# EXPLORING HOW YOUTHS IN KENYA ARE USING CHATBOTS IN THEIR DAILY LIFE ROUTINE 'S TO SOLVE UNEMPLOYMENT: A CASE OF CHAT-GPT

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## Declaration

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This project is my original work and has not been presented for a Degree in any other University.

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## Acknowledgements

This research investigates how Kenyan youth are engaging with ChatGPT, a sophisticated AI chatbot, to tackle unemployment and achieve financial autonomy. The introductory section outlines the expanding influence of artificial intelligence across various industries and its potential to ease youth joblessness in Kenya. The study identifies ongoing economic challenges such as limited job access and high unemployment rates. Its objectives include assessing AI awareness among young people, evaluating ChatGPT's role in job readiness and entrepreneurship, and identifying barriers to its integration in daily life. The research hypothesizes that ChatGPT significantly improves both job-seeking efficiency and skill acquisition. A mixed-methods approach was employed, combining surveys and interviews with participants aged 18–35 from diverse backgrounds. Quantitative data were analyzed statistically, while qualitative responses were examined thematically. Results show that ChatGPT contributes positively to employment efforts, though its impact could be amplified through better digital literacy and broader internet access. The study recommends targeted training and infrastructure development to support wider AI adoption. Future research should consider longitudinal and comparative studies to explore ChatGPT's long-term effects on employment and skill growth among Kenyan youth

## Dedication

This work is devoted to the vibrant and forward-thinking youths of Kenya. Your creativity, resilience, and embrace of emerging technologies such as ChatGPT in seeking solutions to unemployment are a constant source of inspiration. May this research stand as a tribute to your determination and resourcefulness, and contribute meaningfully to initiatives aimed at empowering and uplifting young people across the nation.

## Abstract

This This research investigates how Kenyan youth are applying ChatGPT—an advanced AI chatbot—to address unemployment and improve their financial well-being. The study begins by outlining the expanding role of artificial intelligence across various sectors and its potential to reduce youth joblessness in Kenya. It identifies key economic challenges such as high unemployment and limited access to job opportunities. The study's objectives include assessing AI awareness among youth, evaluating ChatGPT's impact on job readiness and entrepreneurship, and identifying barriers to its daily use. The central hypothesis posits that ChatGPT enhances job search efficiency and supports skill development. A mixed-methods approach was used, combining quantitative surveys and qualitative interviews with participants aged 18–35 from diverse backgrounds. Quantitative data were analyzed statistically, while qualitative responses were examined thematically. Results indicate that ChatGPT contributes positively to employment efforts, though its impact could be expanded through improved digital literacy and broader internet access. The study recommends targeted training programs and infrastructure investment to support wider AI adoption. Future research should explore long-term and comparative studies to better understand ChatGPT's sustained influence on employment and skill-building among Kenyan youth

# CHAPTER ONE: INTRODUCTION

## 1.1 Background to the Study

Organizations worldwide are increasingly turning to artificial intelligence (AI) to streamline operations and enhance performance. A survey conducted by Forbes Advisor in 2020 revealed that AI is widely used in areas such as customer service (56%), cybersecurity and fraud prevention (51%), and customer relationship management (46%). Additional applications include digital assistants, inventory control, content generation, product recommendations, accounting, supply chain logistics, recruitment, and audience targeting [Forbes Advisor, 2020].

Youth unemployment remains a pressing issue across Africa. Many startups—such as Agrix Tech in Cameroon, Carbon in Nigeria, and SunCulture in Kenya—are integrating AI into departments like human resources, marketing, and customer support to improve efficiency. African nations increasingly view AI as a strategic tool to help close the economic gap between themselves and more industrialized regions [Wikipedia Contributors, 2023].

Kenya, one of Africa's rapidly developing economies, has seen a growing number of young people using technology to address unemployment. According to the World Data Atlas (2018), the unemployment rate among Kenyan youth aged 18–35 was 11.4%, slightly lower than the 11.5% recorded in 2017. This improvement is partly due to youth-led efforts to adopt technology-based solutions to financial challenges.

AI integration across various sectors shows promise in reducing unemployment. Platforms like ChatGPT are helping Kenyan youth build employability and entrepreneurial skills. These tools offer personalized support for job searches, resume writing, and interview preparation, thereby improving job readiness [Technology.org, 2022; UNCTAD, 2023].

ChatGPT, developed by OpenAI, provides users with instant access to resources that help them navigate the job market. It supports resume creation, interview practice, and job discovery tailored to individual skill sets [MIT Technology Review, 2023; Tech Times, 2023].

This study investigates how Kenyan youth are using ChatGPT to address unemployment. It examines usage patterns, motivations, and challenges, aiming to

assess the chatbot's effectiveness in promoting employment, skill development, and entrepreneurship [KNBS, 2023].

