

**THE IMPACT OF ARTIFICIAL INTELLIGENCE ON THE JOB MARKET IN
UGANDA, A THIRD WORLD COUNTRY**

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AS21B11/085

**A DISSERTATION SUBMITTED TO THE SCHOOL OF LAW IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR OF LAWS OF
UGANDA CHRISTIAN UNIVERSITY**

May, 2025



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DECLARATION

I affirm that this dissertation, except for properly cited references to the work of others, is entirely my own. It has not been submitted in any form for any degree elsewhere. All sources consulted and utilized are acknowledged through references.

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APPROVAL

This is to certify that this research paper titled “**The impact of Artificial Intelligence on the job market in Uganda, a third world country.**” has been written under my supervision on behalf of the School of Law of Uganda Christian University.

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ABSTRACT

This research seeks to assess the impact of Artificial Intelligence on the job market in Uganda. Through this research the impact of Artificial Intelligence falls both on the positive and negative impact. Three effects were discovered to include; the displacement effect where there will be massive loss of jobs but Uganda being a third world country presents signs that this could take a while to happen, the reinstatement effect which covers creation of new jobs which could take years. The productivity effect that would see enhancement in the different jobs in place.

However, these effects will take long before realization in the different aspects in Uganda because development is slow.

ACKNOWLEDGEMENTS

With deep gratitude, I would like to thank my supervisor, Mrs. Gomes Rebecca, who worked tirelessly to see to the end of my research by constantly correcting specific areas of my work and equally showing me how to improve my work to aid the quality of this dissertation.

I would also like to express deep thanks to my family especially my parents, Mr. MOSES WACHA, Ms. MARION CAROLINE ACIO, my siblings TYRAH MARIA WACHA, HENSLEE OPETO WACHA and CLOVIS OGWAL WACHA whose support and unwavering love kept me afloat during this period.

Not forgetting my classmates who held my hands and encouraged me to see this dissertation to the end. With deep gratitude, I would like to thank ALICE BERTHA NAKUYA, MELISSA NSABA KAMIKAZI, LESLIE DOGO STEPHANAS, DAVINA GRACE ABALIWANO, RUTH ROPANI, EFRANCE KIRABO MPOLOGOMA, SARAH KISAAKYE, SHARON MUNGANYIKA, SARAH TUSIIME and NINA ANGEL MUKIIZA. Your willingness to guide, support and follow up on the progress of my work will forever be a blessing.

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1.0 CHAPTER ONE

1.1 Introduction

The technological world has encountered different developments and the one that happens to be at the center of controversy is Artificial Intelligence (AI). With the increase in the use of AI, it has become imperative to acknowledge its merits as well as demerits on the labor market in Uganda, a third world country. AI is the study of the computations that make it possible to perceive, reason and act or the automation of intelligent behavior, which is driven by a general study of intelligent agents both biological and artificial¹. AI has also been defined to mean the science and engineering of making intelligent machines². It is important to note that AI is able to perform whatever requires human intelligence with extreme accuracy that includes problem-solving, thinking and learning.

The job market in Uganda is made up of laborers. Laborers fall into two brackets to include those under a contract of service and casual laborers. Under a contract of employment, the employer provides work and the employee a service for remuneration. A contract of service means any contract, whether express or implied, where a person agrees in return for remuneration, to work for an employer and includes a contract of apprenticeship.³ A casual employee is defined to mean a person who works on a daily or hourly basis where employment of wages is due at the completion of each day's work⁴. The job market in Uganda includes all these categories of labourers.

¹ Stefan S. (2017) "What is Artificial Intelligence?" Hague Centre for Strategic Studies pg 25-42.

² Matthew L. (2020) Ethics of Artificial Intelligence, Oxford University Press, United States of America.

³ Section 2, Employment Act, Chapter 226.

⁴ Ibid.

Uganda being the case study falls under the list of third world countries which could also be called least developing countries⁵. This research therefore seeks to analyze the impact of AI on the job market in a third world country, Uganda.

1.2 Background of the study.

AI is a fast-growing field world-wide and it was first coined in the Dartmouth workshop organized by the mathematician John McCarthy in 1956⁶. There is no doubt about the simplicity it gives to the different fields such as work spaces, security, academia among others. AI is a scientific discipline aimed at building machines that can perform many tasks that require human intelligence⁷. The concept of AI curves the human aspect that brings forth the understanding that AI is possible because it carries the intelligence of human beings however, the difference is that the modification that arises produces a better effect stronger than the ones a human being would have. Every trade requires the use of a specific tool or a combination of tools some of which include, lawyers use their voice, minds, writing skills which would add up as a combination, secretaries use their hands to type work and keep records, engineers use their heads, numbers, hands, doctors use their heads to predict the sickness in accordance with the description given by the patient, their hands to carry out surgeries, janitorial staff use their hands to offer their services. These are some of the ways in which human beings carry out their work and AI is here to beat this because unlike humans, machines can carry out work without rest and they just need to be programmed and come up with better results than the average human. According to Francesca, AI and humans have complementary capabilities and

⁵ <https://www.worldpopulationreview.com/country-rankings/third-world-countries#title>. visited 8th May 2025

⁶ Larry D. (2022) Cambridge Handbook of Artificial Intelligence, Cambridge University Press, United Kingdom.

⁷ Francesca R. (2019) "Building Trust in Artificial Intelligence" 72, Journal of International Affairs pg 127-134.

once combined, we find the best results. She adds that Artificial Intelligence will certainly bring many benefits in terms of scientific progress, human well-being, economic value and the possibility of exploring solutions to major social and environmental problems⁸. It is this very fact that gives life to this research. Systems programmed to recruit, terminate workers do not have an outlined criteria to follow. Machines do not have emotions but also, they may not follow a fair procedure. The article raises some worries to include the black-box nature of some AI approaches as there is a possibility of discriminatory decisions⁹. A person shall not be discriminated against on the ground of sex, race, color, ethnic origin, tribe, birth, creed or religion, social or economic standing, political opinion or disability.¹⁰ AI has the capability of discriminating against persons and in line with labour laws, discrimination in employment shall be unlawful and includes any distinction, exclusion or preference made on the basis of race, color, sex, religion, political opinion, national extraction or social origin, the HIV status or disability which has the effect of nullifying or impairing the treatment of a person in employment or occupation, or preventing an employee from obtaining any benefit under a contract of service¹¹. Some AI programs have been given roles of hiring employees which slowly will phase out the aspect of human resource but also, firing employees. This becomes a worry to the laborers because it is not clear why and how that is done whereas employers follow a procedure to carry out all these processes. On grounds of misconduct or poor performance, the employer is expected to explain to the employee, in a language they understand providing the reason for which dismissal is being considered¹². AI that has been programmed to dismiss employees

⁸ *ibid* at note 7.

⁹ *Ibid*.

¹⁰ Article 21, The Constitution of the Republic of Uganda, 1995 (as amended).

¹¹ Section 5, Employment Act, Chapter 226.

¹² Section 65, Employment Act, Chapter 226.

will most likely dismiss without giving such notice. Furthermore, employees are entitled to a hearing so as to be given an opportunity to defend the claims against them as in Section 65(2)¹³ and they are equally given reasonable time within which to prepare their defense¹⁴. This kind of accountability protects laborers from unfair decisions, something AI has not been programmed to include. AI is not entirely bad because in playing a complementary role, it produces high productivity levels which improves the quality of work. Unlike humans, machines do not get tired and hence are able to work for long hours on end with little or no issues arising out of memory retention and the need for rest. The law provides that the maximum working hours for employees shall be forty-eight hours per week¹⁵ and that the hours of work shall not exceed ten hours per day or fifty-six hours per week except if agreed upon by the employer and employee¹⁶. That being said, it has become imperative to look at the effect of AI on the job market as AI has the power to take over the world. Machines can be put in place to do the very work humans are meant to do and the irony lying in that, is these machines are programmed by humans and do a better job with very high levels of efficiency and productivity but with no emotional intelligence attached. The backbone of this paper is to analyze such notions as AI has the potential of replacing human control and decision making¹⁷.

