outcome, there is lack of attention on the use of AI in the governmental sector. Secondly, the strategies pertinent to digital transformation and the practices of AI cannot be copied directly toward the public sector. It is because the sector of public need to maximize the value of public. Consequently, in comparison to the private sector there is limited knowledge in the public sector with regards to the challenges of AI (Aoki, 2020).

Similarly, the research of Hernández-Orallo (2014) claimed that the system of AI is becoming less predictable and complex. However, it is not clear for most of the

government that how it influences the public governance. Hence, in practice, most of the governmental organization encompasses understanding pertinent to the multifaceted impact of AI in the sector. This leaves a wide gap as the barrier in the critical development as most of the governmental bodies wrangle with the ethical, political, economic, and societal impact of these AI transformation.

Thirdly, most of the already existing research of AI is technical in nature pertinent to technological solution and problem in the domain of computer science. Such that there also exist different studies concerning the utilization of AI in the governmental organization which exist beyond the technological field of study (Kankanhalli et al. 2019; Etscheid, 2019). The current research is significant theoretically as well as practically. From theoretical perspective it aimed at bridging the gap by contributing effectively to the field of research. The study is significant as it highlights significant issue and aimed to add an originality value to the field of research. Moreover, from practical perspective the study is significant as it encompasses efficient feature for linking the turnout of utilizing the AI through COVID-19. This is significant as it offers effective outcome for the future of work.

1.6 Chapter Summary

The aim of the current study is to set up the basis of the overall study by offering a brief background of the study. For this purpose, the chapter has set the study direction by offering the study background which is further carried out by problem statement. The section of problem statement has offered detailed insight pertinent to the importance and the need of conducting the study. Consequently, the chapter has further developed aim and objective to conduct the overall study and set the goals which are required to be attain at the end. The section has further set the question of the research which the research aimed to answer alongside with the rationale and the significance of the study. The chapter has undercover the need and gaps due to which the research has been conducted. Further, the section undercover the potential significance of the study theoretically and practically by evaluating to whom this study may be significant.

1.7 Dissertation Structure

The study report is subdivided into five potential chapter where each of the chapter has served the potential basis of conducting the study. The five chapter of the current study are as below:

Chapter 1: Introduction

The first chapter is the introductory chapter which offer brief background for conducting the study. The chapter has further undercover and set the potential direction of the overall research. Aims and objectives alongside with the research question has been developed in this chapter. Further, the section has offered brief review indicating the gaps in the study alongside with the facts that to whom this study might be significant.

Chapter 2: Literature review

The second chapter which is also known as literature review has aimed to determine and analyze the aim of the study by exploring the literature published by previous authors. This chapter thereby offer rich source of knowledge for the overall research and the perception of the previous author pertinent to the aim along with their findings. The chapter has further set the theoretical foundation by studying different theories relevant to the research alongside with the conceptual framework. The conceptual framework is developed under this chapter to indicate the dependent and the independent variable efficiently.

Chapter 3: Method

The third chapter is also known as methodology chapter. This chapter aimed to discuss the relevant method which has been used in the current study. The chapter shed light over the philosophy, design, and the approach of the study through which research has been carried. Further, the method of data collection alongside the analysis tool and sampling technique has been discussed under this chapter.

Chapter 4: Analysis and Discussion

The fourth chapter is pertinent to the analysis and the discussion and aimed to analyze the collected data efficiently. This chapter add value to the research by fulfilling the gap through relevant data analysis tool. The chapter also develop a discussion based on the

research findings and the research objective to overview if the objectives has been met or not.

Chapter 5: Conclusion

The fifth chapter is the concluding chapter which has aimed to offer concrete conclusion based on research findings. The chapter has also provided recommendation for employee and organization alongside with the recommendation to conduct future study. The chapter aimed at summarizing the findings of the study in brief way.



CHAPTER II

LITERATURE REVIEW

2.1 Introduction

The Artificial Intelligence (AI) generally entails the constellation of technology such as natural language processing, machine learning, reasoning, and perception. Research conducted by Popenici and Kerr (2017), indicated that AI is hard to define, however, the principle and the application of AI has undergone increased investigation since the past few decades. The research further reported that the influence of AI is increasingly evident. For that, it has introduced distinct challenges along with the opportunities. It's largely enabling the integration of AI into the social and the economic environment.

The aim of the current research is to determine the impact of AI on the future of jobs within the governmental organization. For this purpose, the current chapter aims to determine the aim by analyzing different literature with regards to the current topic. Thus, the chapter has comprehended the notion of AI to develop vast understanding of the phenomenon.

Moreover, the chapter has further determined the impact of AI on the human resource management and on the customer. Further, how AI has been modified and how the need of AI during COVID-19 has been increased is discussed in detail. The chapter further unfold the implication of COVID-19 on the sustainability of the organization and has determine how it will influence the future of work and the employability ratio. Similarly, the literature review has further developed theoretical foundation for the current research by analyzing different theories and its relevancy with the current research. Lastly, the conceptual framework of the research has been developed indicating the hypothesis and the potential variable of the research.

2.2 Artificial Intelligence

According to Shabbir and Anwer (2018) term of artificial intelligence largely refers to the ability to apply or acquire distinct knowledge and skills to solve a provided problem. According to the research conducted by Scherer (2015) the intelligence is greatly concerned with the utilization of general mental ability for solving, learning, and reasoning distinct situation. Besides, the research of Miller (2019), also mentioned that the intelligence is thereby integrated with various cognitive functioning. These comprises perception, memory, planning, attention, and language. Also, the growth of intelligence generally comprises of artificial and human intelligence. In such cases, typical human intelligence is greatly linked with learning, reasoning and problem solving (Miller, 2019, pp. 5-10).

Like the prior findings the research of Ertel (2018), demonstrated that the human encompasses different and complicated behavior which can be learned easily in their life. The research conducted by Popenici and Kerr (2017), reported that the term artificial intelligence refers to the ability of the machine or the computer program toward learning or thinking. For this purpose, the research of Zeng et al. (2018), further claimed that the artificial intelligence is thereby recognized as the field of study which integrate the computers and make them smarter. The notion helps the computers to operate on their own without adding any commands. According to the research conducted by Grewal (2014), the Artificial intelligence is considered as the potential branch of the computer science. This branch increasingly focuses on the establishment of the intelligence machine (Grewal, 2014. pp. 10-12).

Similarly, the above-mentioned research indicated that it increasingly focuses on the developing of intelligence by working and thinking like the human. According to the research conducted by Scherer (2015) the artificial intelligence is recognized as the study related to computation which thereby makes it increasingly possible to evaluate the reason and act accordingly. The research of Miller (2019) further added that the AI has been develop in a sequence as intelligence comprises perceive, analyses and react. It is known to be distinct from psychology due to the importance on computation. Moreover, it is distinct from the computer science due to the importance on action, reasoning, and

perception. Similarly, another research indicated that the AI makes machines more useful and smarter as well (Popenici and Kerr, 2017, pp. 5-10).

According to the research conducted by Ertel (2018), AI started in the year 1950-1980 as it initiated the technique which allow the computer to mimic and copy the behavior of human. While during the year 1980-2010 it grows more, and AI is then recognized as the computational technology which thereby offer the computer with the ability to learn without getting command. Thus, the modern trend of this above-mentioned notion is often referred to as deep learning. The research of Popenici and Kerr (2017), indicated that from the year 2010 till now the notion of deep learning is regarded as the subset or the sub-factor of the machine learning. The research further claimed that this increasingly makes the multi-layer computation of neural networks more feasible (Popenici and Kerr, 2017. pp. 5-7).

Research conducted by Zeng et al. (2018), the AI is referred to as the computational technology related to the customer engagement which also recognized as the arrangement of extensive branches related to computer science, engineering, psychology, mathematics, and linguistics. Another research conducted by Grewal (2014), artificial intelligence plays a significant role and can assist in saving notable amount of time. In the modern world, the notion is being utilized in almost every aspect or field. The research further claimed that AI is being used widely to ease work pressure. Popenici and Kerr (2017), further added that the AI has been recognized as the dynamic subject matter related to science invention. However, in modern world many of the scientist perceive that AI is on the track to make technology a reality (Popenici and Kerr, 2017. pp. 5-7).

On the other hand, the research of Zeng et al. (2018), further demonstrated that the AI is often referred to as the collection of technologies which allow the machine to perform better with increased level of intelligence. Similarly, it assists in adhering to the capabilities of human and act according. Hence, according to the research conducted by Popenici and Kerr (2017), the sound processing and the computer visualization can thereby recognize the world actively. It is generally done by processing and acquiring metaphors, language, and sounds. The research of Miller (2019) found that the inference

engine and the natural language processing allow the technological system to understand and analyses the collected information (Miller, 2019. p. 25).

2.3 Effects of Artificial Intelligence on Human Resources

As per the research conducted by Kamble (2021) the AI integration with the human resource has thereby improvement the experiences of the candidates and workforce. Moreover, the research further indicated that the integrated software of HR has thereby simplified the process of onboarding for the new hires. The AI has thereby assisted the department of HR to analyses their resources and suggest module of training based on their job roles. The research of Hmoud et al. (2020), further mentioned that the AI has impacted each aspect of the life. Similarly, it has largely influenced the department of HR as well. The modern organization is now aware regarding the significance of integrating machine learning with the human resource. It is because it offers predictive environment of working along with effortless work processes. On the other hand, the research conducted by Rodney et al. (2019), indicated that the AI is referred to as the breakthrough of innovation which largely shapes the real time decision making (Rodney et al. 2019, pp. 30-35).

The research further indicated it adhere to the clear set of algorithms and techniques of innovative computation. Consequently, the research of Acemoglu and Restrepo (2019), further mentioned that the AI assist the firm to understand the potential target market and then develop the plan accordingly to attain the organizational goal. The research of Niehueser and Boak (2020), claimed that the notion of AI has develop capability among machines to imitate the intelligence of the human. Further, AI also use the data which has been gathered to learn and adapt data-driven decisions. According to the research conducted by Maduravoyal (2018), the integration of AI with the HR found to be significant for the future performance of the organization. AI has helped the organization in different ways while the integration of the above-mentioned factor with the HR has benefited a lot of organization (Maduravoyal, 2018, pp. 1891-1893).

2.3.1 Talent Acquisition

According to the research conducted by Bhardwaj et al. (2020), AI is perceived as most useful tool in the talent acquisition procedure of HR department. The research further argued that AI is useful tool as it can handle and control numerous repetitive task such as screening of resume, choosing appropriate resume, answering of queries, and scheduling of interviews. The research of Yawalkar (2019), on the other hand stated that the AI help the professional of HR to save time from the mundane task. They tend to emphasize more on the valuable task such as sourcing, HR marketing and engagement of employee etc (Yawalkar, 2019. pp. 20-22).

Thus, the research of Chouhan (2021), further argued that the talent acquired through the process of AI screening will be the most appropriate and with relevant experience and skills that best suit the description of the job. Similar to the previous research findings the research of Vrontis et al. (2021), mentioned that the Chatbots of AI generally interact with those candidates that best suit the requirement of the job. Furthermore, these AI Chatbots also assist in filtering the candidate pool to find out the desired candidate among them. Nevertheless, according to the research indicated that the AI increasingly assist the HR in scheduling the interview and hiring the best possible candidate (Premnath and Chully, 2020, pp. 1193-1195)

2.3.2 Onboarding Process

The research of Tambe et al. (2019), reported that the AI increasingly assist in improving the efficacy and the effectiveness of the onboarding procedure. The research of Premnath and Chully (2020), demonstrated that the integration of AI with the software of HR has simplify the procedure of onboarding specifically for the new hiring. The research of Vrontis et al. (2021), further claimed that the onboarding plays a vital role in lowering the attrition rate and improving the productivity of HR. For this purpose, the AI assist the HR teams in personalizing the process of onboarding to cater each of the employee as per their position. Moreover, with the help of technology the organization can set and define their algorithm on the basis of their agenda. The research of Chouhan (2021), stated that the AI assist in organizing and scheduling the program induction and share the relevant

information of contact. Moreover, it also assists in verifying the documents provided along with the filled forms (Chouhan, 2021. pp. 2778-2780).

2.3.3 Training and Development

According to the research conducted by Yawalkar (2019), the AI integration into the system of HR has provided extensive benefit related to training and development. The research further stated that the integration of AI with the HR systems benefits the organization for training their personnel with regards to their field nature. The research of Bhardwaj et al. (2020), reported that the AI increasingly assist in enhancing the skillset of employee largely. The research further indicated that the AI extensively assist the department of HR to analyses their resource skillset and provide them with a training module as per their nature of job. Moreover, the technology help in gathering the relevant data and helps the team of HR to decide concisely regarding the training which is being conducted in order to enhance the skills. The research conducted by Maduravoyal (2018), indicated that the training and development offer large set of skill to the employees and enhance their existing knowledge. Similarly, the leaders of HR can thereby integrate the algorithm of AI to define the path of career on the basis of their existing skills (Maduravoyal, 2018. pp. 1890-1893).

2.3.4 Business HR Leaders and Analytical Decision Making

Guenole and Feinzig (2018) mentioned that the AI largely assist the organization to develop data-driven decision. The research further indicated that the data-driven decision increasingly helps to flourish the growth of the organization. Thus, according to the research of Niehueser and Boak (2020), the department of HR is accountable for the well-being of the employee apart from the input of work. The AI integration thereby assist the organization in evaluating the employee mind-set and how happy they are with the organization. This helps the organization largely in retaining the employee in the initial stage. According to the research conducted by Acemoglu and Restrepo (2019), AI is referred to as the revolutionary invention which thereby boost the productivity of the employee. It also assists the Rodney et al. (2019), of HR to excel their service and perform

the job effectively. On the other hand, the research of Acemoglu and Restrepo (2019), demonstrated that the team of HR assist in gathering and obtaining relevant feedback regarding the leaders. Thus, based on the feedback of employees the leader is able to make decision to modify their perspectives. The research of Hmoud et al. (2020), further stated that the leader can easily access the data of the employee and further develop a comparison on the performance of the team. It also assists the team in gauging their strategies and evaluate the improvement areas accordingly (Maduravoyal, 2018. pp. 1890-1893).

2.3.5. Administrative Tasks

According to the research conducted by Acemoglu and Restrepo (2019), the integration of HR and artificial intelligence has automated the administrative and the mundane tasks extensively. The research further stated that the integration plays a key role in employee engagement, strategies, payroll management and compliance with the policies of company. On the other hand, the research of Niehueser and Boak (2020), also stated that the notion of AI generally speeds up and automates the administrative task. Moreover, the research also reported that the AI assist the organization in developing strategic action. Similarly, with the help of AI employee queries are effectively handled through Chatbots. These Chatbots offer the employee with the most appropriate solutions. According to the research conducted by Maduravoyal (2018), all the purchases and the expenses of the organization are updated on the software of HR. Thus, the AI assist the team to decide are the expenditure are enough or not.

The research of Bhardwaj et al. (2020), further mentioned that the AI increasingly help in cutting down the expenses which are not necessary. The above-mentioned research further claimed that the AI require proper maintenance and storage of the data to function effectively. Moreover, it also analyses and gather the relevant data so that HR can make the decision of data driven. The research of Yawalkar (2019), also claimed that the HR can make decision that are data-driven which are deemed to be impactful and data driven as well (pp. 22-26).

