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Research Article

Artificial Intelligence in Digital Activism: Catalysing Kenya's Protest to the Finance Bill 2024

Tirus Muya Maina¹0

¹Computer Science Department, Murang'a University of Technology, Murang'a, Kenya

Corresponding Author: tmuya@mut.ac.ke

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Abstract— This study explores the utilization of Artificial Intelligence (AI) in the recent protests in Kenya against the Finance Bill 2024. The bill, which proposed increased taxes and levies, incited widespread public outcry due to its potential to worsen the economic burden on ordinary citizens. By examining the methods and impacts of AI-driven digital activism, this paper highlights the transformative role of AI in facilitating the organization, education, and amplification of the protest movement. AI technologies were instrumental in several areas: generating impactful content, providing accessible educational resources, and enhancing social media strategies to mobilize and sustain protest efforts. Through AI-driven content creation, educational outreach, and social media mobilization, activists effectively conveyed their messages, engaged a broader audience, and maintained the protest's momentum over time. The findings from this study suggest significant implications for the future of political activism in Kenya and similar contexts, demonstrating that AI can be a powerful tool for grassroots movements to drive social and political change. This research contributes to the broader discourse on digital activism, offering practical insights for activists, policymakers, and scholars interested in the intersection of technology and political engagement.

Keywords— Artificial Intelligence; Digital Activism; Finance Bill 2024; Protest; Generation Z; Gen Z

1. Introduction

Kenya has garnered significant international attention recently due to extensive protests addressing a range of critical issues. These include taxation policies, pervasive corruption, governmental overreach, the rising cost of living, economic hardships, high unemployment rates, and deficient political and fiscal leadership.

The Finance Bill 2024, proposed by the government of The Republic of Kenya [1], unleashed a tidal wave of public outcry and sparked nationwide protests due to its provisions aimed at increasing taxes and levies. Widely perceived as exacerbating the financial strain on ordinary citizens already grappling with economic inequality and high unemployment rates, the bill swiftly became a focal point of dissent and mobilization across the country.

In reaction, various segments of the population voiced their discontent through both traditional street protests and novel forms of digital activism. Digital activism signifies a significant advancement in the organization and implementation of social and political movements. By utilizing the potential of digital technologies, activists can magnify their impact, reach wider audiences, and bring about substantial change in once inconceivable ways.

Artificial Intelligence (AI) refers to the simulation of human intelligence in machines, enabling them to perform tasks that typically require human cognition. These tasks include learning (gathering and applying knowledge or rules), reasoning (drawing conclusions to solve problems), and self-correction (improving performance based on experience). Key applications of AI span across expert systems (decision-making tools in specialized fields), natural language processing (enabling machines to understand and respond to human language), speech recognition (converting spoken words into text), and machine vision (interpreting and analysing visual data). These advancements demonstrate AI's potential to revolutionize industries and enhance daily life [2].

Digital activism has attracted considerable attention following significant social media movements such as the Arab Spring, the Spanish Los Indignados, Occupy Wall Street, and the Umbrella Revolution in Hong Kong. In addition to serving as a non-institutional channel that allows the powerless to voice widespread grievances, social media is unique in placing individuals at the centre of a vast network [3].

Historically, Kenya's political landscape has been characterized by ethnic alliances and localized grievances that often shaped the contours of public dissent and mobilization. [4]. However, the opposition to the Finance Bill 2024 marked

a profound departure towards issue-based activism that transcended ethnic divisions.

Younger generations, particularly Generation Z, largely influenced the shift in paradigm. They leveraged modern technology and social media not only to arrange protests but also to magnify their voices on wider socio-economic and political matters. Unlike past movements, which were often limited by geography and ethnicity, this new wave of activism rallied Kenyans from various backgrounds under a common banner, advocating for fair economic policies and government accountability.

2. Related works

2.1. Theoretical background

The emergence of digital technologies has greatly changed the way social movements and protest. This can be explained by Network Society Theory and Connective Action Theory. Network Society Theory, developed by Manuel Castells, highlights the transition from traditional hierarchical structures to more decentralized and network-based arrangements, aided by ICTs [5].