1.3 Statement of the problem.

AI presents the likelihood of affecting the right to work by displacing laborers causing severe unemployment to laborers in Uganda which in turn will affect their source of

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Section 52, Employment Act, Chapter 226.

¹⁶ Ibid.

¹⁷ Larry A. (2022) The Cambridge Handbook of Artificial Intelligence, Cambridge University Press, United Kingdom.

livelihood leading to undesired outcomes. Parliament shall enact laws to provide for the right to work under satisfactory, safe, healthy conditions and to ensure equal payment for work without discrimination but also, to ensure that every worker is accorded rest and reasonable working hours and periods of holidays with pay¹⁸. This paper will therefore find the gap between AI and labor market in Uganda.

1.4 Objectives of the study.

1.4.1 General objective.

To fully dissect the positive and negative impacts of AI on the job market in a third world country, Uganda.

1.4.2 Specific objectives.

1. To ascertain the state of AI on the labor market in Uganda.
2. To examine what policies are in place to govern the use of AI on laborers in Uganda.
3. To investigate the social and economic impact of AI on the labor market in Uganda.
4. To propose recommendations on how the use of AI on the labor market can be regulated.

1.5 Research questions.

1. How is the state of AI on the labour market in Uganda?
2. How can Uganda adopt policies in place to govern the use of AI on the labour market in Uganda?
3. How can the social and economic impact of AI on the labour market be analyzed in Uganda?

¹⁸ Article 40, The Constitution of the Republic of Uganda, 1995(as amended).

4. How can the use of AI on labourers be regulated?

1.6 Significance of the study.

In conducting this research, the impact of AI on the labour market will be ascertained. Such impact is both negative and positive on labourers that includes; those under a contract of service and casual labourers alike, in a country that is still developing. This research needs to be conducted to empower labourers with the knowledge on what AI is, how it will improve productivity but also how it can affect their work negatively. All labourers will benefit from this research. In conducting this research, the knowledge imparted will enable employers who opt to use AI use it in moderation with specific guidelines on what should be reserved for labourers. Scholars will equally attain knowledge and curve out ways to improve the use of AI without having adverse effects.

1.7 Justification of the study.

It is not in dispute that AI is fast developing. AI has become a key area of global strategic competition, offering potentially revolutionary solutions for commercial, civil and military applications¹⁹. Uganda that falls under the list of third world countries, development is slow and therefore, the different jobs that people do grant them a source of livelihood. AI has the potential to work for long hours unlike humans with higher levels of productivity. With AI on the rise, it is becoming glaring to ascertain its impact on the labour market in Uganda. This paper will also equip scholars on the threat posed to labourers in their different fields but also how work can be improved to increase productivity.

¹⁹ Raluca C. https://www.jstor.org/stable/pdf/resrep21397.pdf?refreqid=fastly-default%3Ab6d90f3c5acf645e0234a74b3fb6ef6c&ab_segments=0%2Fbasic_search_gsv2%2Fcontrol&initiator=&acceptTC=1, visited 13th May 2025.

1.8 Scope of study.

1.8.1 Geographical scope

This study will be carried out in Kampala with assessment of different places of work. Assessment will be carried out by the use of questionnaires handed out to different labourers through online platforms.

1.8.2 Time scope

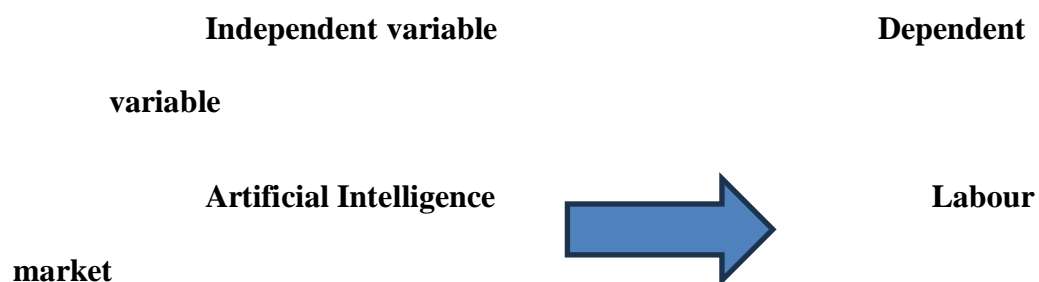
The study will be carried out within five weeks with focus on both primary and secondary data.

1.8.3 Subject scope

The subject will be all labourers in the different work spaces. The focus will be Kampala and compared with other countries of better development.

1.8 The conceptual framework

The work will be analyzed according to the data collected from the questionnaires. This will aid coming up with an assessed view of the same according to the information gathered from the independent and dependent variables.



1.9 LITERATURE REVIEW

1.9.1 Introduction

Literature review includes work that has been published on the topic of research to aid the better discussion of the topic. Such literature will include articles, journals, reports, books among others. The theoretical review will include the general overview of the selected literature that influenced this study while the conceptual review will deal with the literature in a thematic manner and the concepts that arise therein. The different literature in line with the specific objectives are assessed below;

1.9.2 To ascertain the state of AI on the labour market in Uganda.

A technological storm is approaching if not already here and that millions of workers around the globe are in its wake.²⁰ It is for this reason that we ascertain the state of AI on the labour market in Uganda. He adds that half of all jobs could be automated away and stating that the most skilled, highest paying jobs such as surgeons and lawyers could be the most vulnerable to replacement by robots and computers and that AI Robots may substitute workers. He does well to highlight that dozens of start-up companies now employ AI powered chatbots that automate away customer service and this does away with the service providers in the long run. Also, Pharmacy robots and health care innovations of companies like Que.ai and Lunit can prepare prescriptions and make medical diagnoses with flawless accuracy, eliminating once highly complex jobs such as those of pharmacists, radiologists²¹. In Uganda, AI happens to be in its initial stages of adoption. It will therefore, take time before AI robots substitute labourers because of slow development but eventually, the jobs that will be targeted the most will be the

²⁰ Garbarino P. (2022) "The Artificial Intelligence Storm is upon us: Are we ready?" Monthly Labor Review pg 1-4.

²¹ Ibid at note 16.

professional ones since AI is incapable of doing what human beings can do. AI is not equipped to carry on social and interpersonal relations. I partially agree with the author, there will still be a need to retain physical labour for example; he talked about surgeons, after the use of AI to carry out such surgeries, it would be the work of the surgeons to monitor the patients and equally ask how they are feeling, something AI would not be able to do. The other example he gave was lawyers, with AI having the capacity to draft documents, ascertain the likelihood of success of cases, lawyers would still not be phased out. Interpersonal skills and social relations are not part of AI, studying the demeanor of the accused parties, sympathising with the affected families before judgement is given say they lost a bread winner, is best done by lawyers, in cases of Alternative Dispute Resolution, humans are best equipped with the skills of peace making and solving disputes than AI would ever be. Also, AI has the capability to teach but let`s shift our focus to a nursery teacher who has to hold the hand of the child to show him how to write, AI would fail at this. Therefore, in Uganda, the job market of highly complex jobs would only be narrowed rather than displaced entirely. Despite the wave of changes AI may create, he notes down how to make good this displacement by introducing the Artificial General Intelligence (AGI). Artificial General Intelligence (AGI) refers to the ability of a machine to think, understand or learn any intellectual task as a human can.. Such Intelligence would render labour useless. However, for those that will be affected, he proposes the Universal Basic Income (UBI) policy which would give all those displaced a fixed amount of money on a consistent basis to cater for their day-to-day needs. This he suggests as he notes an increase in the economy²². Uganda`s labour market is still not threatened by AI to this level as yet because of its slow adoption. However, in the event that displacement of labour takes place, the Universal

²² Ibid at note 17.