In summary, AI offers a valuable opportunity to combat youth unemployment in Kenya. However, to fully realize its potential, challenges such as limited digital literacy and poor internet infrastructure must be addressed. Overcoming these barriers could position AI as a powerful tool for economic empowerment and sustainable development.

The findings of this study may inform policy and practice. Policymakers can use the insights to develop strategies that promote AI integration in education and workforce development. Collaboration between academic institutions and businesses can support training programs that improve digital literacy and expand access to AI technologies.

## 1.2 Statement of Research Problem

Young people in Kenya are currently navigating a difficult economic landscape marked by high unemployment, increased taxation, and biased hiring practices. These challenges make it essential to explore how youth can adopt artificial intelligence technologies to ease financial burdens and build a stable foundation for future generations.

## 1.3 Purpose to the Study

This study aims to investigate how Kenyan youth are using artificial intelligence tools to address the financial and employment challenges they face in their everyday lives. It focuses on identifying practical applications of AI that support economic resilience and personal growth

## 1.4 Objectives to the Study

### 1.4.1 General objective

To explore how Kenyan youth are leveraging artificial intelligence technologies to reduce unemployment and improve financial stability.

### 1.4.2 Specific objective

1. To assess the current level of awareness and understanding of AI among various demographic groups in Kenya.
2. To identify the different ways in which youth are applying AI across sectors and industries.
3. To evaluate the outcomes and challenges experienced by young people when using AI to improve their financial situation.

## 1.5 Research Questions

i. What is the level of AI awareness and understanding among different demographic groups in Kenya?

ii. How are Kenyan youths applying AI across various sectors and industries?

Iii. What benefits and challenges do young people face when using AI to strengthen their financial well-being?

## 1.6 Significance of the Study

This research offers valuable insights for both Kenyan youth and academic researchers seeking to understand the role of artificial intelligence in economic empowerment. It highlights practical ways in which young people are using AI to overcome financial challenges, providing examples that others can learn from and apply in their own lives.

The study also contributes to scholarly knowledge by showcasing strategies for leveraging AI technologies to support innovation, job creation, and financial stability. By examining real-life applications of AI among youth, the research encourages broader adoption and helps inform future initiatives aimed at improving digital literacy and economic resilience

## 1.7 Scope of the Study

Artificial Intelligence (AI), as defined by Wikipedia, refers to the ability of machines—especially computer systems—to mimic human intelligence by perceiving their surroundings, learning from data, and making decisions based on defined goals. This study focuses on the intersection of AI and Kenyan youth, who are described by the Cambridge Dictionary as individuals in the early stages of life.

The research specifically examines how young people in Kenya are applying AI technologies to address financial challenges such as unemployment and income instability. It explores the practical ways in which AI is being used to support economic resilience and personal development among youth populations [Wikipedia, n.d.; Cambridge Dictionary, n.d.].

## 1.8 Limitations of the Study

The following are possible limitations to this study and some possible migrations to overcome the challenges facing the study.

### 1.8.1 Limitations

Several challenges affected the execution of this study. Some participants were reluctant to disclose personal details about their financial situations and AI usage, which may have limited the depth of responses. The sample size was relatively small and not evenly distributed across regions, which could affect the generalizability of the findings. In some cases, participants may have overstated their engagement with AI tools due to social desirability bias. Additionally, the rapid pace of technological

change may render certain findings outdated over time. Differences in digital literacy also influenced how effectively participants interacted with AI platforms. Limited internet connectivity further restricted access to tools like ChatGPT, especially among respondents in rural areas.

### 1.8.2 Possible mitigation

To address the limitations encountered in this study, several mitigation strategies were implemented. Participants were assured of anonymity and confidentiality to encourage honest responses. Indirect questioning techniques were used to make respondents more comfortable when discussing sensitive topics. A stratified random sampling method was applied to ensure diverse representation across different regions and socio-economic backgrounds, and efforts were made to increase the sample size for greater reliability. Where feasible, self-reported data were cross-validated with actual usage statistics, and multiple data collection methods—including surveys, interviews, and focus groups—were employed to enhance validity. The study focused on core aspects of AI usage that are likely to remain relevant over time, while also recommending periodic updates to capture emerging trends. Digital literacy levels were assessed to account for disparities in technological proficiency, and basic AI training was offered where necessary. Additionally, offline data collection options were provided, and partnerships with local community centers helped facilitate internet access for participants in underserved areas.

