



Effect of Technology on Participation of Disabled Persons in Public Decision-Making Processes: A Case of Turkana County, Kenya

Joseph E. Epuu

Turkana University College a Constituent of Masinde Muliro University of Science and Technology, Kenya

Robert O. Onyango *

Masinde Muliro University of Science and Technology, Kenya

*Corresponding Author: robertonyango29@gmail.com

Abstract

Technology makes it easier for people with impairments to integrate and participate. But in their particular countries, people with disabilities regularly face exclusion from taking part in public decision-making. The goal of this study was to assess how technology has affected the participation of people with disabilities in public decision-making within the Turkana County Government. The study used an explanatory research methodology and had 212 state and non-state actors as its target population in Turkana County. Using Yamanes' formula, a sample size of 139 respondents was drawn from a population of 212 people for the study. Self-administered structured questionnaires were used to collect the data for this research investigation. Using SPSS version 25.0, the data were analysed using both descriptive and inferential techniques. The information was displayed in tabular form. According to the study, technology was responsible for 40.6% of the variation in the level of public input into the Turkana County Government's decision-making processes. A highly significant F-statistic ($F= 74.437$, $p<0.05$) revealed that this link was statistically significant. The public's ability to participate in Turkana County Government decision-making is significantly impacted by technology. The findings back up efforts to increase public involvement in decision-making by people with disabilities through various public and private sector stakeholders. Investment in technical tools that enable people with disabilities to overcome their limitations and actively participate in democratic processes should be a top priority for both state and non-state actors.

Keywords: Technology, Public participation, Disabled person

1. Introduction

The 2030 Agenda for Sustainable Development incorporates individuals with disabilities, promoting their inclusion and acknowledgment as valuable members of society. It emphasizes the importance of preventing discrimination and exclusion towards them (www.internationaldisabilityalliance.org). Individuals with disabilities have been mainly disregarded in traditional development frameworks and processes, while being the largest minority population globally. Therefore, it is essential to give priority to identifying the obstacles that prevent people with disabilities (PwDs) from participating in decision-making processes, as this can greatly aid in the fulfilment of sustainable development goals. The participation of people with disabilities in public decision-making processes can be facilitated by technology. Although technological development has altered people's lifestyles, it has not sufficiently accounted for all members of society (MacLachlan et al., 2018). In order to improve the wellbeing and inclusion of people with disabilities in society and development, the UN (2014) emphasizes the benefits and advantages of assistive technology, accessible information and communications technology, technological adaptations, and other policy and programmatic measures. People with disabilities (PWDs) have historically been excluded from decision-making processes, which has led to a lack of consultation on choices that directly impact their daily life (McVeigh, MacLachlan, Ferri & Mannan, 2021). Low involvement in decisions that have an impact on their daily lives. The UN has urged the removal of obstacles that prevent people with disabilities from participating in political and public affairs (UN, 2012). Technology promotes inclusion and full participation of individuals with disabilities (Raja, 2016). The utilization of technology is increasingly prevalent and favored for the execution of governance, welfare, socioeconomic development, and human rights initiatives (Harniss, Samant Raja, & Matter, 2015). The use of various ICT channels and content formats can enable individuals with disabilities to access information and communication in ways that suit their preferences and comprehension abilities. This facilitates their participation in public decision-making processes. Efforts should priorities increasing awareness and enhancing capacity to effectively implement accessible digital environments and services for individuals with disabilities. Along with addressing issues of transparency, it's critical to concentrate on eliminating barriers that prevent individuals with disabilities from using Information and Communication Technologies (ICTs). Last but not least, it is crucial that everyone has access to various mechanical devices

like cellphones, the Internet, TVs, PCs, electronic stands, and their enormous variety of applications and services. These tools are essential for training, political engagement, social activities, as well as for e-government and e-wellness objectives, among other things. Exclusion from ICT-enabled applications results in being deprived of access to the information society, essential public services, and the ability to live independently (Luis, 2013). ICTs are now widely integrated into various aspects of society, making them a powerful force for positive change and an essential component of personal and institutional development for inclusivity. However, individuals with disabilities have frequently faced exclusion from participating in public decision-making within their respective nations. This study examined the impact of technology on the engagement of individuals with disabilities in public decision-making processes within the Turkana County Government. This study examines the impact of technology on the involvement of disabled individuals in public decision-making processes within the Turkana County Government.