Basic Income (UBI) policy that he suggests would be incapable of coming to life. Uganda has very high levels of corruption and so this fixed income would be swindled by the stake holders. Also, the practicability of this is challenged as there is no minimum wage for the labourers in Uganda and hence a fixed income would be impossible to achieve. Pandora`s box would be opened by AI in a way that the wealthiest people could be the ones benefitting from the economy`s improvement and hence income inequality as the rich would become richer and the poor even poorer. Furthermore, he identifies conditions that humans should use to make a job incapable of automation to include; creativity, building meaningful and complex relationships, significant dexterity and problem-solving skills. These skills will save labourers from the adverse effects of AI. Lastly, there are jobs that he considers safe bets and these include; nurses, elder-care assistants, plumbers, electricians and mechanics²³. Labourers in Uganda can prepare themselves for the effects of AI through the skills that the author notes as AI is not equipped with these and humans can still beat it at its game to that end. Ugandan labourers should therefore, borrow the suggestion of investing in creativity, building meaningful and complex relationships and significant dexterity and problem-solving to be able to salvage the situation fast-approaching us.

1.9.3 To examine what policies are in place to govern the use of AI on labourers in Uganda.

According to Allan Dafoe, there are different stakeholders that can take part in the governance of AI. He adds that considerations on the political impacts of advanced AI on inequality, international political economy and international security to understand how distinct actors may compete. Multilateral organizations could play a pivotal role in artificial governance by providing a joint forum for the formulations, coordination

²³ Ibid at note supra.

and dissemination of the cooperative norms between actors, enabling participating parties to signal sincere commitment to beneficial and shared AI development. However, no organization except the United Nations has developed a vision of pursuing AI for global good and to use it as a driver in achieving its sustainable development goals. Also, the international organization of standardization could be critical in shaping technical standards for AI technologies in a manner that integrates goals of safety and ethics. Non-multilateral bodies can also take part; partnership on AI has hosted a number of conversations about the AI and ethics, the future of life institute hosted an event that led to the 2017 Asilomar Artificial Intelligence principles that were adopted by the Californian state legislature. He also highlights the fact that near-human performance would allow for AI to substitute a range of tasks which could lead to massive labour displacement, radically increased inequality, erosion of privacy. He suggests that humans should reserve some roles for human judgement to take control²⁴. Uganda does not have any AI policies in place to regulate the use of AI. As a country, we should adopt the Asilomar Principles which set out guidelines to direct the use of AI. Asilomar principles are a set of guidelines to regulate the development and use of AI in a responsible manner. The aim of these principles is to ensure that it is developed safely and that it benefits society. Principles such as responsibility, transparency in judicial matters, alignment of values and human control were developed²⁵. These principles are workable guidelines and could be a starting point for Uganda in enacting AI policies to guide its use. Principles such as human control will see to retention of some decisions in the hands of humans, transparency in judicial matters which will give

²⁴ Dafoe A. (2019) "Global Politics and the Governance of Artificial Intelligence 72 Journal of International Affairs pg 121-126.

²⁵ https://www.researchgate.net/publication/373755028_Twenty-three_Asilomar_principles_for_Artificial_Intelligence_and_the_Future_of_Life, visited 8th May 2025

humans access to justice and these will be in alignment of values and responsibility and be attached to a party. In this way, the labour market will be protected from the effects of AI such as displacement as their jobs would still be relevant. However, failure to adopt any policies to regulate the use of AI would be detrimental to the labour market in Uganda.

1.9.4 To investigate the social and economic impact of AI on the labour market in Uganda.

AI has its pros and cons; in regards to this specific paper, it has the ability to enhance productivity as well as diminish the importance of specific workers. According to Jay Agrawal, for one to understand the impact of AI, they need to fully comprehend the technology. Why is it possible for AI to take over the human jobs? The reason is because AI scores highly under the two aspects of prediction and decision making²⁶. In our daily activities, humans make decisions at home, school, work places and even while doing activities like driving, thinking about what food to eat, which route to use while driving among other decisions and predictions at work places, economists tend to make predictions on numbers about growth of the country's economy. Also, decisions on who to hire, dismiss and promote are all made by labour. Prediction is defined in the statistical sense of using existing data to fill in missing information²⁷. With decision making and predictions, there is a lot of uncertainty but Artificial Intelligence does quite well because of machine learning. Ajay Agrawal provides four direct effects through which advances in prediction technology may affect labour in a task-based framework to include; substituting capital for labour in prediction tasks, automating decision tasks when automating prediction increases in relative returns to

²⁶ Ajay A. (2019) "Artificial Intelligence: The Ambiguous Labor Market Impact of Automating Prediction" 33 Journal of Economic Perspectivespg 31-50.

²⁷ ibid

capital versus labour, enhancing labour when automating the prediction task increases labour productivity in related decision tasks and thereby increase the relative returns to labour versus capital in those tasks, creating new decision tasks when automating prediction sufficiently reduces uncertainty as to enable new decisions that were not feasible before. These happen to be the four direct effects that were discussed in depth. AI may directly substitute capital for labour in prediction tasks. Some of such tasks include forecasting and with the presence of AI, such prediction tasks are being transformed into prediction-oriented tasks as machine learning improves and the quality adjusted cost of prediction reduces and many of such tasks are being broken down into prediction tasks and can be performed by AI tools. In addition, the broad area of human resource that includes recruiting is a task based on resumes, cover letters, LinkedIn profiles and interview transcripts and analyze which applicants will do the best job that includes promotion and retention of workers²⁸. With the above examples, one can ably tell that prediction- based tasks will be phased out because AI provides a better accuracy, saves time and is efficient. Uganda being a third world country presents every need to have higher productivity levels so as to reap profit because with AI, the work done will be done faster, efficiently and this would present the need to do away with some labourers but also, AI makes more accurate predictions than the average human which would improve the country`s economy.

Also, humans have a slow response compared to machines. The prediction humans make is usually very slow due to uncertainty but the presence of AI that comes along with more information to back it up enables AI have more accurate predictions that are way faster than the average human. Automating the prediction task in some cases may

²⁸ Ibid at note 25.

have no impact on the productivity of capital performing a complementary task but may increase the productivity of labour²⁹. According to Jay Agrawal, OSD medical devices are able to perform brain surgeries with a 90 percent accuracy as it predicts whether a brain cell is cancerous or not yet previously, doctors use MRI scans to guide them. This AI provides a complementary action to the medical field seeing as there is more certainty³⁰. Also, with the above groups of workers, doctors will have their jobs enhanced. Doctors being human are capable of making mistakes when performing surgeries but also considering Uganda`s health sector, AI would provide accuracy as doctors will use it to carry out surgeries but also diagnose difficult cases instead of having to send patients abroad. On the other hand, the doctors would still be employed and handle the routine checkups of the patients operated on.

This article also does well to elaborate and provide avenues in which Artificial Intelligence can beef up the different fields in that it provides either substitution or complementary avenues in the different labor sectors. Prediction in legal services especially in granting bail and possibility of success of cases³¹. AI through analyzing precedent can ably provide the possibility of winning a case but also, as regards bail, predictions are used by judges to determine whether a party deserves to be granted bail. Such factors include whether the party will return to courts of law or not, also whether they have a home in the country or not among other things. Kira systems use AI to scan contracts and summarize relevant content while Blue J legals AI scans tax law and decisions to provide firms with predictions of tax liability. Software also provides a

²⁹ Ibid at note 25.