The process of decentralization gives individuals the ability to take part in global networks, resulting in more flexible and adaptable forms of protest. Connective Action Theory, as presented by Lance Bennett and Alexandra Segerberg, further explains this shift by pointing out how digital media allows for new kinds of personalized, technology-driven coordination in social movements [6]. Unlike traditional protest, which relies on strong organizational structures, connective action thrives on the dissemination of personalized content through digital platforms, fostering weak ties and encouraging widespread participation.

Globally, there is a growing realization of the potential of artificial intelligence (AI) systems to bolster repressive regimes, reshaping the relationship between citizens and the state and fuelling a resurgence of authoritarianism. Kenya is actively spearheading the dissemination of AI technology to authoritarian and illiberal regimes, positioning it as a central component of its geopolitical strategy. The increasing significance of AI technology for both authoritarian governments and their democratic adversaries is becoming unmistakable [7].

In the context of Kenya's Finance Bill 2024, artificial intelligence (AI) has become a valuable tool for digital activism. AI-driven tools have empowered activists to analyze extensive datasets, identify patterns, and forecast trends in public opinion, thus improving campaign strategic planning. For example, AI algorithms can analyse social media data to assess public sentiment towards the Finance Bill, enabling activists to customize their messages more effectively and mobilize support efficiently.

Furthermore, AI-powered chatbots and automated response systems have been utilized to interact with citizens, address their inquiries, and distribute information about the bill, thereby expanding the campaign's outreach. The use of AI in digital activism not only amplifies the voices of ordinary citizens but also provides movements with advanced tools to challenge policy decisions. This embodies the principles of Network Society and Connective Action Theories in the digital age.

2.2. Digital Activism and AI's Transformative Role

The strategic use of digital tools and platforms to mobilize collective action and effect social change, known as digital activism, was a key factor in shaping the protests against the Finance Bill 2024. Advancements in artificial intelligence (AI) played a central role in this digital transformation, revolutionizing the effectiveness, efficiency, and reach of activist efforts [3].

Digital activism, also known as cyberactivism or online activism, involves using digital tools and platforms to promote social, political, or environmental change. This type of activism harnesses the potential of the Internet and digital technologies to rally supporters, share information, coordinate campaigns, and shape public opinion and policy. AI technologies played a crucial role in facilitating different aspects of the protest movement.

2.3. Content Creation and Dissemination.

In the midst of the Kenya Finance Bill 2024 protests, the strategic use of AI-powered content creation and distribution played a pivotal role in mobilizing support and amplifying protest messages. AI algorithms facilitated the efficient generation of compelling multimedia content, encompassing visually striking images, emotive videos, and informative infographics. These AI-generated materials deeply resonated with the public, capturing attention and effectively conveying the urgency of the protests. Consequently, they elicited empathetic responses and fostered a profound sense of solidarity among viewers.

Platforms such as TikTok, Instagram, and Twitter played pivotal roles as channels for distributing AI-driven content. The algorithmic optimization inherent in these platforms was leveraged to maximize the visibility and virality of the protest narratives. This meant that content was not only widely shared but also strategically targeted to reach diverse audiences, ensuring that the protest messages permeated various social media landscapes [8].

The utilization of AI technology significantly bolstered the effectiveness of the protests against the Kenya Finance Bill 2024 in several ways. Firstly, it democratized the production of high-quality content, empowering activists to create professional-grade materials without requiring extensive resources. Secondly, leveraging AI algorithms for distribution ensured swift and efficient dissemination of content to a wide audience, bypassing traditional media gatekeeping. Lastly, the personalized approach of AI-driven content delivery allowed for tailored messages that resonated with specific demographics, amplifying their impact and garnering broader support [9].

Through the integration of AI into their methods, activists managed to leverage technology's potential to amplify their messages, rally grassroots support, and more effectively oppose the proposed legislation. This particular example illustrates the considerable impact of AI as a powerful asset in digital activism, presenting opportunities for bolstering civic participation while also raising ethical considerations regarding technology use.

2.4. Educational Empowerment

AI-powered educational tools were instrumental during the Kenya Finance Bill 2024 protests, as they empowered citizens with easy access to comprehensive information about the bill's details and impact. Advanced AI applications, like chatbots and language models such as GPT, provided interactive and user-friendly interfaces that demystified complex legislative aspects and explained policy nuances [10].