2.4 Effects of Artificial Intelligence on Customers

According to the research conducted by Nadimpalli (2017) the growth of AI has received significant attention and has invaded consciousness among the society. Since the modern times, the notion of AI has received increased discussion across the world. It is because the international customers are now accepting the idea of AI because of its frequent exposure. According to the research conducted by Sun (2019) most of the customer has thereby interacted with the notion of AI by reading about the factor in the media channel or through their personal experiences. The research of Mohammed (2019) also mentioned that with the AI customer has gained increased confidence with regards to AI. It is because that the AI has left positive impact over the customer. The reason behind it is that most of the individual are becoming must curious regarding the ideas, avenues, and the use of the AI. As an outcome it has increased the awareness and interest of customer in the domain of AI and has accepted the significant role of AI in the 21st century (pp. 19-22).

Owing to the above-mentioned fact the customer is promoting the growth of AI as the modern reality. The research of Grewal et al. (2018) also mentioned that AI play a vital role in the monitoring of the customer segment on the social media and other internet platforms. These platforms that are driven by the engines of AI has make sure that the customer can now easily find their personal preferences. As a result, it has enabled the customer to receive different advertisement through different websites which offered them to find most relevant product which they need. Moreover, the research of Nadimpalli (2017) indicated that the AI enable the customer to effectively save their data on their online platform without processes. However, with the increased in AI customer are now afraid of AI and the capabilities linked with it (Grewal et al. 2018. pp. 10-12).

2.5 Artificial Intelligence and Covid-19 Pandemic

The research of Pan and Zhang (2020) indicated that the automation thereby encompasses potential influence over the next decade of society and work. The research further indicated that the automaker is increasingly utilizing the robot since the past few decades but the advancement in the robotics and AI will encompasses potential effect on the day-to-day operations (Isac et al. 2020). The research of Parker (2016) further mentioned that

the potential driver behind the revolution were economics. However, now robots increasingly offer opportunities to restart the economy again after the damages caused by the pandemic. The research of Parker (2016) further claimed that most of the factories and the offices are empty during the pandemic. Therefore, the manufacturer is planning to replace those spaces with effective robots. According to the research conducted by Affinito et al. (2020), the pandemic is making it severe for employee to continue their working from office therefore the role of robotics has become essential. The research of Vincent (2017) further mentioned that because of this situation most of the worker has now started to worry that now they will be get replaced with the machines (Mohammed, 2019. pp. 19-22).

According to the research conducted by Chattopadhyay (2020), the effective utilization of automation thereby requires process of transformation because of the pandemic. Thus, it has been found that the industries and the organization having robots can thereby automate the working step of individual selectively. On the other hand, the research conducted by Jamshidi et al. (2020), demonstrated that the automation has transformed the activities of labor and develop a set of challenges for the organizations. Thus, despite the growing popularities of the robots the human worker is likely to be the significant part of the business (Isac et al. 2020). The robots can generally increase the competitiveness and productivity and it has been predicted that the robot and human are likely to work together in the near future. According to the research conducted by Adadi and Berrada (2018) AI encompasses wide ranges of technology. The research further indicated that these technologies increasingly assist the computer toward performing specific tasks automatically. Generally, the AI is recognized as the computer program which utilize human cognition for performing different tasks (Adadi and Berrada, 2018. pp. 52135-52139).

On the other hand, the research of Naudé (2020), stated that the application of AI comprises distinct technologies and theories while the technology is thereby evolving on a steady rate. The research further stated that the use of AI has been increased since the COVID-19 and can be seen in each aspect of human life. According to the research conducted by Pan and Zhang (2020), under the present situation organization are require making steady decision in order to sustain in the market. This is the core reason why the

business is more interested in the AI in order to grow their organization. As per the research of Affinito et al. (2020), because of the pandemic most of the organization has thereby faced enormous problems. While working traditionally does not went well due to the virtual offices. The research conducted by Pan and Zhang (2020) demonstrated that although the virtual offices has provided increased flexibility still it has offer increased challenges as well. The challenges include management of health and mental wellbeing, remote work, employee communication, lack of agility and the management of office hours.

The popularity and the awareness regarding AI have been increasing at a steady rate. On the other hand, because of the COVID-19 the phenomenon is becoming more popular due to the ability to make decision and the nature of automation (Affinito, et al. 2020). Similarly, the research of Chattopadhyay (2020) further stated that the organizations have now started executing the AI for the human resource management as well. The research further mentioned that the AI in HRM can be increasingly effective as it is able to offer distinct services with regards to the practices of HRM. Since the past few decades most of the organizations are utilizing the data from the social media. This social media platform includes LinkedIn and other different job portals platforms (Affinito et al. 2020, pp. 1-3). These data were then analyzed using AI in order to evaluate and identify the suitable candidate for the given position. According to the research conducted by Jamshidi et al. (2020), AI does not only assist in identifying the suitable candidate but also predict and estimate the efficacy of the candidate as well (Jamshidi et al. 2020. p. 109582).

2.6 Effects of Artificial Intelligence on the Sustainability of the Organizations

According to Isac et al. (2020) the automotive sector is one of the largest impacted by COVID-19. This impact has displayed that there will be huge shift in future toward the automation. Similarly, it has been analyzed that the automation is not recognized as the new aspect. Since the past few decades, the robot plays an increased role in the manufacturing of automobile and differ largely across distinct activities and sectors. The research of Mohammed (2019) demonstrated that due to the automation and business the sustainability trend related to future of working will be effectively transformed. It has been

found that this automation will thereby influence the job over the next few decades. Similarly, it has been analyzed that automation will impact all the job to different extent depending on the work type and the nature of the job. According to the research conducted by Montoya and Rivas (2019) the extensive utilization of AI in the government sector is providing enormous opportunity to the government across the world. Hence, the traditional form of enforcement, policymaking and the service provision can thereby modify steadily with the initiation of AI in government sector and the ecosystems of public sectors (Montoya and Rivas, 2019. pp. 1-4)

Similar to the previous findings, the research of Ojo et al (2019) indicated that the government can utilize the technology of AI in order to enhance the quality of the public sector. The research of Toll et al. (2019) claimed that the AI also foster the trust of the citizen and increase the efficacy in the service delivery. Similarly, the AI are also utilized by the governmental sector in order to develop more authentic forecast and stimulate the complicated systems. These systems increasing enable experimentation with distinct policy options. The research of Mohammed (2019) further mentioned that the value can be developed in numerous governmental functional areas including law enforcement, public health, transportation, and the decision support. On the other hand, the research of Zuiderwijk et al. (2021) indicated that the utilization of AI in the governmental organization has also create enormous challenges. The research further indicated that as the AI use in the government sector increase the trust of citizen toward the governmental bodies it might also reduce the citizen trust in the government as well. The research further mentioned that the utilization of AI in government sector is one the rise and has increase the sophistication related to AI apps. Thus, this factor has raised enormous public governance question for the governmental bodies across the globe. Similarly, these also involves challenging and complex economic problem with regards to labor market along with the sustainable development.

2.7 Artificial Intelligence and the Future of Jobs

According to the research conducted by Brougham and Haar (2018), the advances in the automation, digital technologies and the AI are increasingly changing the way the work

was performed previously and the skills that were required to proceed. Thus, to attain the steady wave of transformation is increasingly significant in order to make sure the sustainable growth of organization. The report of McKinsey & Company (2020) depicted that the digital technologies has become one of the significant aspects in the growth of future economics. Such that, the report also demonstrated that the digital technology adaptation is thereby accountable for about 60 per cent of the total productivity increase by the year 2030.

The McKinsey & Company (2020) report further indicated that the above finding is true specifically for Turkey. It is due to the fact that the digital technologies, AI and automation will have a potential boost over the economy of Turkey. Therefore, it is significant for Turkey to critically evaluate and develop the awareness related to the challenges and the opportunities that can arise in the future. Moreover, this will also assist the workforce of Turkey for the future work transformation as well. It has been further found that the Turkey has thereby worked effectively since the past 6 months to develop the report on the basis of expertise and the experience of their 250 employees. For this purpose, the report has determined the effect of productivity growth that has been driven by the automation, digital technology and AI in different occupation and sectors. The report addressed that the AI has become potential opportunity for the Turkey that will emerge in order to transform the talent marketplace of Turkey and to overcome the challenges. According to the research conducted by PWC (2020) the AI will increasingly assist the stakeholders in prioritizing the effort toward adaptation of workplace in the future world.

Further, the report of McKinsey & Company (2020) also highlighted that the automation and AI will bring increased benefits and productivity to Turkey by the end of 2030. The report further indicated that on the larger scale, the present technologies encompass the potential to automate about 50 per cent of the total jobs. Moreover, with the help of current technology about six out of ten professions can be automated by about 30 per cent in Turkey. On the other hand, as per the report conducted by PWC (2020) the robotics, AI and other types of smart automation encompasses great potential to bring various economic benefits and growth. The report further indicated that it will account for about benefit of \$15 trillion to the GDP by the year 2030 globally. This extra wealth and money have thereby developed the demand for distinct jobs. However, there are increased level

of concerns that this demand might displace the existing jobs. It has been found through the above research there exist currently 200,000 jobs across about 29 countries. Thus, these countries were assessed to determine the potential for the automation at different phase. It was found in the report that in the next 20-year three potential waves of automation might unfold. The first wave is likely to be unfold in the early 2020s and will be known as algorithmic (Smith and Anderson, 2014, p. 51).

While the second wave will occur in the end of 2020s and will be known as augmentation. Lastly, the third wave is predicted to be unfold during the mid-2030s and will be recognized as autonomy. During the first wave it has been expected that there will be low displacement of job. According to the research conducted by Munro et al. (2019), the job displacement might occur in the later or the upcoming wave as the technology get evolves or mature across the economy. While, by the mid of 2030 it has been predicted that about 30 per cent of the job might get automates. It has been forecasted that this transformation is likely to impact more men in the long run as the machine or autonomous vehicle will transform the manual task. Similarly, it has been found that during the second and the first wave the women might be at increased risk of automation. It is because they encompass increased representation in the administrative and the clerical functions.

The PWC (2020) report further claimed that these estimates are the median value for the 29 countries. Whereas the long-term automation might be lower around 20 to 25 percent in the Nordic and the Asian countries. Another report conducted by Vincent (2017) stated that it has been predicted that by the year 2030 about 800 jobs might get lost across the world. These are not the actual figures but there is increased prediction that the automation is likely to influence the job that are being held currently with limited skills of people. The research of Vincent (2017) further claimed that the impact of AI on the job will rely on the nature of job demand. On the other hand, the growth of AI has developed a concern that in the next 10 year the employment rate is likely to be increased (Smith and Anderson, 2014, p. 51).

2.8 Conceptual Framework

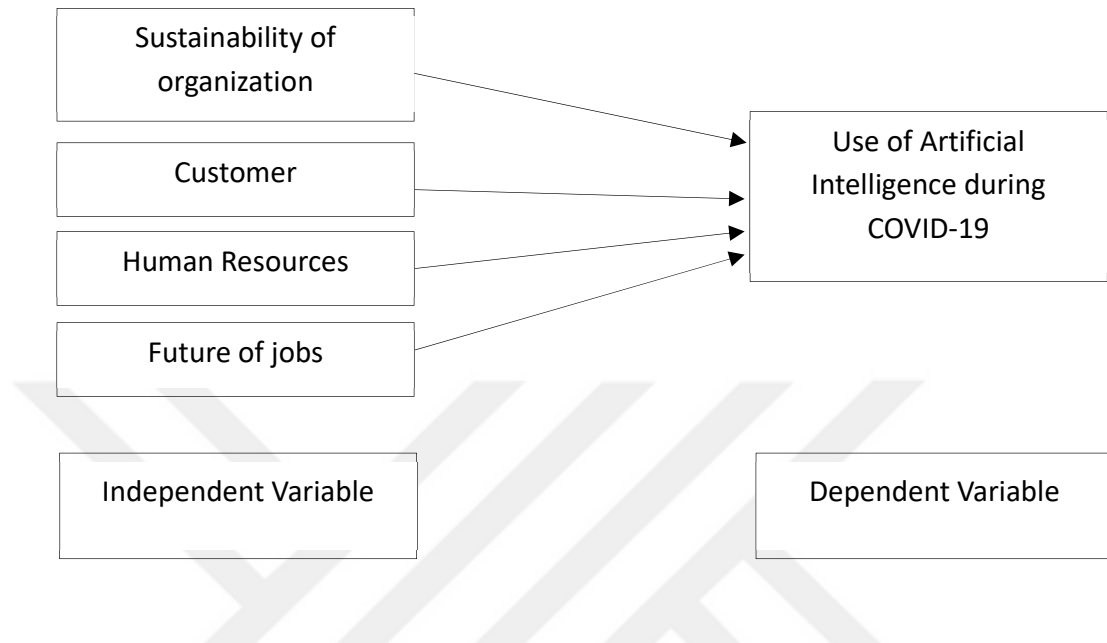


Figure 0.1 Conceptual Framework

The above conceptual framework has been developed based on the aim and the objective of the study. As the aim of the research is to determine the impact of AI on the future of the organization. For this purpose, the dependent variable in the current research is Artificial intelligence while it has particularly emphasized on the utilization of the phenomenon during COVID-19. On the other hand, the independent variable for the research are sustainability of the organization, customer, human resource, and future of jobs in order to determine the impact in the long run. Based on the above conceptual framework below hypothesis has been developed:

H1: Use of AI during COVID-19 will have a positive impact over the sustainability of the organization.

H2: Use of AI during COVID-19 will have a positive impact on the customer during the COVID-19.

H3: Use of AI during COVID-19 will have a positive impact on the human resource during COVID-19.

H4: Use of AI during COVID-19 will have a positive impact on the future of jobs.

2.9 Theoretical framework

2.9.1 Media Richness Theory (MRT)

According to the research conducted by Ishii et al. (2019) the theory of media richness is considered as one of the extensively recognized theories regarding communication channel. Similarly, it tends to offer appropriate link between the characteristic of the task related to communication. Androutsopoulou et al. (2019) utilize the theory of channel expansion along with the MRT to encourage the use of AI. The theory largely supported the fact that the AI enabled Chatbots has thereby enhanced the communication among the government citizens. The research further demonstrated that in order to accommodate and address the complication G2C interactions it is vital to utilize richer digital channels. The theory further emphasized that the intelligence of the bots can be attained through integrating the novel technique of AI which exploit and develop structured information effectively. As the above theory the development of the structured information is linked with the enrichment that underlie the current approach knowledge. Moreover, the theory emphasized that the innovation of the inference mechanism largely relies on decision-making support, recommendation, argumentation and the appropriate reasoning for the AI.

2.9.2 Technology adaption theory

The research of Ojo et al. (2019) used the technology adaption theory to support the background of the research along with their conclusion. The research further stated that it has been largely observed that the traditional innovation and technology acceptance model such as Information system success, Unified theory of acceptance and the utilization of technology does not successfully categorize the factor in order to support the adoption of digital technologies for the benefit. The research of Burton-Jones et al. (2018) further claimed that most of the technology adaption theories were developed in the previous generation. With the passing decades, it has been found that the Information Technology

(IT) has become one of the significant, intelligent, and interconnected aspect. The research of Ojo et al. (2019) develop research based on the past work and the approach was to address the shortcoming and the drawback of the conventional model. It is due to the fact to successfully adopt AI technology in governance and public management context. Hence, based on the above-mentioned research findings it is increasingly evidence that the negative and the positive implication of AI can be deployed into various public sectors (Ojo et al. 2019.pp. 160-162).