³⁰ Ibid.

³¹ Ibid

case finder that identifies the most relevant cases that help generate the prediction³². However, the judges use this as a complementary factor because they still make decisions hence increasing their productivity. In Uganda, this would also help reduce case backlog since cases with a high level of success and those without one would be ascertained and reduce on the amount of work of judicial officers and hence the labour market for lawyers would be protected.

In³³ Australia`s Pilbara, the iron ore mining sites are over a thousand miles from the nearest major city and due to the remoteness and extremely hot temperatures, the drivers are very expensive. AI has made the automation of the steering decision task possible by predicting hazards in the roads and by coordinating the trucks with each other. Furthermore, with vehicles used in shipping, recent applications enable swarms of robots to predict optimal routes and avoid collisions. AI would be used to predict hazards and even do the work that would put the labourers in danger hence protecting them but also, with regard to drivers, not many Ugandans will be able to afford self-driving at least not for now. The need for drivers would still be there and they wouldn't be phased out which in turn will not entirely affect the labour market.

According to Oren Etzioni AI is that activity devoted to making machines intelligent and intelligence is that quality that enables an entity to function appropriately with foresight in its environment. Also, several scholars and technology leaders have warned that AI is on the path to turning robots into a master class that will subjugate humanity, if not destroy it. He also adds that unlike other technologies, AI is destroying more jobs than it creates, leading to major economic disruptions. Etzioni suggests that AI could

³² Ibid at note 25.

³³ Ibid

result into technological singularity by 2030 as computers will continue to advance and give birth to technologies and yet regulation becomes increasingly difficult with extreme intelligence. Such intelligence presents a unique risk of driving to construct a world without humans or meaningful features of human existence. AI is not entirely a bad development because it was in fact created to make the life of the human more comfortable. In the medical field, it has been used to detect cancer and also brain surgeries have been carried out and the human had to interfere only 40 percent as 60 percent of the surgery was accurate. It has been used in search and rescue missions to ascertain how many survivors are in a place but also helped in reducing the risk of airplane collision. Companies such as apple have built personal assistants such as siri, Microsoft cortana and amazon, alexa to learn the different behaviors of their users and be able to serve them better. AI is equally used by all credit card companies to detect fraud and used in surveillance cameras in places the average human guard would not reach or see. With Artificial Intelligence, we must be able to count the different things we would lose out on. Etzioni suggests that we humans are the AI guardians and hence human supervisors who are an increasingly opaque box. We should be able to control the amount of autonomy granted to AI since they have the ability to observe the behavioral patterns of humans. In order to control, we should read more and understand the concept deeply but also, understand the purpose and design of the different categories of AI. He equally adds that we are ignorant on how to create a perfect system. We should shut down both the operational and oversight artificial systems³⁴. The impact of AI derived from this article that fall on the negative side include; destruction of jobs to include white collar jobs in banks and surveillance which phases out guards and some

³⁴ Etzioni A. (2017) "Should Artificial Intelligence be regulated?" 33 Issues in Science and Technology pg 32-36.

bankers, blue collar jobs as robots are doing most of this, professional jobs as it also handles legal research but also E-discovery technologies have reduced the need for large team lawyers and paralegals to examine millions of documents. The bureau of labour statistics found that jobs in the service sector which currently employ two thirds of all workers were being obliterated by technology. From 2012, 1.1million secretarial jobs disappeared and 500,000 jobs under accounting and auditing clerks were lost.³⁵ Loss of employment renders people idle leading to increase in crime rates and growing economic inequality in society. This will be the result of labourers losing their jobs in Uganda. AI will cause unemployment in Uganda with time since its adoption is equally slow. To the extent that humans are the AI guradians, I agree with that statement and that's why humans should leave certain decisions to be made by humans such that labourers are not rendered jobless. He suggests that eventually, people will develop new interests that machines cannot perform. Governments have to play a role in creating new jobs for people as robots will soon take over the working spaces he adds³⁶. People may as well develop new interests in Uganda as there are a number of creative people but also, in the event that jobs are displaced and the labour market is dealt away with, the government of Uganda can ably aid creation of new jobs with the profit made from the rising productivity.

AI is not an entirely bad concept, if anything, it has simplified the different aspects of human life. However, despite the simplicity offered to human beings, there is a cost for it. Laura D. Tyson, in her article predicts how AI will displace humans from existing tasks while increasing the demand for humans in new tasks in both manufacturing and services, the effects of AI enabled digital platforms on labour including the polarization

³⁵ Ibid at note 33.

³⁶ Ibid.

of employment, stagnant wage growth for middle and low skill workers hence growing inequality and lack of jobs³⁷. AI could indeed lead to income inequality and the rich in Uganda would become richer and the poor will become poorer if AI renders some labourers jobless. However, she is skeptical as good jobs could emerge. Strong economies such as Germany, Switzerland, Canada and Denmark have fared well. This would not necessarily mean the same for a third world country like Uganda. She equally dissected the broad aspects and ways in which AI impacts tasks to include; displacement effect which entails decrease in demand for labor tasks that are automated, productivity effect under which increase in demand for labour in non-automated tasks and the reinstatement effect, creation of new tasks. She adds that the displacement effect can be immediate, significant and palpable and are negative for employment and labour`s share in value added while the productivity and reinstatement effect could take years and even decades before it materializes with significant frictional and structural unemployment, wage losses and growing inequality along the way. Some of the effects she noted on labour arising out of AI include; High taxes on labour relative to taxes on machinery and software have been a significant driver of business investments in automation technologies. Also, AI will continue to intensify and accelerate automation adverse effects to include; polarization of employment and wages, slow wage growth for middle and low-skilled workers, significant premium in the wages of highly educated workers, a decline in worker`s share of value added and growing income inequality. In some aspects, create interdependence between human skills and AI skills. Complementary or partnership occupations are likely to require high levels of education or technical training of human partners, such occupational changes are likely to fuel

³⁷ Laura D. (2022) "Automation, AI and Work" 151 American Academy of Arts and Sciences pg 256-271.

wage and income inequality between those with skills and those whose skills are complemented. In other areas of work, increase productivity and create new tasks requiring human skills that cannot be replaced by AI such as interpersonal, physical skills in unpredicted environments and general intelligence skills³⁸. The labour market will be affected by the three effects of displacement, productivity and reinstatement in due time. Displacement will not happen immediately as the labourers will still be needed and also, adoption of AI in Uganda is slow, the productivity effect will be achieved through complementary action and this in Uganda would be more immediate than displacement and reinstatement which aids creation of new jobs.

1.9.5 To propose recommendations on how the use of AI on the labour market can be regulated in Uganda.

Before the development of AI, technologies have developed alongside the evolution of man. Stuart W. Elliot in this article brings forth the realization that other technologies left fundamental structures of work in place despite the different changes. The way to tell the difference is by thinking more carefully about the jobs that will exist in the future and the education needed to prepare workers. He argues that as long as certain types of jobs are left for people to do, we can build an entire work force and economic structure around them. Two centuries ago, 80 percent of people worked in the agricultural field but with the development of machines, such workers were done away with. He suggests that it would be good if the technology dealt away with non-routine tasks and leaving the routine tasks. This when looked at seems hard but in the nineteenth century, early mechanization eliminated craftwork replacing it with more standardized tasks. The other angle to look at is how feasible it is in terms of acquisition of new skills and increasing human proficiency. The world is looking at occupations involving high

³⁸ Ibid at note 33.

levels of social interactions as promising because machines are terrible at such interactions³⁹. The labour market in Uganda will thrive if a structure is created to protect the jobs that AI is unable to perform. The education sector is doing this through the use of the new curriculum with its core being creativity. With the adoption of AI, such people will be able to create new jobs and this will in turn protect the labour market.