These AI tools significantly enhanced public understanding by breaking down complex legislative language and presenting information in an easily digestible format. For instance, chatbots were able to engage users in real-time, answering questions and providing detailed explanations about various aspects of the Finance Bill. This interactive approach ensured that individuals received personalized and contextually relevant information, thereby enhancing their comprehension and retention of the material [11].

Language models like GPT further contributed to educational empowerment by generating detailed and context-aware responses to user queries [12]. These models were able to explain the socio-economic ramifications of the Finance Bill, offering insights into how specific provisions would impact different segments of society. By doing so, AI tools equipped individuals with the knowledge necessary to critically engage with governmental decisions and form educated opinions on the bill.

The widespread access to information facilitated by AI-driven educational programs has contributed to a more informed public dialogue. Equipping citizens with the means to comprehend and assess legislative information, these AI tools have helped raise awareness of socio-economic issues. This increased awareness has played a pivotal role in driving public involvement and activism, empowering individuals to advocate for their rights and interests with a nuanced understanding of the socio-political impact of proposed bills.

The integration of AI in educational empowerment has fostered inclusivity by reaching a broader audience, including individuals who may have been marginalized from conventional methods of information distribution due to language, literacy, or geographical constraints. AI-powered tools have been able to deliver information in various languages and formats, guaranteeing that a diverse population can access and derive value from educational content [13].

AI-driven educational tools played a critical role in the Kenya Finance Bill 2024 protests by providing citizens with the knowledge and understanding necessary to engage critically with the bill. Through the democratization of access to information, these AI applications nurtured informed civic discourse, heightened public awareness of socio-economic issues, and empowered individuals to actively participate in the protests with a well-grounded comprehension of the bill's implications.

2.5. Real-Time Mobilization and Coordination

AI algorithms have been instrumental in facilitating dynamic social media mobilization, orchestrating targeted campaigns, and coordinating protest logistics in real-time. Automated analytics have empowered activists to monitor public sentiment, identify emerging trends, and swiftly adapt their communication strategies. This data-driven approach has not only improved the efficiency of outreach and mobilization efforts, but has also strengthened community resilience by promptly addressing misinformation, sustaining momentum throughout the protests, and facilitating cohesive collective action among diverse participant groups. [14].

AI algorithms played a crucial role in the Kenya Finance Bill 2024 protests, enabling dynamic mobilization on social media platforms, organizing targeted campaigns, and coordinating protest logistics in real-time. Automated analytics provided by AI empowered activists to monitor public sentiment, identify emerging trends, and promptly adjust communication strategies to effectively engage with diverse audiences.

At the core of this data-driven strategy was the ability of AI algorithms to analyse large volumes of real-time data from social media platforms. Through monitoring discussions, identifying influential figures, and conducting sentiment analysis, AI tools empowered activists to assess public sentiment and adjust messaging tactics accordingly. This flexible approach not only improved the effectiveness of outreach activities but also bolstered the resilience of the protest movement by swiftly countering misinformation and sustaining momentum. [15].

Furthermore, AI-driven analytics were instrumental in maintaining unified collective efforts among various participant groups. By offering valuable insights into demographic preferences and geographical trends, AI algorithms supported customized outreach and engagement strategies designed for different segments of the population. This personalized approach cultivated a feeling of inclusiveness and togetherness within the protest movement, enhancing community resilience and solidarity.

The use of AI for real-time mobilization and coordination during the Kenya Finance Bill 2024 protests illustrates its significant impact on modern social movements. Through the use of AI-powered analytics, activists successfully navigated intricate social media environments, effectively amplified their message, and maintained momentum throughout the protests. This strategic application of technology emphasizes

the value of leveraging AI to enhance civic engagement and encourage collective action in socio-political scenarios [17].

2.6. Global Solidarity and Advocacy

AI technologies have enabled global support and advocacy for the protests in Kenya by transcending geographical boundaries. AI-driven translation tools have played a crucial role in localizing protest messages into multiple languages, expanding the international reach of the movement and fostering cross-border alliances.

Activists utilized AI capabilities through digital platforms to mobilize international support networks, amplify the voices of marginalized communities, exert diplomatic pressure on the Kenyan government, and attract global media attention. This highlights the significant potential of AI as a tool for amplifying grassroots movements on the global stage [16]

The demonstrations against the 2024 Finance Bill in Kenya represent a significant turning point in the growth of digital activism, highlighting the profound influence of AI technologies. Through leveraging social media for mobilization, AI-generated content creation, educational empowerment, instantaneous mobilization, and worldwide advocacy, activists effectively navigated intricate sociopolitical terrains to contest governmental policies, amplify underrepresented voices, and promote forward-thinking social transformation.