2. Literature Review

2.1. Technology and Participation of Disabled Persons in Public Decision Making

Modern technology has gained prominence to the abled and disabled persons alike owing to the great promise of improved access to what was initially viewed as impossible. Ellcessor (2016) argued that technologies along the continuum of analog and digital forms have offered many opportunities for civic and cultural participations despite the hardware, software and cultural expectations which creates differences in abilities of applying the different technologies. Moreover, a United Nations report (un.org.,2014) acknowledged the advances in technology and the corresponding socio-economic barriers which limited access to them as suffered across the human divide.

Ellcesor (2016) developed a framework that came to be termed as the Web content Accessibility Guideline for disabled persons (WCAG) and raised five fundamental areas of concern to be used by institutions in determining the effectiveness with which disabled persons accessed information using the available assistive technologies. The five points were regulations, use, form, content and experience. On regulations, the model embodied the definitions of the medium for which braille, normal print, auditory outputs and abridged print were critical parts and the availability of assistive devices used to produce them as a concern of authorities and relevant institutions. Furthermore, regulations questioned the role of authorities in sanctioning the use of the different products which create a variety of forms for improved access by persons

of differing abilities. Core to the conception of this study was the assumption that the county government ensured existence and enforcement of regulations to promote use of a huge variety assistive devices for more varied communication outcomes as a mandatory obligation. However, the scholar argued that the guidelines were voluntary opening the possibility of neglect on the part of the concerned authorities. The study, therefore, seeks to determine the existence of an inclusive legal framework for public participation that gives disabled persons an opportunity to participate in decision making and, whether the framework was being enforced in Turkana.

On use and form, Ellcessor (2016) argued that the place of the user and his/her differing capabilities had to be handled with reservations to allow for considerations that address; how the information is to be accessed (online, offline or mixed), assumptions of the range of disabled persons who anticipates to access and use the information, available alternatives and how they are available to the user and, the model of use approved by the institutions e.g. restricted time use, mixed use method or unlimited time use. On form, the scholar raised concerns on the means used to access the medium which he conceived as ranging from the radio, newsprint, local advertisement, social media and social gatherings. How the means of access interacted with the people who used them was also covered? Following the arguments on use and form interpreted using the screen of availability, level of adoption and access as the key study sub variables, fundamental data gaps were noted on network availability for access through internet based social media platform, frequency availability for access through the radio, presence of qualified braille transcribers and sign language interpreters to function during social gatherings were examined by this study. Given that existing statistical evidence points to the educational and economic disadvantages suffered by disabled persons as a limiting factor, the study sought to determine whether disabled persons had the prerequisite educational level to use the internet-based forms and their economic capabilities in purchasing the different media of disseminating information e.g. radios and local newspapers especially for public participation exercises.

On content and experience, Ellcessor (2016) began by questioning the cultural values surrounding the content alongside the set of motivations and meanings associated with them by arguing about the overwhelming influence of culture and the context in which it was practiced. Technology access for whatever use (including public participation by disabled persons) was therefore a product of the context

and cultures in which it was practiced and the experiences associated with it. While it was true that cultural contexts varied significantly and so was the experiences by disabled persons on use of technology as noted by the study, caution must be observed in generalizing the fact to Kenya and Turkana since the examples cited were drawn from United States of America whose characteristics differs hugely from that of Kenya hence the need for empirical research on the case of Turkana. Besides, using a conceptualization of culture as repeated actions of the county government in respect to responding to the concerns and needs of disabled persons, it becomes necessary to determine; existence of incentivization culture where concerns and needs of disabled persons are facilitated, the training and capacity building opportunities availed to the service providers on mainstreaming of disability concerns and needs during public participation, the means by which the County government interacted with disabled persons and the capacity of the disabled persons to develop and submit their concerns in the form of petitions, submissions and memorandums to the county government during public participation.