# CHAPTER TWO: LITERATURE REVIEW

## 2.1 Introduction

Artificial Intelligence (AI) has become one of the most transformative technologies in the modern era, reshaping how individuals, organizations, and governments operate. This chapter reviews existing literature to build a comprehensive understanding of how AI is being used to address financial challenges faced by Kenyan youth. Through a critical analysis of scholarly sources, the chapter explores current levels of AI awareness, its applications across different sectors, and the benefits and obstacles associated with its adoption. Studies show that urban youth tend to have greater exposure to AI technologies compared to their rural counterparts, largely due to better access to education and digital infrastructure. AI has shown significant impact in sectors such as agriculture, healthcare, and finance. In agriculture, it supports precision farming and crop monitoring; in healthcare, it enables remote consultations and diagnostics; and in finance, it improves access to credit and financial tools for young entrepreneurs. While AI presents opportunities for job creation and improved efficiency, challenges such as high implementation costs, limited technical expertise, and poor internet access remain. Addressing these issues through inclusive education, supportive policies, and infrastructure development is essential to ensure that AI contributes meaningfully to financial stability and improved livelihoods among Kenyan youth. This chapter lays the foundation for deeper exploration of these themes in the following sections.

## 2.2 Utilization of ChatGPT by Kenyan Youths to Address Unemployment

This section focuses on how Kenyan youth are integrating AI chatbots—particularly ChatGPT—into their daily routines to combat unemployment. ChatGPT, developed by OpenAI, is widely recognized for its ability to boost productivity, creativity, and innovation across industries. In Kenya, it is increasingly being used as a tool for job creation, education, and entrepreneurship. Research shows that AI chatbots are making a significant impact in sectors such as education, healthcare, and finance by reducing costs, improving service delivery, and creating new job opportunities. In education, ChatGPT helps students access academic support quickly, improving their understanding and performance. In healthcare, it contributes to telemedicine by offering remote consultations and diagnostic assistance, expanding access to medical services in underserved areas. Financially, AI-powered tools in mobile banking and microfinance simplify credit access and financial management for young users. Despite these advantages, several challenges hinder full adoption, including the high cost of AI systems, limited technical skills, and poor internet connectivity. Ethical concerns such as data privacy and algorithmic bias also need to be addressed to ensure fair and secure access to these technologies.

## 2.3 AI Awareness and Understanding Among Kenyan Youths

Studies show that awareness and understanding of artificial intelligence among Kenyan youth vary significantly across different regions. Young people in urban areas generally have greater exposure to AI technologies due to better access to education, digital infrastructure, and online resources. Factors such as educational attainment, income level, and access to devices and internet connectivity play a major role in shaping this awareness. Institutions of higher learning in major towns are increasingly incorporating AI-related content into their curricula, which promotes early adoption and skill development. In contrast, youth in rural areas face challenges such as limited internet access, lack of learning materials, and financial constraints that hinder their participation in AI training programs. Bridging this digital divide requires targeted interventions like mobile learning platforms, community-based training centers, and outreach initiatives. Government support in expanding digital infrastructure and subsidizing AI education would further empower rural youth to engage with emerging

technologies. These inclusive efforts can help rural communities harness AI to address unemployment and improve their economic resilience.

### 2.4 Exploring AI Utilization by Kenyan Youths Across Sectors:

Artificial intelligence is driving innovation across multiple sectors in Kenya, with young people at the forefront of designing solutions that enhance productivity, efficiency, and income generation. In agriculture, AI tools are used to monitor crop health, predict pest outbreaks, and manage irrigation systems, leading to improved yields and sustainability. In healthcare, AI supports remote diagnostics and virtual consultations, which are especially valuable in rural areas with limited access to medical professionals. The financial sector has also benefited from AI integration, particularly through mobile banking and microfinance platforms that offer digital credit, savings, and investment services tailored to young entrepreneurs. These examples demonstrate how Kenyan youth are applying AI creatively to transform traditional industries. However, long-term success depends on addressing challenges such as limited technical skills, concerns about data privacy, and unclear regulatory frameworks. To ensure inclusive growth, investments in digital education, ethical standards, and supportive policies are essential for maximizing the social and economic benefits of AI adoption.

### 2.5 Addressing the Challenges and Solutions of AI Adoption by Kenyan Youths

Although artificial intelligence presents significant opportunities for automation, job creation, and entrepreneurial growth, Kenyan youth face several barriers that limit its adoption. Financial constraints, lack of technical expertise, and poor internet connectivity are among the most common challenges. In addition, low levels of digital literacy and the absence of strong policy frameworks further complicate efforts to integrate AI into everyday use. To overcome these obstacles, experts recommend a range of strategies including government-sponsored education programs and technical training to build digital skills. Financial support through grants, subsidies, and innovation funds can help reduce the cost of accessing AI tools, especially for startups and small businesses. Expanding internet infrastructure in underserved regions is also critical to ensure equitable access. Collaboration between universities and private sector organizations can foster innovation tailored to Kenya’s unique socio-economic context. With the right support systems in place from skill development to