The labour sector is in for a discrimination period as well. Some employers rely on AI to disqualify job applicants as it is able to process endless amounts of data and they are chosen based on protected trait. Workers should know their rights. He also reechoed that no federal regulations govern the use of AI in employment. It is also important to note that AI keeps evolving and so are the laws governing AI⁴⁰. In Uganda, labourers need to know their rights and also how far AI should be used and this will help them work alongside it without fear of taking over. Usually, where a violation occurs, one is unable to seek redress if they do not know their rights. Seminars should be held to equip workers with the knowledge they need to navigate this fast-growing development but also, laws should be put in place to provide a limitation as regards the use of AI on labourers but also at work places. Government should equally work hand in hand with the different ministries to also create jobs for the threatened laborers such that they are able to earn a living especially for those displaced as a result of AI. With all this, the labourers in Uganda will be protected.

³⁹ Stuart W. (2018) "Artificial Intelligence, Robots and Work" 35 Issues in Science and Technology pg 40-44.

⁴⁰ Amber M. (2021) "Discrimination in the age of Artificial Intelligence" 38 Labor and Employment Law pg 73-74.

With the different literature in this paper, the impact of Artificial Intelligence on laborers has been fully assessed and contrasted with the case study of Uganda. It is going to take a while before the three effects sweep the labour market away.

1.10 RESEARCH METHODOLOGY

1.10.1 Introduction

This area will address the various methods of data collection that will be used to carry out the study. These include research designs, model specifications, data sources, data analysis, ethical considerations and anticipated challenges. The following are the methods that will be employed in this paper as elaborated upon below;

1.10.2 Research Design

Under the research design, the qualitative and quantitative methods are employed and these will be used in this research. With the quantitative method, an analysis of primary and secondary methods will be studied and with qualitative methods, information will be taken from the labourers at their different work places with the use of questionnaires. The anticipated respondents will be both men and women in Kampala, proposed questions on age, type of employment, whether they know what AI is, recognise the use of AI at their work places and any recommendations they propose towards the use of AI at their work places will be employed.

1.10.3 Model specification

The focus under model specification is to establish the standing of the variables; the outcome variable in this paper is AI and its impact on the labour market.

1.10.4 Data sources

1.10.4.1 Data source per variable.

From the research topic, an analysis of all the different sources such as articles, journals, data collected, reports, books on both AI and labour will be put to use. The different work places that use AI for different reasons will be analyzed putting in mind its impact on the job market. This information will be procured through questionnaires.

1.10.4.2 Data processing and analysis.

The collected data will be analyzed using descriptive and statistical methods. This will comprise of interpretation of collected data, summarizing and presenting the key features of the data.

1.10.5 Limitation of the study.

This part seeks to analyze the different challenges faced while carrying out this research. They have been discussed below;

Language barrier as some labourers aren't educated and so they cannot understand the English language yet this research is to be carried out in English.

Inability to reach all labourers. Some people are deep in villages that have no access to internet or even phones. For this reason, it is difficult to reach such labourers who are equally a party to this research.

The privacy precaution that sets in as not all labourers are willing to share details and information surrounding their work.

The length of time used to carry out this research is not sufficient enough to cover the entire Kampala with a bigger coverage of labourers.

1.10.6 Recommendations

There are different loopholes that were gathered and with that, these are the recommendations that I have for Uganda, as below;

Strong policies should be developed to protect labourers but also, to the extent to which AI is used should be regulated. It should be programmed in such a way that does not take away the need for labourers to continue working and hence there should be a limit. Such policies can be made by the government in line with the ministry of labour, social and economic development.

AI should be restricted to the extent of the rate of its use. It should be limited to specific tasks without leaving labourers jobless but should be tended more to increase productivity.

Labourers should invest in skills that AI is unable to perform such as interpersonal skills. Human beings are by nature social and indulge in more social interactions whereas machines are incapable of having these relations and this will increase the need for labourers and they will still be at the fore front irrespective of their type of employment.

Labourers need to be educated on the use of AI, how to use it, its effect on their work and how to better themselves in their different fields. The importance of acquiring new skills is such that they cannot be overtaken by AI and so labourers can stay employed.

Due to the increased levels of productivity that arise out of the use of Artificial Intelligence, it is important to use the benefits to compensate labourers that would have lost their source of livelihood as a result of the effect of the displacement brought about by AI. Government can set out a scheme under the Ministry of Labour, Social and Economic Development that hands out periodic amounts to the displaced labourers.

Government can make education affordable and still have quality to be able to impart high levels of creativity such that when such people step into the job market, they take part in creating jobs that AI cannot override such that labourers still remain relevant.

1.11 Chapter synopsis

This chapter will cover the introduction, background to the study, statement of the problem, objectives, specific objectives, research questions, justification of the study, significance, literature review, research design, methodology, scope of the study, geographical time scope and chapter synopsis. Chapter two will deal with the non-legal aspects connected to the topic. Whereas, chapter three will deal with the legal framework paying attention to the domestic, regional and international aspects relating to the topic and lastly, chapter four will address the summary of findings, conclusion and recommendations.

CHAPTER TWO

THE NON-LEGAL ASPECTS OF THE IMPACT OF ARTIFICIAL INTELLIGENCE ON THE JOB MARKET IN UGANDA, A THIRD WORLD COUNTRY.

2.1 Introduction

AI refers to software and possibly also hardware systems, designed by humans that, given a complex goal, act in the physical or digital dimension by perceiving their environment through data acquisition, interpreting the collected structured or unstructured data, reasoning on knowledge or processing the information derived from this data and deciding the best action to take to achieve the given goal⁴¹. In the previous Chapter, the literature reviewed provided us with an understanding of how AI will impact the job market in Uganda specifically introducing three effects to include; displacement, productivity and reinstatement effect. Non-legal aspects are those things related to the topic that do not exactly have a legal backing. This Chapter will therefore, delve into the non-legal aspects of the impact of AI on the job market as below;

AI presents the possibility of income inequality. Income inequality is the difference in how income is distributed among the population⁴². A concern arising from the widespread deployment of AI will accrue to a small number of people who own capital. The rate of return on capital will outstrip overall economic growth and ordinary people

⁴¹ Laura N. and Mia H. https://www.jstor.org/stable/pdf/resrep50976.pdf?refregid=fastly-default%3A78a316dd13712a6c2d65ff452c603c8f&ab_segments=0%2Fbasic_search_gsv2%2Fcontrol&initiator=&acceptTC=1. visited on 16th May 2025.

⁴² Organisation for Economic Co-operation and Development. <https://www.oecd.org/en/data/indicators/income-inequality.html>, visited on 16th May 2025.

will lose their jobs while incomes at the top end of society will explode leading to unbearable social tensions⁴³. Liran also states that globalization and technological advancement have widened socioeconomic gaps both at the national and global levels. Erosion of many professions could leave many people without the ability to contribute to the economy and that while the economy grows, it is possible that fewer people will be able to benefit from the distribution of its profits. Inequality could equally expand to access to access to health care, personal security, quality of life and self-advancement⁴⁴. In Uganda, income inequality is not a myth. I totally agree with Philip because those at the top end will reap the fruits of the growing economies better than the ordinary people. Furthermore, the high levels of corruption, lack of transparency, unemployed youth existing in large numbers even without the full adoption of AI, those who will in turn be displaced will fail to provide the basic needs of life to their families but also, it will lead to an increased level of crime, drug dependency and hence affecting the quality of life of people.