2.10 Chapter Summary

The chapter has developed extensive knowledge regarding the AI and the future of jobs within the governmental organization. For this purpose, the research has developed wider understanding related to AI. Through the current chapter it has been analyzed that the AI has attained increased significance since the past few years. However, the notion of COVID-19 has made it necessary for the organization to adapt AI. Thus, the current chapter has explored the implication of AI on the customer and the HRM. The above literature has found that the AI is significant for both HRM and the customer as it has made the operation of the organization easier. Furthermore, the literature review has discussed the theories such as media richness theory along the technology adaption theory to demonstrate the efficacy of the AI in the organizations. It has been found through the above literature that AI is likely to impact the future of jobs largely.

CHAPTER III

METHODOLOGY

3.1 Introduction

Methodology section is deemed to be perceived as one of the most potential aspects of the study (Fullerton and Lee, 2011). It is because of the reason that this chapter assist increasingly in analyzing and examining the process that has been done and how it has been done effectively. The research of Silverman (2020) claimed that the research methodology is utilized as the scientific and systematic method for assessing information with regards to particular topic. Synder (2019) further mentioned that the investigation chapter assist largely in attaining in-depth insight for interpreting the quality information. Hence, this chapter has also enabled the reader with the capability to evaluate and investigate the validity and the reliability of current research. For this purpose, the approach of the research has been largely emphasized in the current section to evaluate the method chosen. Further, in-depth, and detailed information has been provided regarding the research design that has been adopted for the study.

The selected design and the approach of the research has bene extensively discussed along with relevant justification for adoption. The section has also elaborated and shed light on the philosophy that has been used for the collected of data. The aim of current research is to study the effect of AI on the future of job. Therefore, the current chapter has extensively discussed the process of data collection as well as the technique of sampling and sample size. Moreover, the analysis tool for the data has been discussed in detailed. The chapter has also undercover the ethical consideration which are followed throughout the collection of data and during the research along with the limitation that has occurred in the current research. Hence, in order to structure the method chapter effectively, Saunder's research onion has been utilized.

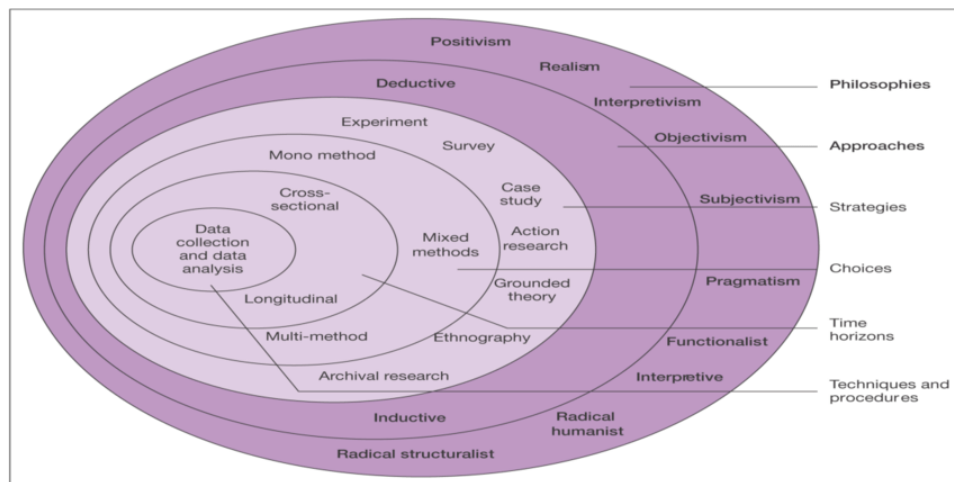


Figure 3.1: Saunder's Research Onion

(Source: Sahay, 2016)

3.2 Research Philosophy

The research philosophy is recognized as the belief through which the data is acquired with regards to particular aspect. As per the research of Caldwell (2015), philosophy of research can be thereby subdivided into three distinct types. These philosophies large includes pragmatism, realism, interpretivism and positivism. Marsonet (2019) further claimed that the positivism philosophy largely assists the research where the data rely on the method which has been utilized in science. Positivism philosophy tend to indicate that the social world can be understood in more objective manner. The research of Caldwell (2015) believed that the choice of philosophy is generally evaluated and determined by the problem of research. Moreover, the philosophy also largely assists in evaluating, measuring, and identifying the research element along with justification for the problem identification. The philosophy only relies over the quantifiable observation. The research of Marsonet (2019) claimed that these observations tend to lead toward statistical analysis. However, as the present research aim to analyses the qualitative and quantitative outcomes therefore this philosophy cannot be utilized (Marsonet, 2019. pp. 33-35).

Another philosophy that is utilized widely in the research scope is realism. This philosophy extensively relies over the scientific assumption that greatly lead toward

knowledge development. The research of Vveinhardt (2018) argued that the realist are the ones which rely largely increasingly over the principle of interpretive and positivist philosophy. This philosophy further underlies over the assumption for observing subjective nature. The philosophy only accepts the notion if it aims to encourage others action. Another research conducted by Shusterman (2016), claimed in pragmatism philosophy the author generally seeks to determine research question as one of the most potential aspects. The research further argued that the pragmatism generally accumulates positivism philosophy along with the interpretivism philosophy. The research conducted by Bacon (2012) also stated that the pragmatist is the one which deals with the fact along with the outcomes. On the other hand, interpretivism is another well-recognized philosophy which enable the researcher toward interpreting and studying the distinct study aspect. The philosophy also extensively relies on the positivism critique with regards to social aspect. However, the interpretivism philosophy cannot be used in the present design of research as it does not involve the interpretivism of quantifiable data.

For this purpose, pragmatism philosophy has been adopted in the current research. It is because of the fact that the pragmatism philosophy is recognized the accumulation of interpretivism and positivism philosophy. The philosophy of positivism assisted the research largely in examining quantifiable outcomes. Whereas the interpretivism philosophy has assisted in evaluating and interpreting the qualitative data. As claimed by Žukauskas et al. (2018) the philosophy of pragmatism is considered as one of the significant aspects as it largely assist in yielding the outcomes from quantitative and qualitative method. Hence, this philosophy has assisted largely in analyzing and highlighting different aspect of research such as what will be the impact of Artificial intelligence on the future of job. The philosophy has also assisted in analyzing the impact through quantifiable measures. The philosophy of pragmatism has largely assisted in generalizing and interpreting the outcomes.

3.3 Research Approach

The approach of research is perceived as general way which helps the researcher in presenting the argument put forward by the authors. The research conducted by Soiferman (2010) claimed that there exist two potential approaches in research. These approaches include inductive and deductive approach both encompasses distinct characteristics as well. It has been found that the deductive research approach is often regarded as top to bottom approach. It has been further mentioned by the above author that under the inductive approach the research generally seeks to initiate the research based on theories and the arguments which are potentially relevant with the subject matter. Consequently, the inductive approach also assists the researcher at large in determining the element which are most important to the research setting. The research conducted by Gregory and Muntermann (2021) the deductive approach on the other hand, aimed at analyzing and testing the theories which exist already. This approach tests the potential theories that were developed for analyzing the specific phenomenon.

The research indicated further that the deductive approach is increasingly significant as it assists in gathering the insight and establishing hypothesis for the targeted setting. The current research has also utilized deductive approach as it has aimed to test the hypothesis. In the current research four potential hypothesis has been developed the first hypothesis stated that the use of AI in COVID will encompasses potential influence over the organizational sustainability. Consequently, this approach has also helped in testing the second hypothesis which indicated that the utilization of AI during COVID will encompass potential influence over the customer. The third and fourth hypothesis aimed at analyzing the how the use of AI at the times of COVID will have impact over the human resource and future of jobs. The approach has increasingly help in the current research as this approach is deemed to be perceived a significant. Moreover, it has also assist performing deductive reasoning based on quantitative investigation. This approach has widely helped in testing the data and the hypothesis in statistical way.

The research conducted by Soiferman (2010), claimed that he deductive reasoning assist the researcher largely with the assistance of objective ontology and positivist epistemology. The above research further claimed that the quantitative tool in the

deductive reasoning is largely utilize on the basis of research process. This approach has also assisted in testing the experience of individuals. On the other hand, in the inductive approach the researcher is generally inclined toward use of reasoning based on research process. The approach is adopted when the researcher tends to develop the theory however without testing of the model. As claimed by Smart et al. (2012) the process of research tends to initiate with the recording and noting of experiences with regards to particular aspect. Further, the research of Azungah (2018), claimed that the inductive reasoning tends to begin with the generalization of themes and the patterns. Thus, as the current research requires testing of hypothesis along with the experiences therefore deductive approach has been used at large.

The research conducted by Liu (2016) argued that the deductive reasoning is recognized as the logical way to evaluate and analyses the outcome with the assistance of theory. The potential reason behind using of this approach is that deductive approach is deemed to be perceived as significant and effective to reach toward logical conclusion. Hence, in the present study the deductive approach has been opted to carefully collect data along with identifying the impact of AI over the future of job during the COVID-19.

3.4 Research Design

The research of Edmonds and Kennedy (2016) claimed that there exist three basic sort of design in research. These designs are being employed by the research more effectively. The research further stated that the design of research is divided into three categories which includes mixed, quantitative, and qualitative research design. The research of Mertens (2014) claimed that the quantitative design of research largely includes the processes that are conducted with the assistance of quantitative data. The research further claimed that the data comprises numerical values i.e., rations and the ratings. The potential goal of this research design is that it aimed at promoting and encouraging the objective analysis related to specific aspect. The research of Vogt et al. (2015) indicated that the quantitative data does not comprises personal bias. The research design on the other hand, is considered as the framework with the help of which different research are performed

effectively. Contradictory, the qualitative design of research is another potential design that is inclined toward the data collection which is more of subjective.

The research performed by Edmonds and Kennedy (2016) argued that the qualitative data is thereby acquired through several different kind. These comprises distinct conversation, debates, speeches, text, pictures, and conversation. Vogt et al. (2014) further stated that the potential benefit of utilizing this design of research is that it provided in-depth analysis with regards to experiences, perception, and the individual feelings. Mertens (2014) emphasized on the fact that the qualitative data help in overcoming and addressing the limitation of internal of quantitative data. It has been further claimed by the above research that the qualitative design of research is critiqued extensively as it is vulnerable toward personal bias. Hence, the subjective nature of this design makes it difficult for drawing clear, concise and clear results.

The third research design is mixed-method design, it is potential research design which is effective in most of the aspect. The research of Schoonenboom and Johnson (2017), stated that the mixed-method research is recognized as the accumulation of qualitative and quantitative design. Under this design of research, the research intent to collect qualitative and quantitative data which further triangulates the outcomes of research efficiently. According to Edmonds and Kennedy (2016), claimed that the outcome of mixed method is deemed to be valid and reliable in comparison with several other techniques. It has been further stated that the mixed-method research allows the researcher to address the internal limitation of research. Hence, as per the current study nature the design of mixed method has been effectively chosen. The potential reason in that it has assisted in quantifying the outcomes regarding the impact of AI on the future of jobs. While, the qualitative data helps in determining the experiences of the research regarding the use of AI at governmental organization. It has been claimed by the study of Vogt et al. (2014), the potential advantage of this research is that it establishes the outcome in numeric and textual form. Thus, the study has effectively utilized mixed research method to determine the impact of AI over the future of Jobs in the governmental organization of Istanbul. In order to acquire effective and reliable information quantitative along with the qualitative data has been used. The quantitative data has been performed to quantify the impact of

AI. While the qualitative data has largely assisted in interpreting the experiences of the employee in the governmental organization.

3.5 Data Collection Method

The research of Johnston (2017) claimed that the data collection is perceived as one of the significant research aspects. It is because no study can be conducted effectively without the proper data collection. The research of Alsayed et al. (2016) claimed that the primary research is thereby recognized as first-hand sources. These sources comprise observation, interviews, experiments and focus group (Fullerton and Lee, 2011). On the other hand, the secondary data is achieved through sources where the data has been provided already. These sources include books, articles, newspaper and journals. The research of Johnston (2017) further indicated that the primary data requires deep commitment from the researcher and need potential attention related to the subject-matter of the study. Whereas the secondary data does not need interaction with the subject of the study. For this purpose, the data of the current study has been collected with the help of primary sources. The major reason for adopting primary data sources is that it is increasingly specific toward the researcher need (Johnston, 2017. pp. 620-623).

While, the secondary research is not specific toward the researcher need. Another potential reason for using the primary data is that it is considered as one of the authentic sources. These sources offer up-to data and the data with regards to particular aspect. Consequently, the data which are attained with the help of primary sources are perceived as most reliable. It is because they are objective in nature and the data is collected from the original source. The research of Alsayed et al. (2016), indicated that the primary data offer updated information with regards to the topic of the study in comparison with the secondary data. Hence, in the present research primary data has been collected. In the present research firstly, survey was distributed to the participant. These questionnaires were thereby distributed in order to attain the impact of AI on the future of jobs in the governmental organization.

Further, interviews were conducted so that they can develop a discussion with regards to integration of AI and how it has impacted. These two primary sources have increasingly

helped in determining the impact of using AI during COVID over the organizational sustainability, human resources, customer and future of jobs. In general, these primary sources have increasingly assisted in attaining in-depth insight with regards to the impact of AI. The reason for adopting these primary sources is that it is cost-effective and fast approach to determine the data in fair and unbiased manner.

3.6 Sample Size and Technique

The study of Bakkalbasioglu (2020) claimed that the research sample is generally regarded as the group of items, people or objects which are undertaken from large population. The study also claimed that the sample need to represent the whole population for ensuring that the research findings can be generalize with the assistance of sample. The aim of current study is to analyses the impact of AI over the future of jobs in governmental organization. For this purpose, the sample for the current study are employee at governmental organization. The data has been collected from those governmental organization where AI has been integrated and implemented in the routine work. Where, the quantitative data i.e., survey has been conducted from the employee. On the other hand, the qualitative data i.e., interviews are also conducted to attain in-depth insight by observing the experience of employee in governmental organizations. The sample for interviews is about 10 and survey has been conducted from 100 employees. The potential reason for recruiting these sample is that they are deemed to be perceived as the relevant population with regards to study aims and objectives. Thus, this sample size and sample has increasingly assisted in attaining the research aim.

The sampling technique that has been utilized to recruit the participant is purposive sampling. The research of Acharya et al. (2013) claimed that purposive sampling is perceived as potential strategy as it also recognized as intentional selection of participant based on their capability with regards to specific phenomenon, theme, and concept. The research also indicated that the major goal of this strategy is to emphasis largely on characteristic of the sample. Hence, this sampling technique has assisted in recruiting the participants that are working in governmental organization where the AI has been integrated (Acharya et al. 2013. pp. 330-331). Similarly, this sampling method also assist

the author to answer research question. The research of Sharma (2017) claimed that the potential advantage of purposive sampling is that it allows the researcher to discuss the major impact of findings on the sample. The research of Acharya et al. (2013) claimed that the purposive sampling technique has been widely recognized as the most effective method. It is because the purposive sampling is time and cost effective as compared to other method of sampling.