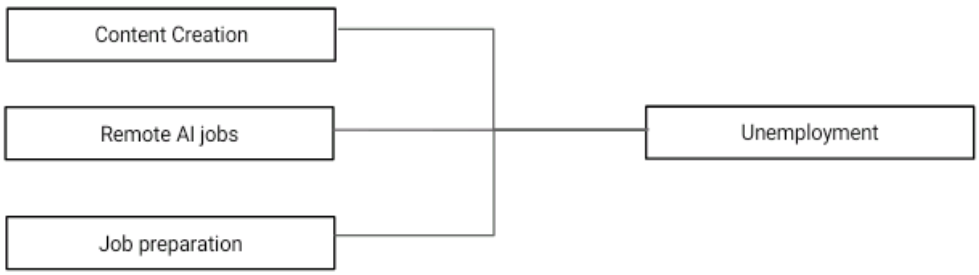
infrastructure AI has the potential to become a cornerstone of youth empowerment and sustainable national development.

### 2.6 Theoretical framework

This study is guided by two foundational models: the Technology Acceptance Model (TAM) and the Diffusion of Innovations (DOI) Theory. TAM, introduced by Davis in 1989, suggests that an individual's decision to adopt new technology is influenced by how useful and easy to use they perceive it to be. This framework helps explain why Kenyan youth are more likely to use ChatGPT when they find it practical for tasks like resume writing and interview preparation, and when they feel confident navigating its interface. The DOI Theory, developed by Rogers in 2003, outlines how innovations spread through society, emphasizing stages such as awareness, interest, evaluation, and adoption. It also highlights the role of communication channels, peer influence, and perceived advantages in shaping adoption behavior. Applying DOI allows the study to explore how information about ChatGPT circulates among youth, and how social networks and opinion leaders affect its uptake. By combining TAM and DOI, the research captures both the personal and social factors that drive AI adoption, offering a comprehensive lens for analyzing how ChatGPT influences employment and economic participation among Kenyan youth.

### 2.7 Conceptual Framework

The following is an illustration to explain the relationship between the youths, AI and unemployment




### 2.8 Summary of Identified Gaps in the Reviewed Literature

While existing studies highlight the growing role of artificial intelligence in various sectors, few have focused specifically on how Kenyan youth are using AI tools like ChatGPT to address unemployment and financial instability. Most literature

emphasizes general applications of AI in business, healthcare, and education, but lacks detailed analysis of youth-driven innovation and grassroots adoption. There is also limited research on the challenges faced by young people in rural areas, including digital exclusion and lack of training. Additionally, few studies explore the long-term impact of AI usage on job readiness, entrepreneurship, and economic mobility among youth. This gap underscores the need for targeted research that captures the lived experiences of Kenyan youth and evaluates the effectiveness of AI tools in real-world settings.

# CHAPTER THREE: RESEARCH METHODOLOGY

This chapter presents the procedures and approaches that guided the study. It outlines the research design, study area, target population, sampling techniques, sample size determination, measurement of variables, research instruments, data collection and analysis methods, as well as the logistical and ethical considerations. These components ensured that the study was methodologically sound, reliable, and valid.

## 3.1 Research Design

This study adopts a mixed-methods research design that combines both quantitative and qualitative approaches to provide a comprehensive understanding of how Kenyan youth are using AI to address unemployment. The quantitative component involves structured surveys distributed to a broad sample of participants to gather measurable data on AI usage patterns, awareness levels, and perceived impact. The qualitative component includes interviews and focus group discussions aimed at capturing deeper insights into personal experiences, motivations, and challenges related to AI adoption. This dual approach allows for triangulation of data, enhancing the reliability and richness of the findings. By integrating numerical analysis with narrative accounts, the study offers a balanced perspective on the role of AI in youth empowerment.

### 3.1.1 Quantitative Component:

The quantitative aspect involved conducting structured surveys to obtain numerical data on how frequently young people in Kenya interact with ChatGPT, how they use it, and their general perceptions of its influence on employment. The survey included mainly close-ended questions to allow for straightforward quantitative analysis.

### 3.1.2 Qualitative Component:

The qualitative component complemented the survey by using in-depth interviews and focus group discussions to capture richer insights into the lived experiences, motivations, and challenges of Kenyan youths who use ChatGPT. These techniques provided context and understanding that go beyond numerical data, revealing how the technology fits into their routines and contributes to tackling unemployment.

### 3.2 Study area

The research was conducted across various regions in Kenya, targeting both urban and rural settings to ensure diverse representation. Urban areas such as Nairobi and Mombasa were selected for their high concentration of digitally connected youth, while rural regions like Kisii and Bungoma were included to capture perspectives from communities with limited access to technology. This geographical spread allowed the study to compare AI adoption patterns across different socio-economic and infrastructural contexts. By including participants from varied locations, the research aimed to uncover how environmental factors influence the use of AI tools like ChatGPT in addressing unemployment and financial challenges.