Unemployment and creation of new jobs arising from the displacement and reinstatement effects of AI respectively. Many jobs are likely to disappear, even if others will likely be created in their place. Structural unemployment will almost certainly occur, affecting individuals and regions. The people who live in an area where they can obtain the skills that are needed to occupy the new jobs that are created. The more people lack and cannot obtain these skills, the fewer new jobs will be created, because inflation will start to increase at a lower level of economic activity and

⁴³ Philip C. https://www.jstor.org/stable/pdf/resrep53114.6.pdf?refreqid=fastly-default%3A29be32727b56b5ef2996fde5814c8f1e&ab_segments=&initiator=recommender&acceptTC=1, visited 16th May 2025.

⁴⁴ Liran A. https://www.jstor.org/stable/pdf/resrep30590.17.pdf?refreqid=fastly-default%3Ae9e28f99ad5bd7ccd4738c84c5afc18c&ab_segments=0%2Fbasic_search_gsv2%2Fcontrol&initiator=search-results&acceptTC=1, visited 16th May 2025.

governments will be reluctant to allow the economy expand at a rate that permits inflation to expand above some desirable level. The willingness and ability of governments to spend on effective structural adjustment programs. These will retrain people who lose, or never get jobs as a result of new technology and help in establishment of new enterprises, open new industries in regions where they live⁴⁵. For Ugandans to be ready for the AI changes, new skills have to be adopted and government could aid this adoption by training labourers on the skills that AI is incapable of overriding. Carsten outlines the idea of an industrial strategy that would boost interpersonal jobs while ringfencing certain social tasks. This could help address the big social needs for expanding the supply of currently under-resourced services for example social care and mental health services. Incenticising such work, through subsidies or tax incentives and by improving working conditions and pay will also have to be complemented by a retraining offer⁴⁶. In creating new jobs for labour, the government could also facilitate retraining of labour such that they have a transition into new jobs rather than remain unemployed. Also, interpersonal skills cannot be performed by AI and Uganda would thrive through this and save the job market.

2.2 CONCLUSION

Having looked into the non-legal aspects, Uganda could face challenges arising from the displacement, productivity and reinstatement effect. Government should work hand in hand with the labourers to skill them with interpersonal skills so as to be able to match up to the fast-approaching effects of AI.

⁴⁵ David P. https://www.jstor.org/stable/pdf/j.ctvq4c16w.9.pdf?refreqid=fastly-default%3Ae9e28f99ad5bd7ccd4738c84c5afc18c&ab_segments=0%2Fbasic_search_gsv2%2Fcontrol&initiator=search-results&acceptTC=1, visited 16th May 2025.

⁴⁶ Carsten J. https://www.jstor.org/stable/pdf/resrep58388.8.pdf?refreqid=fastly-default%3Ae9e28f99ad5bd7ccd4738c84c5afc18c&ab_segments=0%2Fbasic_search_gsv2%2Fcontrol&initiator=search-results&acceptTC=1, visited 17th May 2025.

CHAPTER THREE

LEGAL FRAMEWORK GOVERNING THE IMPACT OF ARTIFICIAL INTELLIGENCE ON THE JOB MARKET IN UGANDA.

3.1 Introduction

Under this Chapter, the different legal frameworks and their relevant provisions will be looked into in regard to the topic of research. Uganda is rich with labor laws to protect the laborers whose provisions will be tackled and related to the topic however, when it comes to AI, there are hardly any laws enacted to that effect.

3.2 DOMESTIC LEGAL FRAMEWORK.

3.2.1 The Constitution of the Republic of Uganda, 1995 (as amended)

The constitution of Uganda is the backbone of all laws governing the different sectors in Uganda. All laws enacted in Uganda have to be consistent with the constitution as it is the supreme law of the land, Article 2 (1) is to the effect that the constitution is the supreme law of Uganda and shall have binding force on all authorities and persons throughout Uganda⁴⁷. With this article in mind, workers are protected under Article 40 (1) provides for economic rights under which parliament shall enact laws to provide the right of persons to work under satisfactory, safe and healthy conditions, ensure equal payment for equal work without discrimination and ensure that every worker is accorded rest and reasonable working hours and periods of holidays with pay, as well as remuneration for public holidays. All labourers are protected by the constitution to the effect of work, pay and public holidays. They are entitled to these benefits attached from work. Furthermore, Article 40 (2) provides that every person has the right to practice his or her profession and to carry on any lawful occupation, trade or business

⁴⁷ Article 2, The Constitution of the Republic of Uganda, 1995 (as amended)

and Article 40 (3) where every worker has a right to form or join a trade union of his or her choice for the promotion and protection of his or her economic and social interests, to collective bargaining and representation and to withdraw his or her labor according to law⁴⁸. From this provision, labourers are to be granted such rights and that too in accordance with the supreme law of the land. AI however, through the displacement effect takes away the right of workers to enjoy such rights and benefits. Laborers, under the displacement effect lose their jobs and their rights to work under satisfactory conditions, remuneration, the right to practice their profession, join a trade union are all taken away by AI.

3.2.2 Employment Act, Chapter. 226

The employment act under the long title provides that it was enacted to provide for laws governing individual employment relationships and to provide for related matter. The topic in question addresses the impact of AI on the job market in Uganda and this act regulates the relationship of workers and their employers and some of the relevant sections will be discussed.

Section 5 (3) of the act provides that discrimination in employment shall be unlawful if it includes any distinction, exclusion or preference made on the basis of race, color, sex, religion, political opinion, national extraction or social origin, the HIV status or disability⁴⁹. AI defeats this section because the concept of hiring is not clear as labourers could be discriminated against on different grounds since there are systems in place to do the hiring, dismissal and yet the transparency on how they achieve these processes is not disclosed and in the long run, this does not serve labourers.

⁴⁸ Article 40, as note supra

⁴⁹ Section 5, Employment Act, Chapter 226

Section 39 (1) (a), (b) and (c) of the act provides for the duty of the employer to provide work in accordance with the contract of service, during the period for which it is binding and on the number of days equal to the number of working days expressly or impliedly provided for in the contract⁵⁰. This also highlights the right to work because as employers provide work, so employees do the work. With the existence of AI, the labourers are hired by AI systems but also, with the displacement effect, AI will slowly take over the different jobs and hence destroy the source of livelihood of many labourers.

Section 52 (1) of the act provides that the maximum length of working hours per week shall amount to forty-eight hours⁵¹. With the rise of AI, machines are able to work longer hours without the need for rest and with very high efficiency and productivity levels. Employers are more likely to opt for AI to achieve profits and do away with labourers which affects their right to work.

Section 65 (1), (2), (3), provides for notice and hearing before termination. The law provides that before dismissing an employee on grounds of misconduct or poor performance, an explanation must be furnished by the employer in a language understood by the employee and they are to be given time to explain themselves. Also, before reaching any decision to dismiss, the employee shall be heard and consideration given to his explanation and all this shall happen within reasonable time⁵². The rules of justice provide for a fair hearing and that one is also entitled to representation as in Article 28⁵³. Artificial Intelligence automated systems that are programmed for dismissal do not have a standard policy to follow as they equally have no emotional

⁵⁰ Section 39, at note supra 49

⁵¹ Section 52, at note supra 49

⁵² Section 65, at note supra 49

⁵³ Article 28, at note supra 47

intelligence to hear the laborer's side of the story. This defeats the protection offered by the law to the laborers.