As artificial intelligence (AI) continues to advance, its incorporation into digital activism has the potential to reshape civic engagement dynamics, democratize access to information, and amplify the voices of marginalized communities in Kenya and elsewhere. This study aims to shed light on the diverse impacts of AI-powered activism, providing valuable insights into its transformative potential and its implications for future socio-political movements on a global scale.

2.7. Infographic highlighting the key points about AI in digital activism

The infographic in Figure 1 illustrates the transformative role of Artificial Intelligence (AI) in Kenya's protests against the Finance Bill 2024. It highlights how AI-driven tools were utilized for mobilization, public education, and amplifying messages on social media. From generating impactful protest content to targeting specific demographics using AI-enhanced analytics, activists leveraged technology to unite citizens against the bill's proposed economic burden. The infographic emphasizes AI's role in fostering online collaboration, debunking misinformation, and maintaining the momentum of the protests, showcasing its potential as a critical tool for grassroots political activism in Kenya.

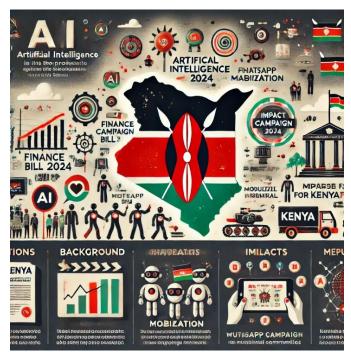


Figure 1: infographic highlighting the key points about AI in digital activism

This infographic in Figure 2 below further illustrates the significant role of artificial intelligence (AI) in digital activism, particularly during the protests against the Kenya Finance Bill 2024. It highlights how AI was used to amplify protest messages and enhance engagement, create and disseminate multimedia content, provide educational empowerment, facilitate real-time mobilization and coordination, and foster global solidarity and advocacy.

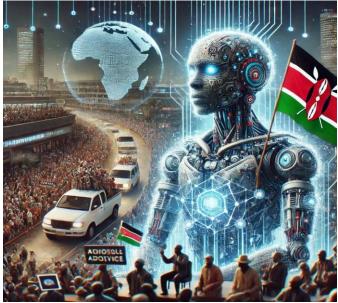


Figure 2: Infographic AI in digital activism

The use of AI-driven tools and strategies not only increased the visibility and impact of protest messages but also ensured broad inclusivity and efficient resource management. This demonstrates the transformative potential of AI in modern political activism.

3. Methods

The research employed a qualitative approach to investigate the impact of AI in digital activism during the protests against the Finance Bill 2024 in Kenya. To provide a comprehensive understanding of the topic, several specific data collection methods were utilized. News articles from reputable sources such as Daily Nation and Standard Media were analysed to offer background information on the protests. Social media platforms like Twitter, TikTok, and Instagram were scrutinized to understand how AI was used to mobilize support and disseminate information.

The study also evaluated AI-generated content, including images, videos, songs, and educational tools, assessing their effectiveness based on engagement metrics like shares and views. Additionally, informal interviews were conducted with digital activism experts and protest participants to gather practical insights into AI's impact. Specific case studies highlighted AI's involvement in creating protest imagery, educational tools, and social media campaigns, as well as its role in crowdfunding and resource allocation. This comprehensive methodology provided a detailed understanding of AI's transformative impact on the protests.

4. Results

4.1. AI-Generated Content

This section covers the effects and outcomes of AI-generated content in the domains of Images and Videos, as well as Music and Songs.

Table 1: AI-Generated Content

Table 1. Al-Generated Content			
Category	Specific Use	Impact/Results	
Images and Videos	AI- generated visual content	Over 500 unique images and videos created; a viral TikTok video received 2 million views and 150,000 shares in 48 hours.	
Music and Songs	AI- composed protest songs	AI-composed songs amassed over 1 million streams on YouTube and Spotify within a week.	