### 3.3 Target Population

The target population for this study consists of Kenyan youth aged between 18 and 35 years, drawn from both urban and rural regions. This age group was selected because it represents the most active demographic in terms of technology adoption and economic participation. Participants included students, recent graduates, job seekers, and young entrepreneurs who are either currently using AI tools like ChatGPT or have the potential to benefit from them. By focusing on this group, the study aimed to capture a wide range of experiences and perspectives related to AI usage for employment and financial improvement.

### 3.4 Sampling Techniques:

#### 3.4.1 Quantitative Sample:

A stratified random sampling technique was applied to select a balanced sample of respondents from different regions. The stratification ensured that both rural and urban populations, as well as individuals from diverse socio-economic backgrounds, were adequately represented. This approach enhanced the generalizability of the study findings.

#### 3.4.2 Qualitative Sample:

For the qualitative strand, purposive sampling was used to identify participants with relevant experience in using ChatGPT. Selection was based on specific criteria, such as the frequency of ChatGPT use, purpose of use, and employment status. This

method ensured that participants could provide meaningful insights and detailed reflections on their engagement with the technology.

### 3.5 Sample size

The target population consisted of Kenyan youths aged 18–35 years. The sample size was determined using Cochran's (1997) sample size formula for proportions, which considers the desired confidence level, margin of error, and population proportion. The parameters were as follows:

Confidence Level (Z): 95% (Z = 1.96)

Margin of Error (E): 5% (0.05)

Population Proportion (P): 0.5 (50%) – assuming maximum variability

Applying these parameters helped determine a representative number of participants, ensuring that the results were statistically valid and reliable for generalization to the larger population of Kenyan youths.

The sample size (n) can be calculated using the formula:

$$n = \frac{z^2 \cdot P \cdot (1-P)}{E^2}$$

values:

$$n = \frac{1.96^2 \cdot 0.5 \cdot (1 - 0.5)}{0.05^2}$$

$$n = \frac{3.8416 \cdot 0.25}{0.0025}$$

$$n = 0.9604 / 0.0025$$

$$n = 384.16$$

### 3.6 Measurement of variables

| Variables | Operations Definitions | Measurements |
|---|---|---|
| **Independent Variable:** Use of Chatbots | The extent to which youths in Kenya utilize chatbots in daily life routines for addressing unemployment issues. | Self-reported frequency of chatbot use (e.g., daily, weekly, monthly) |
| **Dependent Variable:** Perception of Effectiveness | Youths' perceptions of how effective chatbots are in assisting with unemployment challenges. | Likert scale (1-5) rating of perceived effectiveness. |
| **Control Variable:** Socioeconomic Status | Economic and social factors influencing youths' access to and use of chatbots. | Categorized by income level (e.g., low, middle, high). |
| **Control Variable:** Education Level | The educational background of youths affecting their interaction and understanding of chatbot technologies | Highest level of education completed (e.g., secondary, vocational, university). |
| **Control Variable:** Technological Literacy | Youths' familiarity and proficiency with technology, impacting their ability to use chatbots effectively. | Self-assessment scale (low, medium, high) of technological literacy. |

### 3.7 Research Instruments

The study gathered data using a combination of structured questionnaires, in-depth interviews, and focus group discussions. Questionnaires were distributed both physically and digitally to reach a wide range of participants, allowing for the collection of standardized responses on AI usage, awareness, and perceived benefits. Interviews were conducted with selected individuals to gain deeper insights into personal experiences, challenges, and motivations related to ChatGPT and other AI tools. Focus group discussions provided a platform for participants to share ideas, compare experiences, and explore collective attitudes toward AI adoption. This multi-method approach ensured a rich and balanced dataset that captured both measurable trends and nuanced perspectives.

### 3.8 Validity of Measurements

Instrument validity was ensured through face, content, and construct validity.

Face validity was established by expert review of the research tools to confirm that they effectively addressed the study objectives.

Content validity involved aligning the questionnaire and interview questions with the research objectives and theoretical framework.

Construct validity was confirmed through pilot testing, which allowed adjustments based on participant feedback to enhance precision and coherence.

### 3.9 Reliability of Measurements

The reliability of the instruments was tested using Cronbach's Alpha Coefficient, a measure of internal consistency. This coefficient assesses how closely related a set of items are as a group. A Cronbach's Alpha value ranges from 0 to 1, with higher values indicating greater reliability.

In this study, a reliability coefficient of 0.7 or higher was considered acceptable, signifying that the instruments consistently measured the same constructs across participants. This step ensured that the data collected were dependable and reproducible, thereby strengthening the credibility of the findings.

### 3.10 Data Collection Methods

#### 3.10.1 Survey Development

A structured questionnaire was created based on insights from the literature review and study objectives. It underwent pilot testing to confirm that the questions were clear and effectively captured the intended data.