3.6 Data Analysis

The research conducted by Nassaji (2015) indicated that the data analysis is referred to as one of the potential tools for application of statistical tool in more logical manner. These tools are applied to illustrate, expound, and examine the data. Consequently, the data analysis tool differs as per the nature of study i.e., either the study is qualitative in nature or quantitative. It is because the analysis of data relies heavily on the nature of data which has been adopted to acquire the data. The present research has thereby acquired mixed method which has involved the primary data collection. The data has been collected through qualitative and quantitative means. For this purpose, different analysis tool has been adopted for qualitative and the quantitative design. The quantitative data in the current research has been acquired through survey therefore, correlation, frequency, and demographic analysis has been utilized. These tests have been performed with the assistance of SPSS. The correlation analysis has been used for testing the association among variable along with the impact. The correlation analysis has assisted in testing the association among Sustainability of organization, customer, human resource and the future of job. Further, the association of these variables has been tested with the main variable that is use of AI during COVID. Such that the correlation analysis has assisted in determining the association its low, medium, or high. While demographic analysis is performed in order to study the characteristics of the respondents. Further, for the qualitative data as the data has been collected through interviews therefore it has been analyzed with the help of thematic analysis. It has been performed by evaluating and interpreting distinct themes.

3.7 Research Limitation

Each research encompasses different limitation which generally occurs in the process of research. Thus, the potential limitation in the current research has been experienced because of the COVID-19 pandemic. Firstly, the quantitative data was thereby attained through the online questionnaire as most of the employees are working from home. Similarly, the interviews have been performed through telephone. Face-to-face interview cannot be undertaken because of the policies of SOPs published by the government. Hence, these were the potential limitation which has occurred in the present research. As conducting face-to-face interviews might have assisted in achieving in-depth information.

Another limitation was that all of the interviewees regret to mention their workplaces in the official thesis as a reason from the policy of their organization, which an acceptance from those organization has been tried to be taken, but due to the COVID-19 and some restrictions in Istanbul it slows the process, so that the name of the organizations has not been mentioned.

3.8 Ethical Consideration

The research conducted by Wester (2011) claimed that the ethical consideration is one of the widely recognized aspects in the research process. This aspect has gain increased significance in the field of research since the past decades. Matsui et al. (2021), claimed that the ethical consideration is deemed to be significant as it assists in expanding relevant knowledge and promote the study aim with regards to phenomenon (Matsui et al. 2021. p. 250). The study of Wester (2011) further acknowledges the fact that the ethical consideration is vital as it support the values in research toward collaborative working. These values of collective working encompass the mutual respect among the participant and the researchers. Another research conducted by Rani and Sharma (2012) claimed that the social values and the moral such as the principles and the policies for imposing no harm toward the respondent are significant consideration. As the present research has been performed with the assistance of primary research and encompasses interaction with the participant therefore the ethical consideration with regards to respondent has been considered at large.

As the current research has been conducted with the help of primary sources therefore, the ethical consideration with regards to primary research has been followed. Firstly, the participant was increasingly aware with regards to the purpose of the study. Secondly, these respondents were also aware that the information is being collected only for the academic purposes. Informed consent of the participant was also attained, and participant were informed that they can withdraw if they want. Similarly, the participant was adequately aware with regards to aspect of integrity and confidentiality. While the privacy of the respondent during the collection of data was also maintained. In the current research, the informed consent of the respondent was attained from the participant before the survey and interview. These respondents were also aware that the personal informational of them will be kept as anonymous and confidential. The present research has further ensured that no participant has been harmed during the collection of data.

3.9 Chapter Summary

The current chapter has thereby aimed at determining method which were utilized to analyses the impact of AI on the future of jobs in the governmental organization. The current research has offered discussion regarding the philosophy and the approach that were used for collecting the data. Further, the method of data collection, the research design along with the sampling technique has been investigated. The chapter has further developed in-depth and detailed discussion regarding the data analysis tool along with ethical consideration and the limitation of research.

CHAPTER IV

RESULTS AND DISCUSSION

4.1 Introduction

In the past few decades there has been immense modification across the world. Such that the era of digitalization has widely modified many parts of the business. The evolution of internet, technology and the mobile along with the economic development and the financial crises has largely change the needs and the behavior of the customer. These all has results in immense pressure over the economy of the world and the budget deficit (Wirtz & Müller, 2019). The aim of the current study is to analyze the influence of AI over the future of the jobs. The research aimed to determine which type of AI is being used by the governmental organization and how the employee is dealing with it. It aimed at discovering all these by considering the period of COVID-19. For this purpose, the data has been collected from the employees that were working in governmental organization. The data has been collected from the survey and the interviews.

The findings of the survey have been analyzed through demographic, frequency and correlation analysis. On the other hand, the findings of the interviews have been analyzed through thematic analysis. The demographic analysis has been performed to study the characteristics while correlation analysis has been performed to study the relationship among the variables. While the interviews findings have been analyzed through thematic analyze where several themes have been made as per the objectives and the responses of the interview. Further, the discussion section has been developed to discuss the findings of the study.

4.2 Analysis

4.2.1 Demographic Analysis

The study conducted by Kanim and Cid (2020) claimed that the demographic assessment is considered as typical form of analysis. This helps the researcher in determining the pattern and the characteristic of group. The study also indicated that the profile of demographic is also largely regarded as the technique for interpreting the gender, age, and cultural identity of the population. Therefore, the demographics of the respondent in the current study are illustrated below:

Table 4.1: Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	25-30	25	25.0	25.0	25.0
	36-40	46	46.0	46.0	71.0
	45 and above	29	29.0	29.0	100.0
	Total	100	100.0	100.0	

From the Table 4.1, the age of the respondent can be analyzed. The findings of the above table displayed that from 100 respondents about 46% of the participant belongs to the age group of 36-40. On the other hand, about 29% of the participant were 45 and above. While only 25% of the respondent were aged between 25 to 30. From the above findings it can be effectively concluded that majority of the respondent belongs to the age group of 36-40.

Table 4.2: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	43	43.0	43.0	43.0
	Female	57	57.0	57.0	100.0
	Total	100	100.0	100.0	

The findings of demographic analysis in Table 4.2 demonstrate the gender of the respondent. The findings of the results revealed that out of 100 participants about 57% of the participants were female while 43% of the genders were male. Thus, it can be assumed that majority of the respondent were female.

Table 4.3: Work Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 2 years	23	23.0	23.0	23.0
	3-7 Years	20	20.0	20.0	43.0
	8 years and above	57	57.0	57.0	100.0
	Total	100	100.0	100.0	

The above Table 4.3 demonstrates the working experience of the respondent. The findings of the demographic analysis revealed that about 57% of the respondent has the working experience of 8 year and above. Moreover, about 23% of the respondent has the working experience of about less than 2 years. While 20% of the respondent encompasses the age experience of about 3 to 7 years. Therefore, it can be assumed that majority of the employees encompasses wide experience in the field of government organization.

4.2.2 Frequency Analysis

This part of the encompasses deep insight regarding the frequency analysis. This analysis has been undertaken for assessing the response of the participant pertinent to the impact of AI over the future of jobs in the governmental organization.

Table 4.4: Economic Dimension

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	18	18.0	18.0	18.0
	Agree	35	35.0	35.0	53.0
	Neutral	24	24.0	24.0	77.0
	Disagree	22	22.0	22.0	99.0
	Strongly Disagree	1	1.0	1.0	100.0
	Total	100	100.0	100.0	

To study the impact of AI during COVID-19 over the organization sustainability the respondent were asked that does the use of AI during COVID-19 has resulted in rise in unemployment. The findings of the above Table 4.4 show that about 53% of the respondent agree or strongly agree to the statement. While, about 24% of the respondent indicated neutral response and 22% respondent does not agree with the statement. From the above findings it can be concluded that majority of the employees feel that the use of AI during COVID-19 has resulted in rise in unemployment.

Table 4.5: Individual Dimension

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	15	15.0	15.0	15.0
	Agree	36	36.0	36.0	51.0
	Neutral	25	25.0	25.0	76.0
	Disagree	20	20.0	20.0	96.0
	Strongly Disagree	4	4.0	4.0	100.0
	Total	100	100.0	100.0	

The respondents were asked that does the AI utilization during COVID-19 has influence the emotional wellbeing and the working efficiency of employees. The findings of the

Table 4.5 display that out of 100 respondents about 51% of the respondent agree and strongly agree with the statement. On the other hand, 25% of the respondent showed neutral response while 20% does not agree with the statement. Therefore, it can be assumed that the large portion of employee feel that the AI utilization has influenced the emotional wellbeing as well as the working efficiency of the employee at large scale.

Table 4.6: Social Dimension

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	23	23.0	23.0	23.0
	Agree	36	36.0	36.0	59.0
	Neutral	26	26.0	26.0	85.0
	Disagree	12	12.0	12.0	97.0
	Strongly Disagree	3	3.0	3.0	100.0
	Total	100	100.0	100.0	

To determine the influence of AI over the organization sustainability the respondent were asked regarding the social dimension of the aspect. For instance, they were asked that does the use of AI during COVID-19 has influence the social aspect of working such as online community management, administration, or collaboration. The findings of the above Table 4.6 claimed that from a total of 100 participants about 59% of the respondent agree and strongly agree with the statement. On the other hand, 26% of the population displayed neutral response, while 12% of the respondent did not agree with the statement. From the above findings of the table, it can be assumed that the AI utilization has significant impact over the social dimensions which has influence the organizational sustainability at large scale.

Table 4.7: Virtual Assistant Can Follow the Customer Demand

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	8	8.0	8.0	8.0
	Agree	41	41.0	41.0	49.0
	Neutral	29	29.0	29.0	78.0
	Disagree	18	18.0	18.0	96.0
	Strongly Disagree	4	4.0	4.0	100.0
	Total		100	100.0	100.0

To study the impact of AI over the customer, the respondents were asked that does the virtual assistance could adhere to the command of customer. The findings of Table 4.7 shows that about 40% of the respondent agree to the above statement indicating that the virtual assistance can follow customer command. While 29% showed neutral response and 18% did not agree to the statement. Therefore, it can be assumed that as per the majority of respondent it is evident that the virtual assistant can follow the command of the customer.

Table 4.8: Artificial Intelligence Transforms Customer Service with Proper Automation in Fast Service

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	21	21.0	21.0	21.0
	Agree	41	41.0	41.0	62.0
	Neutral	21	21.0	21.0	83.0
	Disagree	15	15.0	15.0	98.0
	Strongly Disagree	2	2.0	2.0	100.0
	Total		100	100.0	100.0

The respondents were provided with the statement that the AI encompasses the power to transform the customer service with fast and automatic service. The findings of the statement in the Table 4.8, indicated that about 62% of the respondent agree or strongly agree to the statement. On the other hand, about 21% of the employee displayed neutral response while only 17% does not agree with the statement. This means that majority of the employee believes that the AI has the power to transform the customer service with fast and automatic service.

Table 4.9: Implementation of AI Will Be Able to Serve the Customers in Time

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	20	20.0	20.0	20.0
	Agree	36	36.0	36.0	56.0
	Neutral	24	24.0	24.0	80.0
	Disagree	19	19.0	19.0	99.0
	Strongly Disagree	1	1.0	1.0	100.0
	Total	100	100.0	100.0	

The respondents were further asked that the execution of AI enable the companies to serve customer on time. The findings of the above table show that about 56% of the respondent agree and strongly agree with the statement. While, about 24% of the respondent indicated neutral response. Such that only 20% of the respondent does not agree with the statement. From the above Table 4.9, it can be assumed that majority of the respondent thereby feel that AI implementation can assist the company in serving the customer on time.

Table 4.10: Onboarding and Talent Acquisition

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	24	24.0	24.0	24.0
	Agree	40	40.0	40.0	64.0
	Neutral	23	23.0	23.0	87.0
	Disagree	12	12.0	12.0	99.0
	Strongly Disagree	1	1.0	1.0	100.0
	Total	100	100.0	100.0	

The above Table 4.10 demonstrates the view of employees pertinent to how AI has influenced talent acquisition and on boarding. The findings of the analysis demonstrated that about 64% of the respondent indicated that the AI utilization has influenced the talent acquisition and the on boarding, while 23% of the respondent displayed neutral response.

Table 4.11: Training and Development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	29	29.0	29.0	29.0
	Agree	36	36.0	36.0	65.0
	Neutral	14	14.0	14.0	79.0
	Disagree	19	19.0	19.0	98.0
	Strongly Disagree	2	2.0	2.0	100.0
	Total	100	100.0	100.0	

The respondents were provided with the statement that does the HR has influenced training and development. The result in the above Table 4.11 indicated that 65% of the respondent has agreed and strongly agree to the statement, while 14% of the respondent has demonstrated neutral response.

Table 4.12: Data Privacy and Information Security

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	22	22.0	22.0	22.0
	Agree	39	39.0	39.0	61.0
	Neutral	26	26.0	26.0	87.0
	Disagree	12	12.0	12.0	99.0
	Strongly Disagree	1	1.0	1.0	100.0
	Total		100	100.0	100.0

The Table 4.12 shows the findings where the respondent was asked that does AI has influenced information security and data privacy. The findings of the research revealed that about 61% of the respondent believed that AI does influence data privacy and security. Only 13% does not agreed to the statement.

Table 4.13: Creativity and Innovation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	28	28.0	28.0	28.0
	Agree	37	37.0	37.0	65.0
	Neutral	23	23.0	23.0	88.0
	Disagree	12	12.0	12.0	100.0
	Total		100	100.0	100.0

The above Table 4.13 demonstrates the view of employee pertinent to the fact that does AI has modified and influenced creativity and innovation. The findings of the study demonstrated that out of 100 respondents about 65% of the respondent believes that the creativity and the innovation of the respondent have been modified because of AI. On the other hand, about 12% of the respondent does not agree to the statement.

Table 4.14: Flexibility and Autonomy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	40	40.0	40.0	40.0
	Agree	31	31.0	31.0	71.0
	Neutral	22	22.0	22.0	93.0
	Disagree	7	7.0	7.0	100.0
	Total	100	100.0	100.0	

The respondents were also asked that does AI have influenced flexibility and autonomy. The finding of the study demonstrated that about 71% of the respondent believed that AI has influenced autonomy and the flexibility of organization. On the other hand, 22% showed neutral response while 7% does not agree with the statement.

Table 4.15: Stress

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	38	38.0	38.0	38.0
	Agree	32	32.0	32.0	70.0
	Neutral	23	23.0	23.0	93.0
	Disagree	7	7.0	7.0	100.0
	Total	100	100.0	100.0	

The respondent also asked that does AI has reduced stress of the organization. From Table 4.15 majority of the respondent i.e., about 70% of the respondent believed that AI has reduced stress in the organization. On the other hand, 23% indicate neutral response.

Table 4.16: Job Complexity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	29	29.0	29.0	29.0
	Agree	31	31.0	31.0	60.0
	Neutral	25	25.0	25.0	85.0
	Disagree	14	14.0	14.0	99.0
	Strongly Disagree	1	1.0	1.0	100.0
	Total	100	100.0	100.0	

To determine the influence over future of jobs, the employees were asked that does AI has influenced job complexity. Upon this statement majority of the participant agreed to the statement. Such that from Table 4.16, it can be viewed that about 60% of the respondent believed that AI has influenced job complexities in organization. On the other hand, 15% does not agree to the statement while 25% showed neutral response.