According to Harris, Owen and De Ruiter (2012), access is an overriding concern in measuring the utility value of technology by disabled persons in participating in activities of daily living. The scholars cite the internet and its rich display of information as practically worthless or meaningless when the information could not be accessed. It is however emerging that the scholars' argument was limited to online based technologies and excluded offline and mixed technologies that may as well pose a challenge to disabled persons due to inability to operate them. The study also sought to identify and describe the range of technologies available for use by disabled persons in the pre, during and post public participation engagements e.g. the dolphin pen, Job Access With Speech (JAWS), qwerty pads and speech back button for website access among others.

Alper (2017) advocated for the use of the term adaptive technology as a more inclusive conceptualization of technology in its application to disabled persons by arguing that the adaptability was a strategy for empowerment and doing business with government by enhancing conveyance of messages and promoting policy debates and sometimes the only means of accessing public debates. On the same note, Alper (2017) noted the prohibitions of the internet and ICT in general especially when they were not sufficiently adaptive for which he suggests for government involvement in remedying the situation for the benefit of

the disabled persons. According to Hasan, Ashraf, Ahmed, Hasan & Bhattacharjee (2017) the starting solution was to be based on the adoption of ICT enabled tools and mobile connectivity.

Bonnah and Unwin (2010) found out that Information Communication Technologies is a very important tool in solving areas where people share rules and principles which they commonly understand and are specific to the participation of PWDs in many societal circles. The scholars noted that websites and technology tools continue to present defective access, privacy, security and feedback features with broken communication links and lack of talk backs. Governments all over the world should make efforts to make digital technologies like Short Messaging Services (SMS), mobile applications, accessible web-based forms, and web portals to respond to demand by enhancing interconnection of government with her people who are living with disabilities (Samant, 2016).

Full integration of disabled persons has not been realized despite the emergence of technologies that support them. Research has shown that although there exist technologies that are geared towards supporting social inclusion of PWDs. Some of the technologies were meant to reduce some of the limitations that affect people's disabilities and to support the interaction of PWDs and including their caretakers and teachers in some cases. The research assumed that technology would enable people with disabilities to be actively involved in society if they could access the proposed technological solutions. However, there was no consideration for potential socio-technical, infrastructural and cultural as well as legal obstacles (Manzoor & Vimarlund, 2018).

Research conducted by Harris, Owen and De Ruitter (2012) used both qualitative and quantitative data as they explored participation of PWDs as well as their inclusion in the civil society. Their focus was on advocacy and technology which are the main strategies advanced by PWDs to champion for their right. From this research, it was proposed that there was need for further understanding about how these tools and strategies could empower PWDs to have a good connection with government.

According to Raja (2016), the World Bank report discussed the opportunities that are presented by digital technologies. Specific reference was made to internet and ICT and the full participation of PWDs. It was found out that this technological development can present opportunities in educational institutions, electronic-governance, civil participation, disaster management, and economic incorporation as well as employment opportunities. This study highlighted the barriers to participation and tried to provide

relevant ICT solutions. This study concluded that; there was an incorrect perception that accessibility of ICT and the internet was costly but many studies had indicated that it was cost effective and therefore governments and counties were informed that the benefits of investing were positive and significant. The study also concluded that digital accessibility could be enhanced by legislation and policy implementation by governments. The report also said that the Internet and ICT could promote social-economic and civic participation. The report also said that ICT could be a source of exclusion for PWDS if internet and ICT-enabled programs were inaccessible to them. However, this study was conducted in a non-Kenyan context limiting its generalization.