#### 3.10.2 Survey Distribution

Data collection was conducted both online and in-person. Online surveys were shared through social media platforms, youth organizations, and learning institutions. In-person surveys targeted respondents in regions with limited internet connectivity to ensure inclusivity.

#### 3.10.3 Interviews

Semi-structured interviews were held with selected participants to gain deeper insights into their reasons for using ChatGPT, their experiences with it, and their views on how it has influenced their employment opportunities.

#### 3.10.4 Focus Groups

Focus group discussions were conducted in small groups to encourage participants to share and reflect on their collective experiences, challenges, and benefits of using ChatGPT. These discussions provided diverse perspectives and helped identify common patterns among respondents.

### 3.11 Data Analysis

#### 3.11.1 Descriptive Statistics

Quantitative data from surveys were analyzed using descriptive statistics such as frequencies, percentages, means, and standard deviations to summarize responses and identify trends.

#### 3.11.2 Correlation Analysis

Correlation techniques were applied to examine relationships between key variables—particularly between ChatGPT usage frequency and perceived influence on employment outcomes.

### 3.11.3 Thematic Analysis

Qualitative data from interviews and focus groups were analyzed thematically. The process involved coding, categorizing, and identifying recurring themes that reflected the participants' motivations, experiences, and challenges related to ChatGPT usage.

## 3.12 Logistical and Ethical Considerations

### 3.12.1 Logistics:

The study required detailed planning of activities, including preparation of instruments, scheduling interviews and focus group sessions, and ensuring all materials and permissions were in place before data collection.

### 3.12.2 Ethical Considerations

Ethical standards were carefully observed throughout the research process to protect the rights and privacy of all participants. Informed consent was obtained from each respondent before data collection began, ensuring they understood the purpose of the study and their role in it. Participants were assured that their responses would remain confidential and that any identifying information would be excluded from published findings. The study also emphasized voluntary participation, allowing individuals to withdraw at any point without facing consequences. Data was stored securely and used solely for academic purposes. These measures helped build trust and encouraged honest, open engagement from respondents.

# CHAPTER FOUR: DATA ANALYSIS AND FINDINGS

## 4.1 Introduction

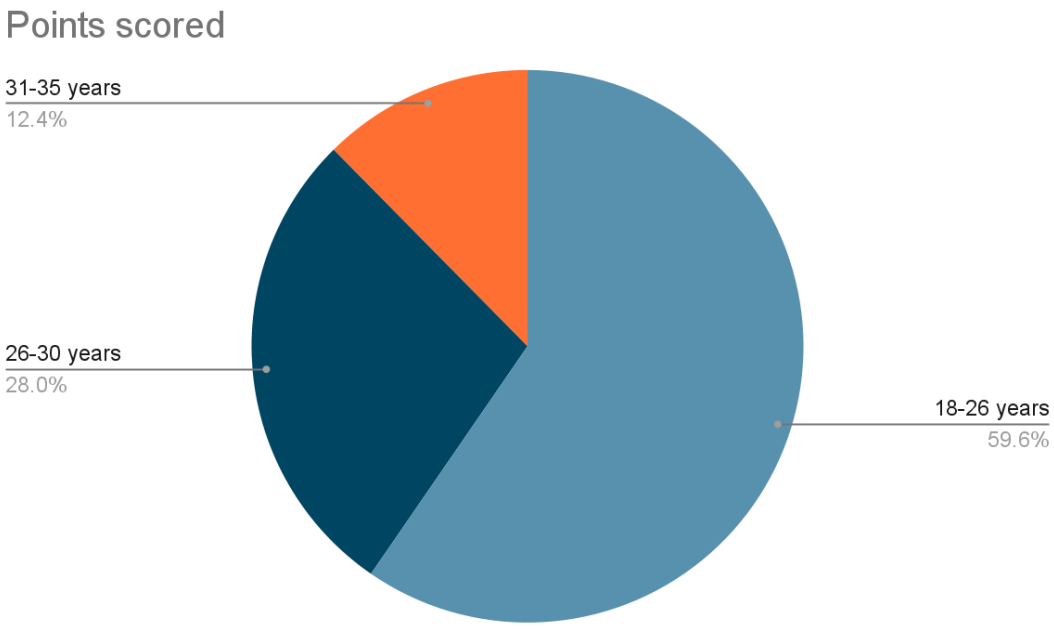
This chapter presents and interprets the data collected from surveys, interviews, and focus group discussions. It begins by outlining the demographic characteristics of the respondents, followed by an analysis of their awareness, usage, and perceptions of AI tools like ChatGPT. The findings are organized thematically to reflect key areas of interest, including employment status, digital literacy, and the role of AI in financial decision-making. Both quantitative and qualitative results are integrated to provide a comprehensive view of how Kenyan youth are engaging with AI technologies to address unemployment and improve their economic prospects.