Table 4.17: Work Overload

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	10	10.0	10.0	10.0
	Agree	35	35.0	35.0	45.0
	Neutral	31	31.0	31.0	76.0
	Disagree	20	20.0	20.0	96.0
	Strongly Disagree	4	4.0	4.0	100.0
	Total	100	100.0	100.0	

The respondents were also asked that does AI have influenced the work overload. It can be viewed from the above Table 4.17 that about 45% of the respondent feel that AI has reduce the workload. While, about 31% has showed neutral response. Out of 100 respondents only 24% does not agree with the statement.

Table 4.18: Uncertainty

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	28	28.0	28.0	28.0
	Agree	34	34.0	34.0	62.0
	Neutral	24	24.0	24.0	86.0
	Disagree	14	14.0	14.0	100.0
	Total	100	100.0	100.0	

The respondents were also asked that does AI have assisted in addressing uncertainty. The response of the statement can be seen in the above Table 4.18, where it has been found that about 62% of the respondent has strongly agreed and agreed to the statement. About 24% of the respondent indicated neutral response.

Table 4.19: Job Insecurity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	17	17.0	17.0	17.0
	Agree	39	39.0	39.0	56.0
	Neutral	28	28.0	28.0	84.0
	Disagree	13	13.0	13.0	97.0
	Strongly Disagree	3	3.0	3.0	100.0
	Total	100	100.0	100.0	

To determine and analyze the influence of AI over the future of jobs, the respondents were asked that does AI has resulted in job insecurity. As stated in table 4.19, about 56% of the

respondent indicated that AI has caused job insecurity in the market as most of the work is performed through technology. 16% of the employees does not agree with the statement.

Table 4.20: The Use of Artificial Intelligence During COVID-19 Largely Influence the Organizational Sustainability

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	15	15.0	15.0	15.0
	Agree	41	41.0	41.0	56.0
	Neutral	29	29.0	29.0	85.0
	Disagree	12	12.0	12.0	97.0
	Strongly Disagree	3	3.0	3.0	100.0
	Total	100	100.0	100.0	

To determine the influence of using AI during Covid-19 the respondent was further asked regarding organizational sustainability. For this purpose, the respondents were provided with the statement that does the use of AI during covid-19 has influence organizational sustainability. From Table 4.20 it can be analyzed that about 41% of the respondent believe that AI use during COVID has an influence over organizational sustainability. On the other hand, about 15% of the respondent did not agree with the statement.

Table 4.21: The Use of Artificial Intelligence During COVID-19 Largely Influence the Behavior and Choice of Costumer

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	9	9.0	9.0	9.0
	Agree	41	41.0	41.0	50.0
	Neutral	21	21.0	21.0	71.0
	Disagree	24	24.0	24.0	95.0
	Strongly Disagree	5	5.0	5.0	100.0
	Total	100	100.0	100.0	

Respondent for further provided with the statement that does the use of AI during covid-19 has influence behaviors and the choice of customer. Findings of the research in the above Table 4.21 display that about 50% of the respondent strongly agree or agree to the statement. On the other hand, 29% of the respondent has not agreed with the statement.

Table 4.22: The Use of Artificial Intelligence During COVID-19 Largely Influence the Operation of Human Resource

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	29	29.0	29.0	29.0
	Agree	34	34.0	34.0	63.0
	Neutral	14	14.0	14.0	77.0
	Disagree	20	20.0	20.0	97.0
	Strongly Disagree	3	3.0	3.0	100.0
	Total	100	100.0	100.0	

The employees were further asked that does the use of AI during COVID-19 have influenced the human resource operation. The findings of the study from the above Table 4.22 demonstrated that about 63% of the respondent agrees with the fact that AI influence human resource operation. Whereas 23% of the respondent does not agree to the statement.

Table 4.23: The Use of Artificial Intelligence During COVID-19 Largely Influence the Future of Jobs and Economy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	24	24.0	24.0	24.0
	Agree	31	31.0	31.0	55.0
	Neutral	32	32.0	32.0	87.0
	Disagree	13	13.0	13.0	100.0
	Total	100	100.0	100.0	

The respondent of the study was asked that does the use of AI has influence the future of jobs. The findings of the study in above Table 4.23 indicated that about 55% of the respondent strongly believes that AI utilization has an influence over the future of jobs. Whereas, about 13% of the respondent does not agree to the statement and 32% displayed neutral response.

4.2.3 Correlations Analysis

It has been asserted by Coolican (2018) that there exist different statistical tools in statistics. These tools are utilized effectively for determining the impact and the relationship among the variable. The analysis of correlation is recognized as one of the effective tools which assists in analyzing the relation among the variable. The study of Babbie et al. (2018) claimed that the Pearson Correlation is abbreviated as r which is recognized as the statistical metric. This metric is used to investigate the association among the variables. The study also claimed that the correlation value generally ranges from 0 to 1. On the contradictory, it is significant to mention that the Pearson Coefficient magnitude can be positive or negative. There exist two distinct variables which can be positively or negatively linked. It is significant to note that the value of Pearson Coefficient can range from -1 to 0 and from 0 to 1 (Verma, 2016). The value of Pearson Coefficient which falls between 0 to 0.3 demonstrate poor link between variables. On the other hand, the “ r ” value which range between 0.3 to 0.7 demonstrated moderate links among the variable. Consequently, the value of r when range between 0.7 to 1 demonstrate strong link among the independent variable and dependent variable (Coolican, 2018).

Table 4.24: Correlation

		Organization sustainability	Customer	Human Resource	Future of Jobs	AI during Covid-19
Organization sustainability	Pearson Correlation	1	.855**	.816**	.500**	.167
	Sig. (2-tailed)		.000	.000	.000	.097
	N	100	100	100	100	100
Customer	Pearson Correlation	.855**	1	.968**	.423**	.327**
	Sig. (2-tailed)	.000		.000	.000	.001
	N	100	100	100	100	100
Human Resource	Pearson Correlation	.816**	.968**	1	.382**	.346**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	100	100	100	100	100
Future of Jobs	Pearson Correlation	.500**	.423**	.382**	1	.775**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	100	100	100	100	100
AI during COVID	Pearson Correlation	.167	.327**	.346**	.775**	1
	Sig. (2-tailed)	.097	.001	.000	.000	
	N	100	100	100	100	100

** . Correlation is significant at the 0.01 level (2-tailed).

As a result, from table 4.24 of correlation which demonstrates the relationship and link among the variables. Where the value of Pearson Coefficient indicates degree of relationship while the value of sig shows to what extent the association is significant. Also, it could be shown from table 4.24 that there was a total of five variable. From which there were four independent variables while one dependent variable. The independent variables in the current study are customer, human resource, organization sustainability and the future of job. On the other hand, the dependent variable of the study is AI during COVID-19. The first variable which was tested for the association was organization sustainability. The relationship between organization sustainability and the AI during COVID-19 was determined through correlation analysis. The Pearson Coefficient value for organization sustainability has been found as .167. Since the calculated value falls under the threshold of poor and weak correlation therefore it can be assumed that the association between organization sustainability and AI during COVID-19 is poor. On the other hand, the value of sig has been determined as .09. The calculated value is greater than .05 therefore it can be assumed that the association between these two variables i.e., organization sustainability and the AI during COVID-19 is poor.

The second variable which was tested against AI was customer. The Pearson Coefficient value which has been found for these variables is .327. As the calculated value falls under the category of moderate association therefore it can be largely assumed that the association between these two variables is moderate. While the value of sig for customer has been found as .001. Since the value of sig is less than .05 therefore it can be assumed that customer and AI encompasses moderate but significant association.

The third independent variable of the study was human resource. The value of Pearson coefficient for human resource is found as .346. The r value falls under the category of moderate association. While the sig value for human resource has been found as .000 which is less than .05. Hence, it can be largely assumed that the relationship between human resource and AI is moderate but significant. Nonetheless, the last variable which is tested in correlation analysis is future of jobs. The relationship between future of job and the AI has been examined in the above Table. The findings indicate that the value of Pearson Coefficient is .775. Since the value calculated falls under the category and threshold of strong relation therefore it can be positively assumed that the association

between future of jobs and the AI is increasingly strong. On the other hand, the value of sig has found to be .000. Thus, with regards to future of jobs and AI it can be assumed that the association between these two variables is strong and significant. From the overall findings of correlation analysis, it can be assumed that the association between organization sustainability and the AI has found to be poor and insignificant. On the contradictory, customer and human resource encompasses moderate and significant association with AI. While there exist strong and increasingly significant association among the future of jobs and the AI.

4.3 Thematic Analysis

The aim of the current study was to determine the impact of AI on the future of jobs. For this purpose, the interviews were conducted from the employees in the governmental organization. The findings of the interviews have been structured into relevant themes as per the responses. Such that the first theme has been developed to determine how the notion of COVID-19 has evolved in organization. While the other themes have been focused on determining the influence of AI over the future of jobs, customer, organization sustainability, government organization and HR.

4.3.1 Evolution of AI during COVID-19

It has been found that the notion of AI has evolved largely during the COVID-19. During the COVID-19 several restrictions were imposed which make it necessary for organization to utilize technology (Jamshidi et al. 2020). For this purpose, the respondent was asked that how in their opinion, AI has evolved during COVID-19. Upon which one of the respondents indicated:

In my opinion, the COVID-19 has influenced almost every sector across the world. For this purpose, most of the organization shifted their working to home. To work virtually, organization adopted automation to make their work easier hence AI was adopted

From the above statement it can be interpreted that the pandemic has led toward the wide utilization of AI. Such that the pandemic has caused increased disruption across the world. Therefore, wide number of employees must shift their working from home. Thus, in order to make work easier and to adopt technology most of the organization began to utilize and

adopt AI. It can be evidenced by the findings of literature as well where it has been found that the awareness and popularity of AI has been increasing at growing rate. On the contrary, due to the COVID-19 most of the organization has started utilizing AI because of the ability to undertake decision. The study further asserted that the COVID-19 has largely led the organization to adopt AI and technology (Affinito, Botta, & Ventre, 2020).

Another respondent indicated:

Covid-19 has brought immense destruction to the economy. It leads the companies toward closure for time being or for permanently. Such that to address these issues AI was adopted by most of the organizations

From the above statement it can be interpreted that the respondents feel that COVID-19 has brought increased destruction to the economy. Such that it has led the companies toward closure for time being. On the other hand, due to the destructions caused by COVID-19 some of the organization has been closed permanently. Hence, to address the issues, organizations started to utilize AI at wide scale. The findings of the above response can be evidenced by the literature findings as well where it has been found that due to pandemic the organization are in large need to undertake automation. The study further demonstrated that the organization and the industries are having robots now which automate their way of working at large scale (Chattopadhyay, 2020).

Contradictory another respondent demonstrated:

The pandemic has led most of the organization toward closure. For this purpose, organization started to replace human with robot to perform their routine which could not have been done more effectively in virtual way. As due to COVID-19 employees are working from home therefore the use of robots has become increasingly significant.

From the above response it can be analyzed that most of the organization closed their operation due to pandemic. For this reason, more and more organization began to replace human with robot this was done to undertake the work in more virtual way. As because

of the COVID-19 large number of employees are working from home therefore the utilization of robots in organization has become viable and significant. It can be effectively triangulated from the findings of research as well where Parker (2016) indicated that due to the pandemic most of the offices and the factories has been closed. Thus, the manufacturers are largely planning to replace the human space with robots. The pandemic has led toward employee thinking and worrying that they might get replaced with robots.

4.3.2 Impact of AI on Future of Jobs

AI has modified the operation of organization at large scale. As such most of the organizations are working toward adopting technology to make their operation easier. For this purpose, the respondents were asked that does they think AI encompasses impact over the future of jobs. Upon this question one of the employees indicated:

I strongly feel that the digital technologies, automation, and the utilization of AI in organizations is widely modifying the way of working. In my opinion, AI and automation encompasses the power to boost the Turkey economy in future at large scale.

It can be analyzed from the above response that the automation, digital technologies, and the utilization of AI in different organization is changing the way of working at large scale. The respondent firmly believed that automation and AI involve the power for boosting the economy of Turkey in future at increasingly large scale. It can be triangulated from the findings of literature where the research of Brougham and Haar (2018) indicated that the technological advancement has increasingly changing the way of working. Hence, to attain the transformation wave it is significant to undertake sustainable growth in the organization.

Another respondent claimed:

I feel that the present technology encompasses the potential to automate half of the jobs. These robotics and other type of smart automation encompasses the potential to undertake economic benefits. Thus, the benefit attain from the automation can assist in generating the demand of jobs.

It can be analyzed from the above statement that the present technology comprises the potential to automate about half of the potential jobs. Such that the respondent believes that the robots alongside with other smart automation comprises the ability to reap economic benefits. These benefits and advantage attain through automation assist in further generating future demand of jobs. It can be sourced by the findings of literature where McKinsey & Company (2020) claimed that on international level the present technology can automate about 50 per cent of the jobs.

Another respondent said:

AI encompasses the potential to influence future of job. The reason behind it is that it has the ability to switch the companies pure into automation without having the necessities of human workers.

From the above response it can be effectively analyzed that the AI has the potential ability to influence the future of the jobs. The potential reason behind the phenomenon is that it has wide ability to transform the companies into automation by eradicating the need of human workers. The response can be triangulated from the findings of the literature as well. From the literature findings it has been noted that the AI is considered as the potential opportunity for the people of Turkey. It is because the notion has aimed to transform the marketplace and deal with the challenge. Moreover, AI also assist stakeholder in prioritizing the effort toward workplace adaption in the future world (PWC, 2020).

4.3.3 Influence of AI on Customer

AI growth has received notable attention across the world. It has largely invaded consciousness among society. It has been found that AI has modified the choices as well as the behavior of customers. For this purpose, the respondent was asked that does the aspect of AI has modified and change the preferences of the customer and how. Upon this question, one of the respondents responded:

In my opinion, the notion of AI has widely increased throughout the world. It has gained increased importance among the customer as well. The reason behind

this is that most of the modern customer are curious pertinent to exploring of new ideas and the utilization of AI.

It can be analyzed and interpreted from the above statement that the AI has been emerge as one of the significant phenomena across the world. It is because the notion has attained significant important among the customers. The potential reason behind this is that most of the modern customers are increasingly curious for exploring novel ideas and utilizing AI. It can be evidenced from the literature findings as well where it has been found by the study of Nadimpalli (2017) that the increase of AI utilization has attained significant attention and has invaded consciousness among the society at large scale. Thus, in the modern era, the element AI was at the center of attention across boundaries. The reason behind this was that international customer are now positively accepting the idea of AI as it is considered as frequent exposure.

Another employee expresses his opinion by stating:

AI has largely influence customer across the world, such that AI has enable the customer to save their data effectively. However, with increased use of AI in the modern world the customer of AI is largely afraid of the technology and the capabilities linked with the phenomenon.

It can be interpreted from the above statement that the occurrence of AI has influence the customer across boundaries at large scale. Moreover, it has been further found that the AI has largely enable the customer to save their data more effectively. On the other hand, the customers are widely concern with the technology alongside with the capabilities that are link with the aspect. It can be evidenced and sourced from the findings of literature as well where it has been found that the AI encompasses positive and significant influence over the customer. Such that the potential reason behind this is that most of the customers are just curious for the use of AI. The research further claimed that the AI has allowed the customer to save the data efficiently on their online platform. The study also claimed that the customers are largely concerned with the capabilities and the challenges linked with AI (Nadimpalli, 2017).