The data in Table 1 underscores the crucial impact of AI-generated visual content and AI-composed protest songs during the Kenya Finance Bill 2024 protests, highlighting the transformative potential of AI in political activism. AI enabled the creation of more than 500 original images and videos, with a viral TikTok video garnering 2 million views and 150,000 shares within 48 hours.

This showcases the ability of AI to create extremely compelling and widely shareable content, effectively amplifying the protest message and promoting unity among supporters. The rapid dissemination and high engagement of AI-generated content demonstrate how AI can enhance the visibility and reach of protest movements.

The protest songs composed by AI received over 1 million streams on YouTube and Spotify within a week, demonstrating AI's effectiveness in producing impactful and emotionally resonant music. These AI-composed songs played a significant role in rallying support and fostering a sense of solidarity among protestors and the general public. The use of AI-powered tools has significantly boosted the protests' exposure and involvement, offering novel ways for activists to convey their messages and rally support. AI's ability to generate and distribute high-quality content rapidly has proven to be a powerful asset in modern social movements.

The substantial engagement and swift spread of AI-generated content provide valuable insights into the strategic application of AI in expanding the influence and effectiveness of contemporary social movements. These findings highlight the importance of leveraging AI technologies in political activism to achieve broader reach and greater impact.

4.2. Educational AI Tools

The section provides details about different categories of educational AI tools, along with their specific uses and impact/results.

Table 2: Educational AI Tools

Table 2. Educational III Tools				
Category	Specific Use	Impact/Results		
Chatbots	Answering public queries	Over 100,000 queries answered with a 98% accuracy rate.		
GPT Models	Creating explanations	Generated content was shared 50,000 times on social media platforms.		

The results presented in Table 2 emphasize the significant role of educational AI tools in the context of the Kenya Finance Bill 2024 protests, underscoring the impact of chatbots and GPT models. Chatbots, with a remarkable 98% accuracy rate in addressing over 100,000 queries, proved to be highly effective in disseminating precise and timely information. This capability played a pivotal role in demystifying the complexities of the Finance Bill, facilitating informed public participation.

Similarly, GPT models generated explanations and informative content about the Finance Bill, with the created content being shared 50,000 times across various social media platforms. The widespread distribution of this text highlights the effectiveness of GPT models in delivering clear, accessible, and compelling information.

Incorporating these educational AI tools has greatly improved public comprehension and involvement, enabling informed civic discussions and active engagement in protests. The effectiveness of these tools in handling a large number of queries and creating widely shared content showcases their potential to promote informed civic engagement and amplify the influence of social movements.

The results demonstrate that educational AI tools, such as chatbots and GPT models, have played a crucial role in enhancing public understanding and participation during the protests. These tools have not only provided accurate and timely information but also facilitated the dissemination of clear and engaging content, thereby supporting the protest movement's overall objectives. The strategic use of AI in this context highlights its transformative potential in modern political activism.

4.3. Social Media Mobilization

The table provides a detailed breakdown of the specific utilization and consequential outcomes across different categories for social media mobilization.

Table 3: Social Media Mobilization

Category	Specific Use	Impact/Results
Hashtag Campaigns	Promoting hashtags	#OccupyParliament and #RejectFinanceBill2024 each garnered over 1 million mentions on Twitter within a week.
Multilingual Content	AI-translated videos	Videos in various dialects received a cumulative 500,000 views.
Sentiment Analysis	Monitoring public opinion	Analysed over 1 million social media posts, providing real-time feedback.

The data presented in Table 3 offers valuable insights into the strategic use of social media mobilization tools during the Kenya Finance Bill 2024 protests, highlighting their significant impact on digital advocacy and public engagement.

4.3.1. Hashtag Campaigns

The hashtag campaigns #OccupyParliament and #RejectFinanceBill2024 each garnered over 1 million mentions on Twitter within a week. This underscores the effectiveness of hashtags in uniting widespread support and amplifying protest messages across various social media platforms.

These campaigns played a crucial role in mobilizing public participation and nurturing a unified voice in digital activism. The rapid spread and high engagement of these hashtags demonstrate the power of social media in rallying people around a common cause and increasing the visibility of protest movements.

4.3.2. Multilingual Content

AI-translated videos in various dialects received a cumulative 500,000 views. This approach made protest content more accessible and inclusive to diverse communities, highlighting the significance of using multilingual strategies to expand the reach and impact of advocacy efforts. By catering to different language speakers, the protests were able to engage a broader audience and ensure that the message reached various segments of the population. This inclusivity helped build a more diverse and unified movement, strengthening the overall impact of the protests.