3.2.3 Occupational Safety and Health Act, Chapter 231

This Act was enacted to provide for safe, healthy and satisfactory working conditions of labourers at their different work stations in line with Article 40 (1) (a). Section 12 (1) (a) and (b) creates a duty for employers to protect laborers as far as is reasonably practicable from hazards due to pollution and as they carry out their work through employing technical measures, supplementary organizational measures⁵⁴. Such protection offered is in form of protective gear, equipment among other things. With AI in place, protection is guaranteed because machines are programmed to work in mines, and high-risk substances such as asbestos can all be handled by AI without causing risk to the employers. This reduces the number of deaths as a result of accidents, reduction in life-span as a result of constant interaction with harmful substances and hence preservation of the life of labourers. Also, the employers will then have very few or no labourers to compensate on grounds of accidents arising from work.

3.2.4 Data Protection and Privacy Act, Chapter 97

The Data Protection and Privacy act is an act set out to provide for the privacy of individuals to include the data subject as it sets rules to be followed by data controllers. Section 10 of the act provides that a data collector, data processor or data controller shall not collect, hold or process personal data in manner which infringes on the privacy of a data subject⁵⁵. In addition, Article 27 (2) provides for protection of correspondence, communication or another person⁵⁶. For labourers, their right to privacy is invaded by

⁵⁴ Section 12, Occupational Safety and Health Act, Chapter 231

⁵⁵ Section 10, Data Protection and Privacy Act, Chapter 97

⁵⁶ Article 27, at note supra 47

AI because the data they provide at their work places is sufficient to dig into the very intimate parts of their lives but also, some work places have the communication of their labourers monitored to avoid leakage of information but in the long run, AI has the power to monitor more than just work details seeing as laborers do not have different gadgets for work and their personal use and this affects the privacy of labourers.

Section 14 (1), (2) provides for minimality to the extent of how much data is collected as it has to be to the extent of its relevance and the data controller or processor shall not collect personal data in excess⁵⁷. Different job descriptions require different data to be collected. Labourers often submit data to their employers. Work places that collect data using AI cannot guarantee this protection because algorithms have the capacity to acquire more data from the one it is provided and this affects labourers as their private life is equally tapped into.

Section 18 (3), (4) and (5) provides that data collected should be kept for a period prescribed by law or retain data for a period which shall afford the data subject an opportunity to request access to the data. Also, a data controller shall destroy or delete a record of personal data or de-identify the record at the expiry of the retention period and such destruction shall be done in a manner that prevents reconstruction in an intelligible form⁵⁸. AI defeats the purpose of this law because when labourers provide their personal data to the employees through the automated systems, it will not be destroyed but also it is impracticable to know that such information on labourers will be destroyed in a way that it cannot be reconstructed and this affects the protection of the labourer's right to privacy even when they stop working at a specific place.

⁵⁷ Section 14, at note supra 55

⁵⁸ Section18, at note supra 55

Section 27 (1) of the act provides for the rights in relation to automated decision-making as the data subject may by notice in writing to a data controller require the data controller to ensure that any decision taken by or on behalf of the data controller which significantly affects the data subject is not based solely on the processing by automatic means of personal data in respect of that data subject⁵⁹. AI programs at different work places make significant decisions such as hiring, dismissal among others. These decisions are made by AI systems and this defeats the protection of the labourers under this provision of the law.

AI presents a situation at cross roads where it is difficult or even impossible to hold users accountable especially because they are programmed to perform specific tasks. Section 33 (1) provides for compensation of a data subject who suffers damage or distress through the contravention of the data controller, processor or collector⁶⁰. AI programs made for these tasks make it hard to fault employers and seek compensation in cases of dismissal without reason and hearing . Labourers who are dismissed by AI systems should ordinarily be compensated but how possible is it to do so seeing as such systems are built for such purposes and this makes it hard for labourers to be compensated where their rights have been infringed.

In conclusion, Uganda has rich labour laws that can ably protect labourers but it should be noted these are not sufficient with the adoption and use of AI at work places because it does not cover for the specific tasks meant to be carried out but also AI is not transparent enough in terms of who to fault in case of its negative impact.

3.4 REGIONAL INSTRUMENTS

⁵⁹ Section 27, at note supra 55.

⁶⁰ Section 33, at note supra 55.

3.2.5 Protocol to the African Charter on Human Rights and People`s Rights on the Rights of Women in Africa,2003

This protocol provides for the protection of the rights of Women in Africa and Uganda is a signatory to it. It is also called the Maputo Protocol. Section 13 provides for the provision of equal opportunities in work and career advancement and other economic opportunities to include promotion of equality of access to employment and ensure transparency in recruitment, promotion and dismissal of women⁶¹. This protocol was put in place by humans who have evolved over time and have discovered the need for protection of women`s right to work and carry on fairness in aspects of promotion, recruitment. AI systems that are in place have not been tested to the extent to which such protection of women labourers can be offered. The likelihood of women labourers being presented as weak on grounds of being women by AI could be very high and hence a mode of discrimination against women labourers which defeats the purpose of this provision.

3.2.6 African Charter on Human and People`s Rights, 1981

This Charter is also called the Banjul Charter. Article 15 provides for the right to work under equitable and satisfactory conditions and shall receive remuneration equivalent to the pay⁶². With AI phasing out the different jobs, labourers are left unemployed and with no pay and hence no source of livelihood which goes against their right to work.

3.3 INTERNATIONAL INSTRUMENTS.

International instruments are persuasive in nature and in Uganda, some of them have been ratified.. These instruments will be looked at to suit the topic of research as below;

⁶¹ Section 13, Protocol to the African Charter on Human Rights and People`s rights on the Rights of women in Africa, 2003.

⁶² African Charter on Human and People`s Rights, 1981.

3.3.1 International Covenant on Economic, Social and Cultural Rights, 1966

Article 6 (1), (2) recognizes the right to work which includes the right of everyone to gain his living by work and appropriate steps to protect these rights should be employed. The steps provided under the covenant to achieve full realization of this right shall include technical and vocational guidance and training programs, policies and techniques to achieve steady economic, social and cultural development and full productive employment⁶³. This instrument has been ratified by Uganda and therefore the rights of labourers have to be protected but with the use of AI, the right to work is taken away through the displacement effect that leaves labourers jobless as they are replaced and hence fails to protect this right. On the other hand, to protect this right, stake holders have to provide guidance to labourers on how to deal with the emergence of AI and offer other avenues for those affected by the displacement effect of AI to enable continuity of the source of livelihood for labourers.

Article 15 (1) (b) recognizes the right to enjoy the benefits of scientific progress and its applications⁶⁴. AI falls within the ambit of scientific progress and its application in the labour sector produces high levels of productivity as it helps laborers such as lawyers to draft documents and also to predict the likelihood of success of cases, shipping companies also use AI, it is also used in rescue missions in hard-to-reach areas to find survivors. All these have been incorporated into the labour sector and equally offer protection to labourers in high-risk work environments. This shows the acceptance and recognition of scientific progress as well as its applications.

⁶³ Article 6, International Covenant on Economic, Social and Cultural Rights, 1966.

⁶⁴ Article 15, at note supra 63.

3.3.2 Convention of the rights of persons with disabilities, 2006

Article 1 provides for the purpose as to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities⁶⁵. Persons with disabilities also have a right to work so as to be able to attain the basic necessities of life, however, with the emergence of AI programs that are in place to conduct hiring of labourers, the likelihood of hiring disabled labourers is very slim seeing as it would be looking at them as unfit to do work. This stands in the gap of the disabled being able to enjoy their right to work and hence affects their quality of life since they will have no source of livelihood.

Article 3 and Article 5 provides for general principles of non-discrimination and equality of opportunity for the disabled and prohibits their discrimination⁶⁶. AI helps to achieve high productivity that human beings would be able to attain over a long period of time. Systems that take over hiring labourers will most likely fail to avoid discrimination and this defeats the principle of equality but could also dismiss laborers as a result of disability. This therefore takes away the right to work and be free from discrimination.