Wong and Cohen (2012) conducted a study about application of Assistive Technology (AT) by visually impaired students and their instructors concerning barriers and challenges that they encounter in special education. A group of 10 and 20 respondents comprising of schoolteachers and students respectively were used in this research. Self-completion interviews were applied in collecting primary data. Both teachers and learners were interviewed. Teachers acknowledged that there were benefits of alternative technology but said that there were big gaps and disconnections in Alternative Technology in terms of skills and knowledge within the teachers. On the other hand, the learners/students were not using AT and did not have much knowledge about AT. The means of accessing and application of technologies mainly relies on the environment where they are situated and can be enhanced or barred by policy and legislation frameworks of a country. It is assumed that accessibility to Information Communication Technologies (ICTs) could get rid of or alleviate some of the obstacles or barriers. The increase in availability or complexity of will not singly enhance affordability and penetration, or scalability of ICT-related growth for PWDS. However, the study was not done in the Kenyan context limiting its generalization.

Kithuka (2018) examined the factors that affect the willingness of individuals with disabilities to engage in development initiatives in Kenya, specifically in Makueni County. The study aimed to examine the impact of technology on the participation readiness of individuals with disabilities. The study utilized a descriptive survey design and focused on a sample of 356 management staff and department heads from 10 departments within the county. The disability association in the county was also targeted, including its 43 officials. The study employed stratified sampling to select a sample of 192 staff members and management personnel. Additionally, a census technique was utilized to obtain data from all 43 officials of the disability

association. Questionnaires served as the primary instruments for data collection. The raw data was quantitatively analyzed using descriptive statistics, including frequencies, percentages, means, and standard deviations (SDs), and presented accordingly. Both Pearson correlation and linear regression analysis were conducted to examine the relationship between technology and disability readiness to participate in development projects in Makueni County. The results indicated a significant negative impact of technology ($\beta=.364$, $t=4.333$, $p<0.000$) on disability readiness. The study's scope was limited to Makueni County, which restricts its applicability to other counties.

Musyoki (2016) examined the factors that determine disability dominance in the design of government basic infrastructure projects in the municipality of Kisumu, Kenya. The goals of this research were to find out the degree of realization, the position or state of physical accessibility, spread of information, and appropriate transfer of technology and how it influences the incorporation of disability dominance in the municipality. This research was a cross-sectional survey and it made use of qualitative and quantitative research methodologies. Experts within the municipality, people living with disability and engineers were used as respondents. A hundred and eight respondents were drawn from Kisumu Municipality who comprised of 38 people living with disability, 30 municipality experts and a total of 40 civil engineers who participated in construction industry.

Questionnaires, observations and direct interviews were applied in collecting the relevant data. From the research questions formulated, quantitative data was generated, and analysis was done by use of descriptive statistics. Majority of the respondents agreed (91.7%) that the persons living with disability were not enjoying equal chances accessing technical guidance like those without disabilities. On the other hand, dissemination and accessibility of information was poor since 100% of the respondents reaffirmed that there were no provisions to adequately address this problem. There was no braille and sign language interpreters. In addition, 96.3% of the respondents confirmed the absence of transfer of technology and development applicable technology/s that favors PWDs in the construction industry at public infrastructure projects in Kisumu Municipality. The outcome of this research was that PWDs did not immediately benefit from technology since they were not specifically developed for them. The research recommended to the Ministry of public works to consider improving the access to its physical facilities,

spread of information and transfer of information by integrating PWDs in Kenya. However, the study didn't focus on public participation or decision making.

The promise of technological tools and their application in facilitating the inclusion of disabled persons in routine social life has received considerable research attention for its transformational qualities. However, the review hereby cited also noted gaps that required immediate research attention to be responded to by questions on; data availability on count and forms of technological tools, users' awareness of technological tools, county government investments on acquisition and use of technological tools to promote adoption and specific access challenges associated with prohibitive costs. The research aimed to investigate the impact of technological issues on the participation of disabled individuals from Turkana County in public activities.

2.2. Conceptual Framework

According to Antonenko (2015), a conceptual framework is a tool utilized to structure and organize research or inquiry. The argument presented is both captivating and grounded in theory, with a data-driven approach that effectively addresses a research problem. A research conceptual framework is a concise representation, either visual or written, that illustrates the key concepts and variables involved in a study. It may be presented through graphical means or descriptive explanations, and it outlines the presumed relationships between these elements. This study examines the relationship between technology (availability, level of adoption, and accessibility) as independent variables and the participation of disabled individuals in decision making as the dependent variable, as depicted in Figure 1.