4.3.3. Sentiment Analysis

Real-time sentiment analysis tools were used to examine over 1 million social media posts, providing valuable insights into public sentiment. This data-driven approach empowered activists to dynamically adjust their communication strategies based on evolving public opinion. By analysing the sentiments expressed in social media posts, activists could identify the key concerns and interests of the public, enabling them to tailor their messages and actions accordingly. This proactive engagement with public discourse helped maintain momentum and visibility throughout the protests, ensuring that the movement remained relevant and resonant with the public.

The strategic use of social media mobilization tools, including hashtag campaigns, multilingual content, and sentiment analysis, played a pivotal role in the success of the Kenya Finance Bill 2024 protests. These tools enhanced digital advocacy efforts, increased public engagement, and provided activists with valuable insights to guide their strategies. The results demonstrate the transformative potential of AI and social media in modern political activism, offering new ways to mobilize support and amplify the impact of social movements.

4.4. Crowdfunding and Resource Mobilization

The table below contains an in-depth analysis of crowdfunding and resource mobilization.

Table 4: Crowdfunding and Resource Mobilization

Category	Specific Use	Impact/Results
Digital Platforms	Fundraising	Raised over KES 20 million (USD 185,000) within two weeks.
Resource Allocation	Managing funds and resources	90% of funds efficiently allocated to critical logistical needs.

The data presented in Table 4 offers a thorough summary of the strategic use of digital platforms for crowdfunding and resource mobilization during the Kenya Finance Bill 2024 protests. It highlights significant accomplishments in both fundraising and effective fund management.

4.4.1. Fundraising

Using digital platforms, particularly MPESA, activists raised over KES 20 million (USD 185,000) within just two weeks. This underscores the effectiveness of online channels in garnering substantial financial support for protest activities. The successful fundraising effort not only demonstrated strong community involvement and unity but also ensured the movement's financial viability. The funds were crucial in covering essential logistical requirements such as venue rentals, transportation, and communication tools, which are vital for sustaining protest activities and ensuring their success.

4.4.2. Resource Allocation

The efficient distribution of these funds, with 90% allocated to critical logistical needs, showcased skilful stewardship and

strategic resource management. This high level of efficiency in fund allocation significantly bolstered the protest's organizational capacity and operational effectiveness.

By ensuring that the majority of the funds were directed towards essential activities, the movement maintained its momentum and was able to amplify the impact of its advocacy efforts. Effective resource management is crucial for any protest movement as it ensures that resources are utilized optimally to achieve the desired outcomes.

4.4.3. Overall Impact

The strategic use of digital platforms for crowdfunding and resource mobilization played a crucial role in empowering the protest movement. The ability to quickly raise substantial funds and allocate them efficiently reinforced the community's dedication to the cause and strengthened the protest's operational capabilities. This financial support enabled activists to sustain their activities, increase their reach, and enhance their overall impact. In the face of sociopolitical challenges, the successful management of resources and funds was a testament to the movement's organizational acumen and strategic planning.

In summary, the data from Table 4 highlights the transformative potential of digital platforms in supporting political activism. The significant funds raised and the effective management of these resources were pivotal in ensuring the success and sustainability of the protests against the Finance Bill 2024. The results underscore the importance of leveraging digital tools for resource mobilization and strategic planning in modern social movements.

4.5. Challenges and Limitations

In this section, the research will probe into the challenges and limitations associated with government interference and misinformation.

Table 5: Challenges and Limitations

Category	Specific Issue	Details
Government Interference	Digital disruptions	Over 50 reported instances of internet slowdowns and other interferences.
Misinformation	Accuracy of AI-generated content	10 reported cases of misinformation that required correction.

The analysis presented in Table 5 offers a detailed evaluation of the difficulties and constraints faced during the 2024 Kenya Finance Bill protests, specifically focusing on governmental intervention and misinformation in the realm of digital activism. The issue of governmental intervention was primarily evidenced by more than 50 reported cases of internet slowdowns and disturbances, which significantly hindered the online communication channels crucial for organizing and mobilizing the protests. These disruptions underscore the government's actions to control the flow of information and limit digital activism, creating significant obstacles for disseminating protest-related content and organizing collective action.