4.3.4 AI and HR

Human resource is considered as one of the important departments in the organization. It is because this department is largely responsible for managing the human in the organization. Such as their training and development, recruitment, and onboarding etc. Thus, to understand the influence of AI over the human resource one of the employees indicated:

AI has revolved largely in the operation of organization such as it has made it easier for talent acquisition, onboarding and training and development. I feel that the integration of AI into HR has proved to improve the performance of the organization

It can be interpreted from the above statement that the notion of AI has largely evolved in the organization operation. The response further indicated that it has made it increasingly easier for the acquisition of talent, recruitment, training, and development etc. The respondent believes that the AI integration into HR has increasingly proved to result in positive performance of organization. It can be triangulated and evidenced through the findings of literature where it has been found by the study of Kamble (2021) that the integration of AI into the human resource has brought improvement in the candidates experience along with the workforce. Additionally, the study further claimed that the integrated HR software has simplified the process of onboarding of new hiring. The study findings also claimed that the notion of AI has assisted the department of HR increasingly to analyze their resource efficiently. These also assist in suggesting the training based on the role in the job.

Similarly, another respondent demonstrated:

AI has eased the operation of HR at large scale. Looking at the influence that AI has made to the organization one can conclude it is wide. AI is considered as significant tool for acquiring talent. For instance, it can help in controlling different aspect such as resume screening, scheduling interviews and answering queries.

The above response of the employee indicated that the AI has largely eased the operation of HR at wide scale. The respondent believes that the AI is recognized as one of the potential tools to recruit and acquire talent. For example, it increasingly assists in

controlling distinct aspect such as answering queries, scheduling interviews and resume screening. It can be sourced from the findings of the literature where the study of Bhardwaj et al. (2020) indicated that AI is considered as one of the effective tool for the acquisition of talent. The study further indicated that the tool of AI is useful as it can help in controlling and handling of various task such as resume screening, scheduling interviews and many more. The study further asserted that the AI tend to provide help to the HR professional which assist in saving time from overly customer task. Through AI, HR department tend to emphasis over the valuable task such as HR marketing, sourcing and the employee engagement.

4.3.5 Role of AI in Governmental Organization

AI has revolutionized different part of the world. Similarly, the governmental organizations are also modified by the notion of AI. For determining the role of AI in government organization. The respondents were asked what advantage AI offers to the governmental organization. On this question one of the respondents replied:

AI has largely revolutionized governmental organization. More precisely, AI has offered increased number of opportunities to the government across the world. It has also improved the trust of citizen in the sector of government

It can be interpreted from the above statement that the AI has largely revolutionized the governmental organization. In other words, AI has provided increase opportunities to the governmental bodies across the world. It has thereby enhanced trust among the citizen at large scale. It can be evidenced and triangulated from the findings of the literature where it has been found that the excess utilization of AI in the governmental sector has thereby offered increased opportunities to the governmental bodies and authorities. The research claimed that the traditional type of policy making, enforcement and the provision of service can modify the provision steadily with the integration of AI in the sector of government (Montoya & Rivas, 2019).

Another respondent claimed:

I feel that advantage that AI provides to government organization is that governmental organization can thereby effectively use AI to improve the quality and efficacy of the public sector.

It can be analyzed from the above response that the benefit which AI has offered to the governmental organization is that the organization can use the AI efficiently. Such that the governmental organization utilize AI to enhance the efficacy and the quality of the public sector. It can be evidenced from the findings of the literature as well. Such as in the literature it has been found by the study of Ojo et al. (2019) that the governmental bodies can thereby utilize technology like AI. This assists largely in improving the quality of the public sector.

On the contradictory, another respondent talks about the disadvantage of using AI in governmental organization by stating that:

I feel that alongside with the benefits the AI is also challenging in the governmental organization. Such that it could result in lower trust among citizens. The usage of AI in government organization is at rise and has enhanced the sophistication pertinent to AI apps.

The above response indicated that alongside with the advantages linked with AI there has been increased number of challenges as well. These challenges can certainly lower the trust among the citizens. The response further indicated that the utilization of AI in the organization of government has thereby increase the sophistication linked with the AI applications. It can be sourced and evidenced from the findings of literature where the study of Zuiderwijk et al. (2021) claimed that the utilization of AI in the governmental organization can reap benefit but also bring increased number of challenges as well. Such that as AI can foster trust it might lead toward reduce in the trust as well. It has been further found by the above findings of the research that the AI utilization in the sector of government has increased the seriousness of applications. Hence, this factor has thereby raised question on the public governance. It also involves challenging economic problem pertinent to the labour market besides sustainable development.

4.4 Discussion

Objective 1: Comprehending the notion of Artificial intelligence and its significance in general

The first objective of the study was to comprehend AI and its importance. The findings of the literature demonstrated that the notion of AI refers toward the ability to acquire or apply different skills and knowledge for solving the problems (Shabbir and Anwer, 2018). It has been further found that that the artificial intelligence is considered as the field of study that aimed to integrate the computer and tends to make them smarter. This largely assists the computer to operate on their own without adding any subsequent commands. The study findings also demonstrated that the AI play increasingly significant role and can help in saving adequate time. Thus, in the modern world, the AI is being utilized largely in every aspect of life. It is being utilized for making the work easier. Popenici and Kerr (2017) indicated that the AI is considered as wide subject matter pertinent to science invention. Still, in the modern world most of the scientist tends to perceive AI makes technology a reality (Miller, 2019. p. 25).

Objective 2: Determining the different effect of Artificial intelligence over the human resources

The second objective was to analyze the influence of AI over human resource. The study of Kamble (2021) claimed that the integration of AI with human resource has largely brought enhancement in the experience of the candidates. The findings of frequency analysis revealed that majority of the employees feel that the AI has largely modified the process of onboarding and talent acquisition. The findings of the literature claimed that the onboarding has become easier for the new hiring with the assistance of integrated HR software (Premnath and Chully, 2020, pp. 1193-1195). The study of Hmoud et al. (2020) claimed that the AI has largely assisted the HR department to analyze their resource and suggest the training module based on the job role. The notion of AI has largely influenced almost each aspect of the life. It can also be evidenced from the findings of the current study. Such that majority of the respondent believe that the AI has influenced the training and development at large scale. Similarly, the findings of the current study also indicated

that the data privacy and information security is widely enhanced through the utilization of AI (Chouhan, 2021. pp. 2778-2780).

More precisely, the regression findings demonstrated that the AI has influenced the HR operation at large scale. It can be evidenced from the study of Yawalkar (2019) that the integration of AI in the HR system has offered increased benefit pertinent to development and training. Another study by Bhardwaj et al. (2020) claimed that the notion of AI assist largely in improving the skillset among the employee's at large scale. The study findings also indicated that the AI tends to assist extensively for analyzing adequate skillset and offer them with the training as per the job nature. Another study by Acemoglu and Restrepo (2019), asserted that the firm require understanding the significant target market and developing the plan accordingly for attaining the goal of organization. Thus, the integration of AI with HR has proved to be significant (Maduravoyal, 2018. pp. 1890-1893).

Objective 3: Analyzing the influence of AI on the customers.

The third objective of the study was to determine the influence of AI over the customer. It has been found that the customer tends to play increasingly significant role in the growth of AI as the modern reality. The study conducted by Grewal et al. (2018) claimed that the AI play increasingly notable role for monitoring the segment of customer on the social media and other platform of internet. The respondents were asked that does the virtual assistant encompass the ability for following the commands that are made by customer. The findings of quantitative analysis revealed that mixed result such that majority of the respondent agree but most of them showed neutral response. This means that the virtual assistant encompasses moderate ability to follows the command. Similarly, majority of the findings revealed that AI transformed the customer service with adequate automation and fast service. The findings of literature revealed by the study of Nadimpalli (2017) that the AI has enable the customer to efficiently save their data on the online platform without processes. Thus, with the increased in the notion of AI, customers are largely afraid regarding the AI and the capabilities linked with AI (Grewal et al. 2018. pp. 10-12).

The current findings of the study indicated that association between AI and customer is moderate. The findings of the study and the literature largely contradicts due to the fact

that the literature findings by Sun (2019) indicated that the customer interact with the AI by reading regarding them on media or due to their personal experience. Consequently, the findings of quantitative analysis also does not triangulated with the findings of the qualitative analysis. Such that the findings of thematic analysis revealed that the AI utilization has been increased across the globe. Such that the notion has attain increased significance among the customers at large scale. The potential reason behind this is that the modern customers are largely curious to explore the novel ideas pertinent to the utilization of AI (Mohammed, 2019. pp. 19-22).

Objective 4: Examining the association among AI and COVID-19 pandemic.

The fourth objective of the study was to determine the link between AI and COVID-19 pandemic. It has been found that the effective utilization pertinent to automation require transformation due to the pandemic. The organizations and the industries have transformed their labor activities and have develop challenges for the organization (Isac et al. 2020). The quantitative analysis displayed the utilization of AI largely increased because of COVID-19. Such that from the frequency analysis it can be noted that the use of AI during COVID-19 largely influence the sustainability of organization and the choices of customer. It has also influenced the operation of human resources at large scale. It has been further revealed that the sector of automation has been hardly hit due to the pandemic. While it is predicted that there will be adequate shift toward automation (Pan and Zhang, 2020).

The study performed by Affinito et al. (2020), indicated that the pandemic is making it increasingly severe for the employee to concentrate on their working. It is because the employee is unable to continue their working from the office thus the robotic role has become increasingly significant. The current study findings can also be evidenced by the study of Vincent (2017) that indicated that due to the COVID-19 most of the worker has begun to worry that now they will be replaced through machines. Therefore, most of the companies have transformed their operation to work from home. For working virtually many of the organization has thereby adopted automation in order to make their work easier (Grewal et al. 2018. pp. 10-12).

For this purpose, the notion of AI has been adopted. The findings of the current study can be evidenced by the research of Isac et al. (2020), where it has been indicated that the advancement in robotics and AI encompasses powerful influence on the routine operation. Such that before pandemic the potential driver behind the evolution of AI was economics. However, in the modern world robots offer the opportunities for restarting the economy after the damages that has been caused due to covid-19. The findings of the current study through qualitative analysis demonstrated that the COVID-19 has impacted almost each sector across the globe. The current findings of the current also indicated that the COVID-19 has brought increased destruction toward the economy. As an outcome it has led the companies toward closure permanently or for time being. Thus, for addressing the issues the notion of AI has been adopted by most of the organization (Rodney et al. 2019, pp. 30-35).

Objective 5: Evaluating the influence of AI over the organizational sustainability.

Fifth objective of the study was to evaluate the impact of AI over the sustainability of organization. The findings of the literature demonstrated that the sector of automation is considered as one of the most influenced sectors because of COVID-19. The impact has indicated that there is predicted to be a great shift in the future toward automation. Moreover, it has been further analyzed that the automation is not thereby considered as the new aspect (Montoya and Rivas, 2019). It has been further found through the literature that since the past few decades, the robots tend to play significant role in the automobile manufacturing. This largely different across different sectors and activities (Mohammed, 2019. pp. 19-22).

The findings of the quantitative analysis revealed that the AI has largely influence the economic dimension such as it has led the country toward rise in unemployment. Further, it has also found through quantitative findings that AI has influenced the individual dimension such as emotional wellbeing and work efficiency. Further, the social dimension including facilitation of collaboration and administration is also influence because of AI.

These findings can be evidenced largely through the report of McKinsey & Company (2020) where it has been indicated that the advancement in automation, digital technologies and AI are changing the working ways, the activities performed by business and the skills that are required to succeed. Thus, adopting this steady wave of transformation is pertinent to the utmost significance for ensuring the sustainable growth. The study of Mohammed (2019) further asserted that because of business and automation the trend of sustainability pertinent to the future of working can be transformed efficiently. Thus, the job of next few decades thereby predicted to be influenced due to COVID-19. Whereas the study of Montoya and Rivas (2019) claimed that the wide usage of AI in the sector of government has offered increased opportunity to the government across the globe. The quantitative findings of the study demonstrated that the AI encompasses significant and notable influence over the sustainability of organization (Premnath and Chully, 2020, pp. 1193-1195)

Objective 6: Analyzing the potential impact of the AI over the future of jobs.

The fifth objective of the study was to analyze the impact of AI over the future of jobs. It has been analyzed that that in Turkey about one-third of the activities that are performed in about 60% of the companies can be automated (McKinsey & Company, 2020). The findings of the current quantitative analysis indicated that the AI has significant influence over the future of jobs. Moreover, AI is expected to influence the job satisfaction as well. It can be evidenced by the study of McKinsey & Company (2020), that the automation encompasses the potential for enhancing the emergency response, environment, education, healthcare, and traffic (Chouhan, 2021. pp. 2778-2780).

It can also assist in lowering the hazards at workplace, making housing more affordable and offering benefit to the customer in variety of ways. It has been expected that the AI has the potential to enhance the job satisfaction and make the labor market more elastic. Consequently, it eventually predicted to increase the productivity and the growth that is likely to be the potential driver for the economic growth in most of the mature economies. The report of PWC (2020) claimed that the robotics, AI, and other type of automation encompasses the potential to bring economic benefit. It is due to the fact that these all

contributes for about \$15 trillion to the international GDP by the year 2030. Thus, this extra money is expected to increase the demand of jobs along with the concern which could displace the already existing jobs.

4.5 Chapter Summary

The above chapter has been developed to shed light on the influence of AI to the future of jobs. For this purpose, mixed research design has been utilized. The quantitative data was attained through survey while the qualitative data has been attained through interviews. The current chapter was developed to analyze the findings. Thus, for the quantitative data, it has been analyzed through frequency, and correlation analysis. On the other hand, the finding of thematic analysis has been analyzed through different themes. Nonetheless, the discussion section has also been developed to discuss the findings as per the objectives.

CHAPTER V

CONCLUSION AND RECOMMENDATION

5.1 Summarized Findings

The current study aimed to focus on the impact of AI over the future of jobs. More precisely, the aim was to determine that what sort of AI is being utilized by the governmental organization. Moreover, it also determines how the employees are dealing with the phenomenon. Thus, to attain the study aim mixed method was utilized. Under this strategy, the quantitative data has been analyzed through survey whereas; the qualitative data has been analyzed through interviews. The data of quantitative design has been analyzed through frequency and correlation. Whereas the qualitative data has been analyzed through thematic analysis. Different objectives were developed to determine the aim. The first objective of the study was to comprehend what AI means and shed light on its significance. The findings of the study revealed that the notion of AI largely refers toward the ability for acquiring or applying distinct skills and knowledge for resolving the problem. Further, it has been revealed through the analysis and the literature that the intelligence is widely linked with using mental ability for reasoning, learning, and solving different situation. Besides, it has been found that the intelligence is integrated with different cognitive functioning. These largely include attention, language, planning, memory, and perception. Another objective of the study was to determine the influence of AI over the human resource. The study findings revealed that the integration of AI with the HR has brought significant improvement in the experience of workforce and the candidates.

Further, it has been indicated that this software has simplified the procedure of onboarding for the new hiring. Such that the findings revealed that the AI has influenced HR operation such as onboarding, training and development, talent acquisition, analytical decision-making, and administrative tasks. In the correlation analysis the Pearson Value for the Human resource and AI was .346. This indicates that the association between human resource and AI is found to be moderate but significant.