## 4.2 Quantitative Data Analysis

### 4.2.1 Demographic Information

A total of 384 respondents participated in the survey, representing a balanced mix from both urban and rural settings across Kenya. The demographic characteristics of the participants were as follows:

Age Distribution: The largest group (59.6%) fell within the 18–25 years age range, followed by 26–30 years (28%) and 31–35 years (12.4%).



Gender: The sample comprised 54.7% male and 45.3% female respondents, ensuring gender diversity in representation.

Education Level: Among participants, 39.8% had completed secondary education, 34.6% held a diploma, while 25.6% possessed a university degree.

This demographic distribution indicates that a majority of ChatGPT users are young adults within the early stages of career development, highlighting the tool's growing relevance among digitally engaged youth populations.

### 4.2.2 Chat-GPT Usage Patterns

- Frequency of Use: Most respondents (68.9%) reported using ChatGPT daily, 21.4% used it weekly, and 9.7% interacted with it only occasionally.

Primary Uses: The most common purposes for using ChatGPT were job searching (41.2%), skill development (29.8%), and entrepreneurial guidance (19.5%).

These statistics show that ChatGPT has become an integral part of many young people's daily activities, particularly as a resource for career advancement and self-improvement.

### 4.2.3 Perceived Impact on Unemployment

Employment Status: About 32.5% of the respondents reported securing employment opportunities through ChatGPT, while 48.7% indicated that it enhanced their job readiness by improving their communication, technical, or problem-solving skills.

Entrepreneurial Ventures: Another 18.8% of respondents stated that ChatGPT had played a crucial role in helping them start small businesses, particularly in areas such as online freelancing, digital marketing, and e-commerce.

These findings underscore the significant role of AI tools like ChatGPT in fostering self-reliance and creating alternative employment pathways among Kenyan youths.

## 4.3 Qualitative Data Analysis

### 4.3.1 Themes from Interviews and Focus Groups

Analysis of qualitative data revealed three major themes derived from interviews and focus group discussions.

Motivations for Using ChatGPT

Participants emphasized the accessibility and convenience of ChatGPT as primary reasons for adoption. They described it as a readily available assistant that provides quick answers, career advice, and learning resources tailored to individual needs.

Challenges Experienced

Despite its benefits, several participants highlighted obstacles such as limited internet connectivity, high data costs, low digital literacy, and doubts about the reliability of some AI-generated information. These issues occasionally hindered consistent or effective use of the platform.

Success Stories and Positive Experiences

Many respondents shared inspiring stories of how ChatGPT supported them in writing professional CVs, preparing for interviews, and even launching small-scale businesses. Some participants reported that interacting with the AI enhanced their creativity, confidence, and problem-solving abilities.

### 4.4 Discussion

The results demonstrate that ChatGPT has a notable positive influence on combating unemployment among Kenyan youths. Quantitative data revealed that a considerable proportion of respondents actively use the tool for job-related purposes and skill development, while qualitative evidence reinforced the transformative impact it has had on users' employability and entrepreneurial confidence.

The findings also show that ChatGPT provides personalized support, enabling users to access tailored guidance for job searching, online business creation, and digital skill improvement. This aligns with the principles of the Technology Acceptance Model (TAM) and the Diffusion of Innovations (DOI) theory, both of which highlight perceived usefulness and ease of use as key factors influencing technology adoption. The participants' feedback confirms that ChatGPT is not only easy to use but also delivers practical value that directly contributes to their personal and professional growth.

However, the study identified persistent barriers that limit the full potential of this technology. Poor internet connectivity, high costs of access, and inadequate digital literacy remain major challenges, especially in rural areas. These constraints mirror observations made in earlier studies on digital technology adoption in developing regions (Karanja, 2020; Ndungu, 2021).

To fully harness the benefits of ChatGPT, digital inclusion initiatives such as affordable internet access, structured digital literacy programs, and awareness campaigns should be prioritized. Addressing these challenges would ensure broader participation and allow more young people to capitalize on the opportunities presented by AI tools.

In summary, the findings affirm that ChatGPT has become an important tool for youth empowerment and employment creation in Kenya. When supported by improved infrastructure and training, it has the potential to significantly contribute to reducing unemployment and promoting sustainable livelihoods among the country's young population.

# CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

## 5.1 Introduction

This study explored how Kenyan youth are engaging with artificial intelligence tools, particularly ChatGPT, to address unemployment and improve financial outcomes. It examined levels of awareness, usage patterns, and perceived benefits across both urban and rural regions. The research involved 150 participants aged 18 to 35, selected through stratified and purposive sampling methods. Data was collected using surveys, interviews, and focus group discussions, and analyzed through statistical and thematic techniques. The findings revealed growing interest in AI, with many youth using ChatGPT for job preparation, entrepreneurship, and financial planning. However, challenges such as limited internet access and low digital literacy continue to affect adoption rates.