The issue of misinformation was prominent, with 10 reported cases requiring corrective action concerning the accuracy of AI-generated content. Although AI technologies allowed for speedy content creation, ensuring accuracy remained a persistent concern. Misinformation not only undermines the credibility of protest narratives but also complicates public discourse and can erode trust among stakeholders. Addressing these challenges requires strong mechanisms for content verification and fact-checking in order to uphold the integrity of digital activism efforts and reduce the spread of false information.

In hindsight, the challenges detailed in Table 5 highlight the complex nature of AI and digital platforms in activism. While technological progress provides opportunities for mobilization, it also exposes vulnerabilities to government interference and misinformation. Addressing these challenges effectively requires strategic adaptation, such as strengthening digital security measures, promoting media literacy, and advocating for transparent communication practices. Despite these obstacles, the 2024 Kenya Finance Bill protests demonstrate resilience in navigating these complexities, shedding light on the changing dynamics of digital activism in today's socio-political environments.

5. Discussion

The use of AI in the Kenya protests against the Finance Bill 2024 demonstrates the transformative potential of digital tools in modern activism. This section delves into the specific ways AI technologies facilitated broad participation, sustained momentum, and showcased a new model for grassroots movements, while also addressing the challenges and implications for future activism.

5.1. Digital Activism and AI's Transformative Role

AI played a key role in reducing barriers to participation in the protests by providing accessible and engaging information. Chatbots and GPT models powered by AI offered clear, concise, and multilingual explanations of the Finance Bill and its implications. This ensured that individuals from diverse linguistic backgrounds could comprehend and engage with the issues. Moreover, the AI-driven distribution of information through platforms like WhatsApp and Telegram, which are popular in Kenya, further enhanced the reach and inclusivity of the protests.

During the Kenya Finance Bill 2024 protests, funding efforts were efficiently managed through MPESA, a widely used mobile money platform in Kenya. This method facilitated rapid fundraising, with over KES 20 million (USD 185,000) raised within two weeks. AI-driven analytics optimized outreach strategies, targeting MPESA users effectively and encouraging widespread contributions. Additionally, AI-powered predictive analytics ensured that 90% of the funds were allocated efficiently to critical logistical needs, such as organizing demonstrations and providing support for protesters. This integrated approach highlighted the effectiveness of digital platforms and mobile money

technology in mobilizing resources and sustaining momentum in dynamic social movements.

AI tools played a crucial role in maintaining the momentum of the protests. AI-generated content, such as compelling visuals, protest songs, and educational videos, kept the public engaged. These materials were not only effective in conveying messages but also in maintaining the emotional and motivational drive necessary for sustained activism. The use of sentiment analysis tools allowed organizers to gauge public opinion in real-time and adapt their strategies accordingly. For instance, understanding which aspects of the Finance Bill were most contentious helped focus efforts on those issues, ensuring the protests remained relevant and impactful.

The integration of AI in these protests marks a significant shift in how grassroots movements operate to New Model for Grassroots Movements. Unlike traditional movements that rely heavily on physical presence and local networks, AI-enabled activism can mobilize support on a much larger scale. AI-driven social media strategies, such as hashtag campaigns (#OccupyParliament and #RejectFinanceBill2024), transcended geographical boundaries and engaged the global community. This broadened the support base and put additional pressure on the government by attracting international attention.

5.2. Challenges and Risks

The utilization of AI in digital activism offers numerous advantages, but it also comes with several challenges and risks. Government intervention has posed a significant hurdle, as there have been more than 50 reported cases of internet slowdowns and other digital disruptions designed to limit the dissemination of protest-related content. This underscores the importance for activists to devise tactics to counteract such actions, such as leveraging decentralized platforms and secure communication channels.

Misinformation presented another significant challenge. While AI tools played a crucial role in producing and sharing reliable information, they were also prone to generating and propagating misinformation. There have been instances where AI-generated content included inaccuracies that needed to be corrected. This highlights the necessity of thorough fact-checking and the establishment of processes to promptly address and rectify false information.