While the customers of Istanbul are increasingly curious to explore novel ideas, avenues, and the utilization of AI. As a result, it has increased the interest and awareness of customer in the AI domain which play notable role in the modern century. On the contradictory, the quantitative finding shows opposite result. It has been revealed that the impact of AI over customer is non-significant. While the Pearson Coefficient value demonstrated moderate correlation. Another objective of the study was to analyze the relationship between COVID-19 pandemic and the AI. The findings of the qualitative design revealed that the COVID-19 has influenced almost each sector across the globe. The country Turkey is also influenced by the pandemic and has been disrupted at large scale. Therefore, most of the organization has shifted their working to home. Hence, to work virtually most of the organization has started to adopt automation. This has assisted in making the work easier. The findings of the study also indicated that the relationship between AI and pandemic is significant as due to pandemic most of the organization get closed. Therefore, organizations in Turkey began to replace the human with robots. This assist in performing routine activities which can be done more efficiently through virtual manner.

The literature findings indicated that the potential driver behind the revolution in the past were economic however in the modern world it is economics. Thus, the robots largely provide novel opportunities to restart the economy of Turkey after the damages led by the pandemic. Another objective of the study was to analyze the AI influence over the sustainability of organization. The findings of the study revealed that the automation sector is considered as one of the largely influenced sector because of COVID-19. It has been found that because of business and the automation the trend of sustainability pertinent to the future of working is transformed efficiently in Istanbul. AI is predicted to influence job of Turkey over the upcoming few decades.

Thus, the utilization of AI in the sector of government is offering increased number of opportunities toward the government across the globe. The findings of Pearson Coefficient for this variable indicate poor and insignificant association. However, the influence over the organization sustainability was found to be significant in Turkey. Nonetheless, the last objective of the study was to analyze the influence of AI over the future of the jobs. The findings of the study indicated that the advancement in the automation specifically the AI

and digital technology are increasingly modifying the way in which individual tend to work. It has been further revealed that the digital technologies have become significant aspect for the future economy growth.

While it is also revealed through the results that the productivity of the employee is likely to be increased through the adoption of AI. The findings also indicated that the AI encompasses the potential for improving the job satisfaction at work and make market of labor more flexible. On the other hand, it is predicted that the productivity among employees and the growth of the business is likely to be potential driver for the economic growth of country like Turkey. Thus, these all can be enhanced through effective utilization of AI.

5.2 Recommendation

The aim of the study was to analyze the influence of AI on the future of jobs in the governmental organization. From the findings of the study, it can be analyzed that the notion of AI is increasingly prevalent for the success of the organization. Thus, following recommendation has been made for the government that how they can improve the utilization of AI and deal with the pandemic.

- It has been found in the coming years; several employees are expected to lose their jobs to the robot. Thus, the retaining of employees might undergo increased physical and psychological pressure. Such that more and more employees are expected to experience unemployment due to the absence of jobs. For this purpose, enormous solution has been proposed. While one of the significant consideration regards to the phenomenon is to increase the educational level of the employee. This can assist the employee in commencing high degree jobs which are required by automation. Such that the training schemes can be mandated to deal with the problem.
- Another recommendation to the government official is to save money and time by optimizing and automating the routine task and the processes. It tends to increase the operational efficiencies along with the productivity. Government institution need to develop awareness among employee that how AI can assist in making business decision faster.

- The government official need to offer training that how the AI can effectively streamline the workflow and ensure effective project management. They need to understand that AI can lower time-consuming, monotonous task by developing intelligence and automated tools.
- In order to execute effective utilization of AI in the governmental organizations. The employees at government organization need to adhere to the potential standard. Such that they need to be flexible to keep pace with innovation. Secondly, they should focus on the areas with large utilization of scale which can address the particular risk and the influence.
- Moreover, the government can utilize AI to assist the public member in interacting with government and accessing the services of government. For instance, these can assist by answering the queries through online chatbots. This can largely assist in directing the requires to particular area of government and filling out forms.
- The government needs to be aware that the AI can be seen as one of the effective tools for the policy maker for pursuing the data driven approach with the help of machine learning and analytic techniques. It offers precise image regarding the need of the country and how the problem can be resolved efficiently.

5.3 Conclusion

The findings of the study concluded that the AI encompasses significant influence over the future of jobs. Such that the dimensions of AI which has been found and were tested were organization sustainability, customer, HR, future of jobs and human resource. The variables which are accepted in the current research are HR, future of jobs, organization sustainability and future of jobs. It can be assumed that the AI does not influence customer. From the above findings it can be concluded that the utilization of AI in the governmental sector has been increased at large scale. It can be further concluded that the notion of AI has attained increased significance across the globe. It is to the fact that the international customers are now widely accepting the AI idea because of frequent exposure. Moreover, the literature findings along with qualitative findings shed light that the customer of AI has attained increased significance pertinent to AI. It is largely because the AI encompasses positive influence over the customer. With regards to COVID-19, it can be concluded that because of the pandemic employee shift their working to home thus the

utilization of robot become more prevalent under such circumstance. From the study findings it can be conclude that the AI can lead toward job satisfaction as it can offer the employee with tools and technique which can make their work easier at Istanbul.

5.4 Future Implication

The aim of the present research was to determine the influence of AI over the future of jobs in the governmental organization of Istanbul, Turkey. The data of the current study has been collected through mixed method i.e., survey and interviews both. However, the future research should emphasis on one design to make detailed analysis and generalized the findings more easily. As the current research aimed to determine the influenced therefore, the future research needs to be conducted pertinent to the effective utilization of AI in the governmental sector. The official needs to develop understanding regarding how they can effectively utilize AI. It is because it has been predicted that the robot is likely to replace human in the upcoming decades.

BIBLIOGRAPHY

- Acemoglu, D., & Restrepo, P. (2019). 8. *Artificial Intelligence, Automation, and Work* (pp. 197-236). University of Chicago Press. DOI: 10.3386/w24196
- Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: Why and how of it. *Indian Journal of Medical Specialties*, 4(2), 330-333. DOI: 10.7713/ijms.2013.0032
- Adadi, A., & Berrada, M. (2018). Peeking inside the black-box: a survey on explainable artificial intelligence (XAI). *IEEE access*, 6, 52138-52160. DOI: 10.1109/access.2018.2870052
- Affinito, A., Botta, A., & Ventre, G. (2020, September). The impact of covid on network utilization: an analysis on domain popularity. In *2020 IEEE 25th International Workshop on Computer Aided Modeling and Design of Communication Links and Networks (CAMAD)* (pp. 1-6). IEEE. DOI: 10.1109/camad50429.2020.9209302
- Al-Mushayt, O. S. (2019). Automating E-government services with artificial intelligence. *IEEE Access*, 7, 146821-146829. DOI: 10.1109/access.2019.2946204
- Alsayed, I., Maguire-Wright, K., & Flickinger, K. (2016). Utilizing secondary data sources in combination with primary clinical data to optimize data collection in prospective study designs. *Value in Health*, 19(3), A108. DOI: 10.1016/j.jval.2016.03.1699
- Aoki, N. (2020). An experimental study of public trust in AI chatbots in the public sector. *Government Information Quarterly*, 37(4), 101490. DOI: 10.1016/j.giq.2020.101490
- Azungah, T. (2018). Qualitative research: deductive and inductive approaches to data analysis. *Qualitative Research Journal*. DOI: 10.1108/qrj-d-18-00035
- Babbie, E., Wagner III, W. E., & Zaino, J. (2018). *Adventures in social research: Data analysis using IBM SPSS statistics*. Sage Publications.
- Bacon, M., (2012). *Pragmatism: an introduction*. Polity. DOI: 10.1007/s11016-013-9843-x

- Bakkalbasioglu, E. (2020). How to Access Elites When Textbook Methods Fail: Challenges of Purposive Sampling and Advantages of Using Interviewees as "Fixers". *Qualitative Report*, 25(3). DOI: 10.46743/2160-3715/2020.3976
- Ben Rjab, A., & Mellouli, S. (2019, April). Artificial intelligence in smart cities: Systematic literature network analysis. In *Proceedings of the 12th International Conference on Theory and Practice of Electronic Governance* (pp. 259-269). DOI: 10.1145/3326365.3326400
- Bhardwaj, G., Singh, S. V., & Kumar, V. (2020, January). An Empirical Study of Artificial Intelligence and its Impact on Human Resource Functions. In *2020 International Conference on Computation, Automation and Knowledge Management (ICCAKM)* (pp. 47-51). IEEE. DOI: 10.1109/iccakm46823.2020.9051544
- Brougham, D., & Haar, J. (2018). Smart technology, artificial intelligence, robotics, and algorithms (STARA): Employees' perceptions of our future workplace. *Journal of Management & Organization*, 24(2), 239-257. DOI: 10.1017/jmo.2016.55
- Burton-Jones, A., Butler, B., Scott, S., & Xu, S. X. (2018). Next-generation information systems theories. *MIS Quarterly Call for Papers*. DOI: 10.25300/misq/2021/15434.1
- Caldwell, B., (2015). *Beyond positivism*. Routledge. DOI: Caldwell, B., (2015). *Beyond positivism*. Routledge. DOI: 10.25300/misq/2021/15434.1
- Chattopadhyay, P. (2020). A Study on Various Applications of Artificial Intelligence (AI) in the Field of Human Resource Management (HRM). *International Journal of Advanced Research in Science, Communication and Technology*, 63-67. DOI: 10.48175/605
- Choudhury, S. R., (2018). A.I. and robotics will create almost 60 million more jobs than they destroy by 2022, report says, [Online] Available at: <https://www.cnbc.com/2018/09/17/wef-machines-are-going-to-perform-more-tasks-than-humans-by-2025.html>. DOI: 10.1108/ir.2012.04939daa.003

- Chouhan, K. (2021). Comprehensive Analysis of Artificial Intelligence with Human Resources Management. *LINGUISTICA ANTVERPIENSIA*, 2774-2784. DOI: 10.52034/lanstts.v8i.245
- Coolican, H. (2018). Psychological tests and measurement scales. In *Research methods and statistics in psychology* (pp. 213-248). Routledge. DOI: 10.4324/9781315201009-8
- De Sousa, W. G., de Melo, E. R. P., Bermejo, P. H. D. S., Farias, R. A. S., & Gomes, A. O. (2019). How and where is artificial intelligence in the public sector going? A literature review and research agenda. *Government Information Quarterly*, 36(4), 101392. DOI: 10.1016/j.giq.2019.07.004
- Desouza, K. C., Dawson, G. S., & Chenok, D. (2020). Designing, developing, and deploying artificial intelligence systems: Lessons from and for the public sector. *Business Horizons*, 63(2), 205-213. DOI: 10.1016/j.giq.2019.07.004
- Dignum, V. (2017). Responsible autonomy. *arXiv preprint arXiv:1706.02513*. DOI: 10.1063/pt.5.028530
- Dwivedi, Y. K., Hughes, L., Ismagilova, E., Aarts, G., Coombs, C., Crick, T., ... & Williams, M. D. (2019). Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, 101994. DOI: 10.1016/j.ijinfomgt.2019.08.002
- Ertel, W. (2018). *Introduction to artificial intelligence*. Springer. DOI: 10.1007/978-0-85729-299-5_1
- Etscheid, J. (2019, September). Artificial intelligence in public administration. In *International Conference on Electronic Government* (pp. 248-261). Springer, Cham. DOI: 10.1007/978-3-030-27325-5_19
- Fullerton, S. M., & Lee, S. S. (2011). Secondary uses and the governance of de-identified data: lessons from the human genome diversity panel. *BMC medical ethics*, 12(1), 1-6. DOI: 10.1186/1472-6939-12-16

- Gregory, R., & Muntermann, J. (2011). Theorizing in design science research: inductive versus deductive approaches. DOI: 10.1287/isre.2014.0533
- Grewal, D. S. (2014). A critical conceptual analysis of definitions of artificial intelligence as applicable to computer engineering. *IOSR Journal of Computer Engineering*, 16(2), 9-13. DOI: 10.9790/0661-16210913
- Grewal, D., Motyka, S., & Levy, M. (2018). The evolution and future of retailing and retailing education. *Journal of Marketing Education*, 40(1), 85-93. DOI: 10.1177/0273475318755838
- Guenole, N., & Feinzig, S. (2018). The business case for ai in HR. *IBM [Электронный ресурс].–Режим доступа: <https://www.ibm.com/downloads/cas/AGKXJX6M> (дата обращения: 10.04. 2020).*
- Hernández-Orallo, J. (2014) AI evaluation: past, present and future (2014). *arXiv preprint arXiv:1408.6908*. DOI:
- Hmoud, B. I., & Várallyai, L. (2020). Artificial Intelligence in Human Resources Information Systems: Investigating its Trust and Adoption Determinants. *International Journal of Engineering and Management Sciences*, 5(1), 749-765. DOI: 10.21791/ijems.2020.1.65
- Isac, N., Dobrin, C., & Badshah, W. (2020). The Impact of Sustainable Transition of Automation on Employees in the Automotive Sector and the Influence of Corona Pandemic. *Review of International Comparative Management/Revista de Management Comparat International*, 21(4). DOI: 10.1504/ijpspm.2020.10040371
- Ishii, K., Lyons, M. M., & Carr, S. A. (2019). Revisiting media richness theory for today and future. *Human Behavior and Emerging Technologies*, 1(2), 124-131. DOI: 10.1177/1077800420922251
- Jamshidi, M., Lalbakhsh, A., Talla, J., Peroutka, Z., Hadjilooei, F., Lalbakhsh, P., & Mohyuddin, W. (2020). Artificial intelligence and COVID-19: deep learning approaches for diagnosis and treatment. *IEEE Access*, 8, 109581-109595. DOI: 10.4135/9781849209878.n2

- Johnston, M. P. (2017). Secondary data analysis: A method of which the time has come. *Qualitative and quantitative methods in libraries*, 3(3), 619-626. DOI: 10.5703/1288284317144
- Kafle, S. C. (2019). Correlation and Regression Analysis Using SPSS. *Management, Technology & Social Sciences*, 126.
- Kamble, S., (2021) The Impact Of Artificial Intelligence In Human Resource Decision Making Processes, [Online] Available at: <https://inc42.com/resources/the-impact-of-ai-in-human-resource-decision-making-processes/>
- Kankanhalli, A., Charalabidis, Y., & Mellouli, S. (2019). IoT and AI for smart government: A research agenda. DOI: 10.1016/j.giq.2019.02.003
- Kaplan, J. (2016). Artificial intelligence: Think again. *Communications of the ACM*, 60(1), 36-38.
- Kar, A. K. (2015). A hybrid group decision support system for supplier selection using analytic hierarchy process, fuzzy set theory and neural network. *Journal of Computational Science*, 6, 23-33. DOI: 10.1016/j.jocs.2014.11.002
- Klosters, D., (2015). World Economic Forum Annual Meeting 2015 Programme, [Online] Available at: http://www3.weforum.org/docs/AM15/WEF_AM15_Programme_A3526EC2F4.pdf
- Kuziemski, M., & Misuraca, G. (2020). AI governance in the public sector: Three tales from the frontiers of automated decision-making in democratic settings. *Telecommunications policy*, 44(6), 101976. DOI: 10.1016/j.telpol.2020.101976
- Kuziemski, M., & Misuraca, G. (2020). AI governance in the public sector: Three tales from the frontiers of automated decision-making in democratic settings. *Telecommunications policy*, 44(6), 101976. DOI: 10.1016/j.telpol.2020.101976