3.3.3 Employment Promotion and Protection against Unemployment Convention, 1988

The preamble of this convention emphasizes the importance of work, lays down a level of compensation for the protection of the unemployed persons. Work is a source of livelihood however, with the displacement effect of AI, labourers are left unemployed and they then lack the capability of enjoying the basic needs of life.

⁶⁵ Article 1, Convention on the Rights of Persons with Disabilities, 2006

⁶⁶ Articles 3 and 5, note supra.

Article 2 provides that states should take appropriate steps to co-ordinate its system of protection against unemployment and its employment policy and further seeks to ensure that its system of protection against unemployment and in particular the methods of providing unemployment benefit contribute to promotion of full, productive and freely chosen employment⁶⁷. It is safe to say that with AI, productivity will be at its best as machines do not make mistakes and they are able to work longer hours without the need for rest and this is something labourers are unable to do as they need rest in order to be productive. On the other hand, the system of protecting labourers from unemployment with AI displacing so many laborers is simply not guaranteed and this then stands in the way of the right to work, source of livelihood and in long run failure to attain the highest attainable quality of life.

Article 7 advocates for members to promote full, productive and freely chosen employment by all means such as the provision of employment services, vocational training and guidance⁶⁸. While AI fulfills productivity, it replaces labourers through the displacement effect by doing perfectly work that would have been done by a large number of people leaving them unemployed, robots that can clean faster and efficiently have led to the janitorial staff becoming irrelevant, introduction of self-driving cars will in the long run do away with drivers and all these will be left without a source of livelihood. This convention does well to highlight the aspect of vocational training and guidance. This should be offered to displaced labourers such that they are skilled in areas of work where AI cannot rob them of their work. This is because AI is being adopted at a high speed and sooner than later, we should co-exist with it.

⁶⁷ Article 2, Employment Promotion and Protection against Unemployment Convention, 1988.

⁶⁸ Article 7, at note supra 67.

Article 8 provides for promotion of additional job opportunities and employment assistance⁶⁹. AI provides employment assistance seeing as it is capable of performing humanly possible tasks but while at it, displaces labourers and when this happens member states should be able to create new job opportunities for the displaced labourers in fields that AI is not good at. AI cannot be human and hence has no emotional intelligence, skills such as creativity, crafting meaningful and complex relationships cannot be effectively by AI and hence labourers will thrive in such areas.

Periodical payments to the unemployed should be adopted as a way of providing the beneficiary with partial and transitional wage replacement provided for under Articles 13 and 14⁷⁰. The convention provides methods of protection for the labourers. AI will produce very high productivity and hence more benefits to the economy and different companies using AI. Having considered that, the protection offered to labourers should be in form of periodic payments to enable them continue achieving their daily needs of life such as food, clothing, hospital bills, education among others.

2.3.4 Occupational Safety and Health Convention, 1981

This is a brain child of the International Labor Organization. It was put in place to protect the laborers from the hazards that arise from their employment as in the preamble. Article 4 (1), (2) of the convention is to the effect that policies should be formulated, implemented and a coherent national policy⁷¹. Such a policy is to prevent accidents, injury to health arising out employment, linked to the employment or carried out in the course of work by administering as far as is reasonably practicable. AI scores highly in this area because machines do not get sick and neither are they prone to

⁶⁹ Article 8, at note supra 67.

⁷⁰ Articles 13 and 14, at note supra 67.

⁷¹ Article 4, Occupational Safety and Health Convention, 1981

sickness. It helps to protect labourers through protective gears but also, carrying out the dangerous pieces of work hence protecting laborers from the hazards that arise out of employment.

In conclusion, the legal framework is sufficient to protect labourers however, laws have to be enacted to provide for the extent to which AI can be used at the different work places to provide for protection of laborers who will be faced with the displacement effect arising out of AI.

CHAPTER FOUR:

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS.

4.1 Introduction

AI is a fast-approaching development was curved to simplify the work humans do. While at it, it presents both merits and demerits that have been analyzed in depth to suit Uganda`s as it is the study. The three major effects of AI presented include; the displacement, productivity and reinstatement effect. The different literature and laws in place have been analyzed and they present a dire need to protect labourers from the adverse effects of AI. This chapter will provide the summary of findings, conclusion and recommendations.

4.2 Summary of Findings.

From the different literature reviewed, the laws looked at and the questionnaires that were filed by the Ugandans in employment is where the summary of findings will be deduced as below;

Labourers in Kampala are in large numbers as people are employed under contracts of employment, casual laborers and other forms of employment.

There are three effects that AI is yet to bring to include the displacement, productivity and reinstatement effect to labourers in Uganda however, the reinstatement effect could take years to materialize.

From respondents 10,14,21,30,55,75, they are able to recognize the use of AI in their work places in form of the security surveillance measures used among other things.

About 30 percent of labourers who happened to be respondents do not know what AI is, how it is used, how it helps the progress of their work among other things. Also, since one of the limitations encountered dealt with failure to reach all labourers

especially those in the villages with no access to internet, such labourers can be said to fall within the bracket of those who are unaware of the presence of AI and what it is.

As a result of the of productivity effect that will lead to laying off of some laborers, the benefit that will arise out of high efficiency levels will result into income inequality because the employers will reap the bigger benefits of AI.

AI has no precedent in line with issues arising out of labor and this opens floodgates because there is need to have landmark cases to offer guidance through legal principles on how people should deal with the different legal issues. The reason for this is because Artificial Intelligence is still developing.

Also, there were very few responses as I had only 80 responses which does not cover the whole of Kampala.

4.3 Conclusion

AI is a fast-growing concern in Uganda and its impact on labourers will produce three effects to include; the displacement effect where laborers will be laid off leading to unemployment which will lead to high crime rate, drug abuse and dependency, broken families, failure to attain the basic necessities of life while productivity levels will be increased as a result of machines working longer hours and producing faster results and hence growth in the economy but also income inequalities will arise as a result of employers reaping the benefits of AI. The reinstatement effect that would result into creation of new jobs however, writers suggest that this could take years to materialize. In order to avoid the far-reaching effects of AI, labourers should invest in interpersonal and social skills that AI is unable to adopt⁷². Uganda also has a wide range of labor laws that provide protection to laborers but not inclusive of AI laws or policies and this

⁷² Ibid at note 37

places laborers at cross roads. Uganda should therefore adopt laws and policies strong enough to protect laborers. In adoption of the use of AI, humans should do so in moderation as it presents the capacity to take over and laborers should be left with a part to be able to make decisions.

4.4 Recommendations

From this research conducted in Uganda, these are the recommendations that I came up with as below;

Respondent 15 recognised the need for policies to regulate the use of AI. Policies such as bring your own device (BYOD) to enable labourers who use monitored devices be protected were suggested.

Labourers should be skilled in line with interpersonal and social skills which Artificial Intelligence cannot beat⁷³.

Laborer`s consent should be sought especially in the use of Artificial Intelligence for surveillance and they should be informed about it by their employers.

Laborers should be educated on the use of AI⁷⁴, its merits and demerits before they use it and how to integrate Artificial Intelligence in their work without affecting the quality of their work.

Artificial Intelligence should be used in moderation as humans still remain the guardians of AI and some level of judgement should be retained by human beings⁷⁵.

Such decisions include, hiring, termination.

⁷³ Ibid at note 37

⁷⁴ Ibid at note 34.

⁷⁵ Ibid.

According to respondent 67, the amount of money used to buy data should be reduced because not all laborers can afford to purchase data and be connected with the different developments in the systems used at their work places.

In the event that displacement of labourers takes place, policies such as Universal Basic Income should be adopted and this is a fixed amount of money that would be paid to laborers who would have lost their jobs such that they are able to afford the basic needs of life⁷⁶.

⁷⁶ Ibid at note 20.

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