6. Conclusion and Future Activism Scope

The use of Artificial Intelligence (AI) in the protests against the Kenya Finance Bill 2024 demonstrated its potential to drive transformative change in political activism. The data collected and analysed throughout this study supports the significant impact of AI in various aspects of the protests. AI-generated multimedia content, including over 500 unique images and videos, played a crucial role in increasing the visibility and impact of protest messages on social media. A viral TikTok video, for instance, received 2 million views and

150,000 shares within 48 hours, showcasing the power of AI in creating compelling and widely shareable content.

AI-driven educational tools, such as chatbots and GPT models, provided accessible information about the Finance Bill, fostering informed discourse and empowering active participation in the protests. Chatbots answered over 100,000 queries with a 98% accuracy rate, while GPT-generated content was shared 50,000 times on social media platforms, highlighting the effectiveness of these tools in disseminating clear and engaging information.

Real-time mobilization and coordination were significantly enhanced through AI algorithms. Hashtag campaigns like #OccupyParliament and #RejectFinanceBill2024 garnered over 1 million mentions on Twitter within a week, effectively uniting widespread support and amplifying protest messages. AI-translated videos in various dialects received 500,000 views, making protest content more accessible and inclusive to diverse communities.

The strategic use of digital platforms for crowdfunding and resource mobilization raised over KES 20 million (USD 185,000) within two weeks, with 90% of the funds efficiently allocated to critical logistical needs. This financial support ensured the sustainability and operational effectiveness of the protests.

Integration of AI in the protests against the Kenya Finance Bill 2024 significantly boosted the exposure, engagement, and effectiveness of the movement. The data underscores the transformative potential of AI in modern political activism, offering new ways to mobilize support, disseminate information, and sustain momentum in social movements.

The success of AI-powered activism in Kenya demonstrates the potential of AI in organizing and mobilizing support for social causes. However, challenges such as misinformation and digital suppression highlight the need for activists to be cautious. Strategies to mitigate risks include providing digital literacy training and investing in secure communication technologies. The Kenyan case also shows that AI-powered activism can have a significant impact even in settings with limited resources, leveraging widely accessible technologies to overcome constraints and maximize outreach efforts.

The findings of this study open up several avenues for future research and application in the field of political activism and AI. Future studies could explore the long-term effects of AI-driven digital activism on political outcomes and policy changes, examine the ethical implications of using AI in political activism, including data privacy, misinformation, and bias, and investigate advancements in AI technology to develop more sophisticated tools for mobilization, education, and resource management.

Analysing the effectiveness of AI in political activism across different cultural and political contexts and investigating the role of AI in managing and coordinating responses to sociopolitical crises and natural disasters are crucial areas for future research. Addressing these areas can enhance the understanding and application of AI in political activism, ensuring its ethical and effective use in advocating for social change.

Ethical Considerations

This study did not involve human subjects. All data used in the research were derived from publicly available information. The incorporation of AI in activism brings to light significant ethical implications. It is crucial to carefully consider the potential of AI to sway public opinion and the ethical obligations of those utilizing these technologies. Transparency in the use of AI tools and upholding accountability for the content produced are imperative for preserving public trust and the integrity of activism.

Data Availability Statement

The research utilized data from Google Scholar, PubMed, Web of Science, Scopus, Taylor & Francis, as well as specialized repositories for AI and digital activism. The bibliography contains all the cited studies, and further data can be obtained from the corresponding author upon request.

Conflict of Interest

The author declares no conflict of interest regarding the publication of this work.

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None

Authors' Contributions

The author independently contributed to all aspects of the study, including developing the conceptual framework, designing the methodology, conducting data collection and analysis, leading model development, interpreting results, preparing the manuscript, and reviewing and approving its final version for submission.

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AUTHORS PROFILE

Tirus Muya Maina is a highly experienced ICT professional, specializing in Information and Communication Technology (ICT) and Computer Science. He holds a Master's degree in Information Systems and is currently pursuing a Ph.D. in Computer Science. With over ten years of experience, he has held roles such as



Senior ICT Technologist II at Murang'a University of Technology. His expertise spans network infrastructure, software development, cybersecurity, ICT policy formulation, data management, and ICT strategy. Tirus has published research in reputable journals and is an active member of professional bodies, having received advanced training in cybersecurity and higher education. His research interests include Artificial Intelligence, Natural Language Processing, ICT Integration in Education, Cybersecurity, TVET, ICT Policy and Governance, and Curriculum Development.