- Lee, K. (2016). Artificial intelligence, automation, and the economy. *Executive Office of the President of the USA*, 20. DOI: 10.1016/1381-141x(95)80021-t
- Liu, L. (2016). Using Generic Inductive Approach in Qualitative Educational Research: A Case Study Analysis. *Journal of Education and Learning*, 5(2), 129-135. DOI: 10.5539/jel.v5n2p129
- Maduravoyal, C. (2018). Artificial Intelligence in Human Resource Management. *International Journal of Pure and Applied Mathematics*, 119(17), 1891-1895. DOI: 10.1007/978-1-4471-1735-3_7
- Margetts, H., & Dorobantu, C. (2019). Rethink government with AI. DOI: 10.1038/d41586-019-01099-5
- Marsonet, M. (2019). Philosophy and logical positivism. *Academicus International Scientific Journal*, 10(19), 32-36. DOI: 10.7336/academicus.2019.19.02
- Matsui, K., Ibuki, T., Tashiro, S., Nakamura, H., & Study Group on Regulatory Science for Early Clinical Application of Pediatric Pharmaceuticals. (2021). Principles of ethical consideration required for clinical research involving children. *Pediatrics International*, 63(3), 248-259. DOI: 10.1111/ped.14529
- McKinsey & Company, (2020), Future of Work, [Online] Available at: <https://www.mckinsey.com/tr/~media/mckinsey/locations/europe%20and%20middle%20east/turkey/our%20insights/future%20of%20work%20turkey/future-of-work-mckinsey-turkey-full-report.pdf>
- Miller, T. (2019). Explanation in artificial intelligence: Insights from the social sciences. *Artificial intelligence*, 267, 1-38. DOI: 10.1016/j.artint.2018.07.007
- Mohammed, P. S. (2019). Towards inclusive education in the age of artificial intelligence: Perspectives, challenges, and opportunities. In *Artificial intelligence and inclusive education* (pp. 17-37). Springer, Singapore. DOI: 10.1038/d41586-019-01099-5
- Montoya, L., & Rivas, P. (2019, November). Government AI Readiness Meta-Analysis for Latin America and the Caribbean. In *2019 IEEE International Symposium on Technology and Society (ISTAS)* (pp. 1-8). IEEE. DOI: 10.1109/istas48451.2019.8937869

- Montoya, L., & Rivas, P. (2019, November). Government AI Readiness Meta-Analysis for Latin America And The Caribbean. In *2019 IEEE International Symposium on Technology and Society (ISTAS)* (pp. 1-8). IEEE. DOI: 10.1109/istas48451.2019.8937869
- Munro, M., Whiton, J., & Maxim, R. (2019). What jobs are affected by AI?. DOI: 10.1016/j.artint.2018.07.007
- Nadimpalli, M. (2017). Customers & Industry Impact.
- Nassaji, H. (2015). Qualitative and descriptive research: Data type versus data analysis. DOI: 10.1109/istas48451.2019.8937869
- Natale, S., & Ballatore, A. (2020). Imagining the thinking machine: Technological myths and the rise of artificial intelligence. *Convergence*, 26(1), 3-18. DOI: 10.1177/1354856517715164
- Naudé, W. (2020). Artificial intelligence vs COVID-19: limitations, constraints and pitfalls. *AI & society*, 35(3), 761-765. DOI: 10.1007/s00146-020-00978-0
- Niehueser, W., & Boak, G. (2020). Introducing artificial intelligence into a human resources function. *Industrial and Commercial Training*. DOI: 10.1108/ict-10-2019-0097
- Ojo, A., Mellouli, S., & Ahmadi Zeleti, F. (2019, June). A realist perspective on AI-era public management. In *Proceedings of the 20th Annual International Conference on Digital Government Research* (pp. 159-170). DOI: 10.1145/3325112.3325261
- Pan, S. L., & Zhang, S. (2020). From fighting COVID-19 pandemic to tackling sustainable development goals: An opportunity for responsible information systems research. *International Journal of Information Management*, 55, 102196. DOI: 10.1016/j.ijinfomgt.2020.102196
- Parker, G., (2016), 10 Auto Industry Jobs that Will Die Due to Automation, [Online] Available at: <https://moneyinc.com/10-auto-industry-jobs-will-die-due-automation/>

- Popenici, S. A., & Kerr, S. (2017). Exploring the impact of artificial intelligence on teaching and learning in higher education. *Research and Practice in Technology Enhanced Learning*, 12(1), 1-13. DOI: 10.1186/s41039-017-0062-8
- Premnath, E., & Chully, A. A. (2020). Artificial intelligence in human resource management: a qualitative study in the indian context. *Journal of Xi'an University of Architecture & Technology*, XI, 1193-1205. DOI: 10.31219/osf.io/uqhn2
- PWC (2020), *How will automation impact jobs?* [Online] Available at: <https://www.pwc.com.tr/how-will-automation-impact-jobs>
- Rani, R., & Sharma, R. K. (2012). Ethical Consideration in Research. *International Journal of Nursing Education*, 4(1). DOI: 10.15373/22778179/sep2013/49
- Rodney, H., Valaskova, K., & Durana, P. (2019). The artificial intelligence recruitment process: How technological advancements have reshaped job application and selection practices. *Psychosociological Issues in Human Resource Management*, 7(1), 42-47. DOI: 10.22381/pihrm6220186
- Rossi, F. (2016). Artificial intelligence: Potential benefits and ethical considerations. *Policy Department C: Citizens' Rights and Constitutional Affairs*, [Online]. Available: http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/571380/IPOL_BRI_282016_2957.
- Sahay, A. (2016). Peeling Saunder's research onion. *Research Gate, Art*, 1-5. DOI: 10.31979/etd.44mj-8rjs
- Scherer, M. U. (2015). Regulating artificial intelligence systems: Risks, challenges, competencies, and strategies. *Harv. JL & Tech.*, 29, 353.
- Shabbir, J., & Anwer, T. (2018). Artificial intelligence and its role in near future. *arXiv preprint arXiv:1804.01396*. DOI: 10.22541/au.149693987.70506124
- Sharma, G., 2017. Pros and cons of different sampling techniques. *International journal of applied research*, 3(7), pp.749-752. DOI: 10.22381/pihrm6220186
- Shusterman, R., (2016). *Practicing philosophy: Pragmatism and the philosophical life*. Routledge. DOI: 10.4324/9780203760499

- Silverman, D. (Ed.). (2020). *Qualitative research*. Sage Publications Limited.
- Smart, K.L., Witt, C. and Scott, J.P., 2012. Toward learner-centered teaching: An inductive approach. *Business Communication Quarterly*, 75(4), pp.392-403.
- Smith, A., & Anderson, J. (2014). AI, Robotics, and the Future of Jobs. *Pew Research Center*, 6, 51. DOI: 10.7551/mitpress/8493.003.0013
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333-339. DOI: 10.1016/j.jbusres.2019.07.039
- Soiferman, L.K., (2010). Compare and Contrast Inductive and Deductive Research Approaches. *Online Submission*.
- Stiglitz, (2014). Unemployment and Innovation, [Online] Available at: <https://www.nber.org/papers/w20670>
- Sun, C., Shi, Z. J., Liu, X., Ghose, A., Li, X., & Xiong, F. (2019). The effect of voice ai on customer purchase and search behavior. *NYU Stern School of Business*, 1-43. DOI: 10.1515/9783110869163.418
- Sun, T. Q., & Medaglia, R. (2019). Mapping the challenges of Artificial Intelligence in the public sector: Evidence from public healthcare. *Government Information Quarterly*, 36(2), 368-383. DOI: 10.1016/j.giq.2018.09.008
- Tambe, P., Cappelli, P., & Yakubovich, V. (2019). Artificial intelligence in human resources management: Challenges and a path forward. *California Management Review*, 61(4), 15-42. DOI: 10.1177/0008125619867910
- Toll, D., Lindgren, I., Melin, U., & Madsen, C. Ø. (2019, September). Artificial Intelligence in Swedish Policies: Values, benefits, considerations and risks. In *International Conference on Electronic Government* (pp. 301-310). Springer, Cham.
- Vaishya, R., Javaid, M., Khan, I. H., & Haleem, A. (2020). Artificial Intelligence (AI) applications for COVID-19 pandemic. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 14(4), 337-339. DOI: 10.1016/j.dsx.2020.04.012

- Verma, R., & Bandi, S. (2019). Artificial Intelligence & Human Resource Management in Indian IT Sector. In *Proceedings of 10th International Conference on Digital Strategies for Organizational Success*. DOI: 10.2139/ssrn.3319897
- Verma, T. K., Tiwari, K. L., & Jadhav, S. K. (2016). Research Article Correlation Between Iron Pollution and Physicochemical Characteristics of Effluent of Steel Industries from Urla, Raipur (Chhattisgarh), India. DOI: 10.3923/rjet.2016.172.182
- Vincent, J., (2017) Automation threatens 800 million jobs, but technology could still save us, says report, [Online] Available at: <https://www.theverge.com/2017/11/30/16719092/automation-robots-jobs-global-800-million-forecast>
- Vrontis, D., Christofi, M., Pereira, V., Tarba, S., Makrides, A., & Trichina, E. (2021). Artificial intelligence, robotics, advanced technologies and human resource management: a systematic review. *The International Journal of Human Resource Management*, 1-30. DOI: 10.1080/09585192.2020.1871398
- Vveinhardt, J., (2018). Philosophy and Paradigm of Scientific Research. *Chapters*.
- Wester, K. L. (2011). Publishing ethical research: A step-by-step overview. *Journal of Counseling & Development*, 89(3), 301-307. DOI: 10.1002/j.1556-6678.2011.tb00093.x
- Wirtz, B. W., & Müller, W. M. (2019). An integrated artificial intelligence framework for public management. *Public Management Review*, 21(7), 1076-1100. DOI: 10.1080/14719037.2018.1549268
- Yawalkar, M. V. V. (2019). a Study of Artificial Intelligence and its role in Human Resource Management. *International Journal of Research and Analytical Reviews (IJRAR)*, 6, 20-24. DOI: 10.31142/ijtsrd11127
- Zeng, Y., Lu, E., & Huangfu, C. (2018). Linking artificial intelligence principles. *arXiv preprint arXiv:1812.04814*. DOI: 10.1063/pt.5.028530
- Zuiderwijk, A., Chen, Y. C., & Salem, F. (2021). Implications of the use of artificial intelligence in public governance: A systematic literature review and a research

agenda. *Government Information Quarterly*, 101577. DOI:
10.1016/j.giq.2021.101577

Žukauskas, P., Vveinhardt, J., & Andriukaitienė, R. (2018). Philosophy and paradigm of scientific research. *Management Culture and Corporate Social Responsibility*, 121. DOI: 10.5772/intechopen.70628



Appendices

SURVEY QUESTIONNAIRE

Demographic

Age

- 25-30
- 36-40
- 45 and above

Gender

- Male
- Female

Work experience

- Below 2 years
- 3-7 years
- 8 and Above

Factors	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
AI under organization Sustainability					
Economic dimension Rise in Unemployment					
Individual dimension Work efficiency Emotional well-being					
Social dimension					

Administration and facilitation of collaboration Social media and online community management (online service)					
The impact of AI on Customer					
The virtual assistants can follow the commands made by customers					
Artificial Intelligence transforms customer service with proper automation in fast service					
Implementation of AI will be able to serve the customers in time					
The impact of AI on Human resource					
onboarding and talent acquisition					
training and development					
Data privacy and information security					

Creativity and innovation					
Flexibility and autonomy					
Stress					
The impact of AI on Future of jobs in Turkey					
job complexity					
Work overload					
Uncertainty					
Job insecurity					
Use of artificial intelligence during covid					
The use of artificial intelligence during COVID-19 largely influence the organizational sustainability					
The use of artificial intelligence during COVID-19 largely influence the behaviors and choice of costumer					
The use of artificial intelligence during COVID-19 largely					

influence the operation of human resource					
The use of artificial intelligence during COVID-19 largely influence the future of jobs and economy.					

INTERVIEW QUESTIONS

Q1: In your opinion how AI has been evolved during COVID-19?

Q2: Do you think that AI encompasses potential impact over the future of job? If yes, they are why?

Q3: Does the notion of AI has modified the preferences of customer and how?

Q4: How AI has modified the operation of HR during COVID-19?

Q5: What advantage does AI has provided to the governmental organization and organizational sustainability?

CV

Email: 1

Location:

Linkedin: 7058660

Personal Profile:

Experienced in event coordinating and management, digital marketing, and public relations with a demonstrated history of working in the non-profit organizations management industry. Strong operations professional with a Bachelor of Science (B.S.) focused in Sustainable and Renewable Energy Engineering from University of Sharjah. Currently doing my MBA at Istanbul Sabahattin Zaim University.

Education:

SABAHATTIN ZAIM UNIVERSITY | Istanbul - Turkey
Master's in business administrations | Sep. 2019 – Present
Published Paper: <http://www.rmci.ase.ro/no23vol1/04.pdf>

UNIVERSITY OF SHARJAH | SHARJAH - U.A.E
B.Sc., Sustainable and Renewable Energy Engineering | Sep 2011 - Jan. 2016

AL GUBAIBA HIGH SCHOOL | SHARJAH - U.A.E
GCSE, Science | 2008 – 2010

Work Experience:

Detour Business Solutions | TURKEY - ISTANBUL
Marketing Project Manager | Feb. 2021 – Present

AudtEye | TURKEY - ISTANBUL
Marketing Project Manager | September 2020 - January 2021

IPALESTINE NGOS | TURKEY - ISTANBUL
Public Relations and Digital Marketing Manager | May 2020 - September 2020

SHARJAH BOOK AUTHORITY | SHARJAH - U.A.E

Special Projects Manager | March 2016 - June 2018

UNIVERSITY OF SHARJAH | SHARJAH - U.A.E

Finance Assistant | Jan. 2015 - Jan. 2016

MUBADARA YOUTH ENRICHMENT GROUP | SHARJAH - U.A.E

Executive Board Member | October 2011 - Jan. 2016

UNIVERSITY OF SHARJAH | SHARJAH - U.A.E

Student Coordinator cum Event Organizer - SREE Club | October 2013 - Jan. 2016

Certificates and courses:

Participation in the III. International "BAŞKENT" congress on physical, social and health sciences

presenting the paper entitled "The Effects of Artificial Intelligence (AI) on the Future Jobs within the Governmental Organizations in Istanbul - Turkey".

International BAŞKENT Congress | December 2021

Fundamentals of Digital Marketing

Google | August 2020

Public Relations & Corporate Reputation Management

Al Jazeera Media Institute | March 2019

Life coaching program

Australian New Future & Business Academy | Jan. 2013

Success of the Engineering College Events

University of Sharjah | May 2014

Mentoring the Third Winning Team in the Renewable Challenge
University of Sharjah | December 2014

Giant Dove of Peace & Love

The 19x19-metre white peace dove is made of 1.2 million buttons in the colours of the UAE flag. It entered the Guinness Book of World Records (2013 Edition).

A landmark conference on the protection of millions of refugee children and teenagers in the region. "Investing in The Future: Protecting Refugee Children" is being co-hosted by UNHCR and The Big Heart campaign under the patronage of Sharjah's ruler, Sheikh Sultan Bin Mohammed Al-Qasimi.

Investing in the future Conference

We guided students through knowledge and experience to the congenial future to achieve aspirations. We realised this by the direct communication between both high school and college students who acquired wide background and knowledge about the situation.

Academic orientation forum | 2013 - 2016

Languages:

Arabic | Native

English | Fluent

Turkish | Proficient - C1