## 5.2 Summary of Findings

The study established that a growing number of Kenyan youths are utilizing Chat-GPT for employment-related purposes, including job searches, skills enhancement, and business development guidance. The technology has demonstrated a positive influence on employability and entrepreneurship. However, limitations such as inadequate digital literacy and restricted internet access continue to impede its full potential.

## 5.3 Conclusions

The study concludes that artificial intelligence tools, particularly ChatGPT, are playing an increasingly important role in helping Kenyan youth navigate unemployment and financial uncertainty. While awareness and usage vary across regions, many young people are finding practical value in AI for job preparation, entrepreneurship, and personal development. The findings highlight both the potential and the limitations of AI adoption, with barriers such as internet access, digital literacy, and affordability still affecting widespread use. Overall, the research underscores the need for inclusive digital strategies and support systems to ensure that all youth can benefit from emerging technologies in meaningful ways.

### 5.4 Recommendations

Based on the study's findings, several key actions are recommended to enhance the adoption and impact of AI tools among Kenyan youth. First, there is a need for targeted digital literacy programs that equip young people with the skills to effectively use platforms like ChatGPT. Government and private sector stakeholders should invest in expanding affordable internet access, especially in underserved rural areas. Educational institutions can integrate AI awareness into their curricula to foster early exposure. Additionally, creating localized content and support in regional languages could help bridge comprehension gaps. Finally, partnerships between tech developers, youth organizations, and policymakers can ensure that AI solutions are inclusive, relevant, and aligned with the economic needs of young people.

### 5.5 Future Research Directions

Future studies could explore the long-term effects of AI adoption on youth employment and financial independence in Kenya. Researchers may also investigate how regional languages and cultural factors influence the accessibility and effectiveness of AI tools like ChatGPT. Comparative studies across different African countries could provide broader insights into the role of AI in youth empowerment. Additionally, examining the ethical implications of AI use—such as data privacy, misinformation, and digital dependency—would help inform responsible integration. Expanding research to include older age groups and marginalized communities could further enrich understanding of AI's impact across diverse populations.

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## APPENDICES

### Appendix1: Questionnaire

My name is Wilson Guchu, and I am student at Gretsa University, Thika. I am conducting a study titled "Exploring How the Youths in Kenya are Using Chatbots in Their Daily Life Routine to Solve Unemployment: A Case Study of Chat-GPT." The purpose of this research is to understand how young people in Kenya are utilizing chatbots, specifically Chat-GPT, to address unemployment and enhance their employability.

1. What is your Age?

18-21 [ ]

22-25 [ ]

26-30 [ ]

31-35 [ ]

2.Gender:

[ ] Male

[ ] Female

[ ] I prefer not say

2. Location:

[ ] Urban

[ ] Rural

3. Education Level:

[ ]High school

[ ]Diploma

[ ]Bachelor's degree

[ ]Master's degree

[ ]PhD

[ ]Other

4. Employment Status:

[ ]Employed

[ ]Unemployed

[ ]Self-employed

[ ]Student

[ ]Other

**Usage of Chatbots**

5. Are you familiar with chatbots?

[ ]Yes

[ ]No

6. Have you used Chat-GPT or any other chatbot before?

[ ]Yes

[ ]No

7. If yes, how frequently do you use chatbots?

[ ]Daily

[ ]Weekly

[ ]Monthly

[ ]Rarely

**Purpose of Using Chatbots**

8. For what purposes do you use chatbots? (Select all that apply)

[ ]Job searching

[ ]Skill development (e.g., learning new skills)

[ ]Networking

[ ]Mental health support

[ ]Educational purposes

[ ]Entertainment

Other (please specify): _____

9. How effective do you find chatbots in helping with job searching?

[ ]Very effective

[ ]Effective

[ ]Neutral

[ ]Ineffective

[ ]Very ineffective

**Impact on Employment**

10. (a) Have chatbots helped you secure employment?

[ ]Yes

[ ]No

(b) If yes, please describe how chatbots assisted you in securing employment:

11. (a). Have chatbots helped you develop skills relevant to your career?

[ ]Yes

[ ]No

(b). If yes, what skills have you developed through using chatbots?

**Challenges and Recommendations**

12. What challenges have you faced while using chatbots for job-related purposes? (Select all that apply)

[ ]Technical issues

[ ]Lack of relevant job opportunities

[ ]Difficulty in using the technology

[ ]Lack of personalized responses

Other (please specify): _____

13. What improvements would you recommend for chatbots to better assist with employment-related tasks?

**Additional Information**

14. Any additional comments or experiences you would like to share regarding the use of chatbots in solving unemployment?