Independent Variables (Technology)

Dependent Variables (Participation in Decision Making)

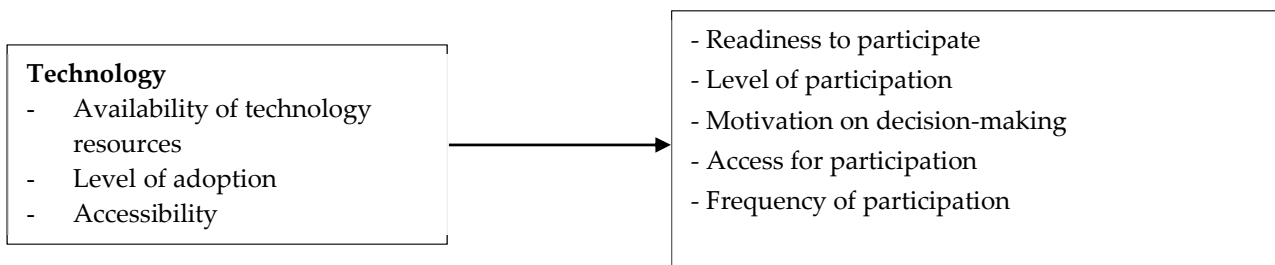


Figure 1. Conceptual Framework

3. Research Design and Methodology

Research design: Research design, as defined by Vogt, Gardner, and Haeffele (2012), is the "a framework for conducting a study in order to achieve the study's aims." For this study, we opted for a method that seeks explanations. Elahi and Dehdashti (2011) state that this method can be used for investigating the strength of a relationship between variables and when extrapolating future observations of social and physical phenomena.

Target population: The individuals, events, or things that the researcher intended to use for the study make up the target population (Cooper, Hedges, & Valentine, 2019). According to table 3.1 below, the study population consisted of 212 state and non-state actors from Turkana County. For the sake of generalization, this was also taken into account as a means of providing trustworthy information on the link between the research variables.

Sample and sampling techniques: Sample selection from a larger population for the purpose of data collection is defined as a statistical process by Cameron and Miller (2015). Stratified random sampling was utilised to select participants from both state and non-state actors for this study. Each stratum had a sample taken from it using a simple random sampling method. According to Elliott and Valliant (2017), in simple random sampling (SRS), each of the n sample units in a population of size N has an equal chance of being selected. The goal of this kind of sampling is to pick communities that exhibit differences in response to some phenomenon.

Sample size: Elements of the study were chosen using processes for picking specific elements from the population to calculate the sample size. Using a modified version of the Yamane (1967) sample size calculation, Etuk and Akpabio (2014) report that 139 respondents were drawn from a population of 212 state and non-state actors. The equation looks like this:

$$n = \frac{N}{1 + Ne^2}$$

Sample size (n), population size (N), and sampling error (e) are shown in the formula. A 5% margin of error was acceptable for this study's purposes. Sample size was determined using the formula shown below.

$$n = \frac{212}{1 + 212 \times 0.05^2}$$

$$= 139$$

Neyman's allocation formula (Singh & Micah, 2013) was used to ensure that the sample size was allocated fairly. Researchers found this technique helpful when attempting to maximise survey precision with a fixed sample size. As a result, we were able to calculate the optimal sample size for each stratum using

$$n_h = \left(\frac{N_h}{N}\right)n$$

The formula yields the following values for the number of people in each stratum: n_h = sample size for stratum h , n = overall sample size, N_h = population size for stratum h , and N = total population. As a result, the following distribution is what we get when we do a random sampling technique.

Table 1. Sampling proportions

Classification	Strata	Accessible population (Nh)	Size of Sample
State Actors	Department of Finance and Economic Planning.	26	17
	Department of Public Service, administration and Disaster Management.	46	30
	Department of Infrastructure and Public Works	7	5
	Department of Early Childhood, Social Protection and Sports.	7	5
	County Assembly	21	14
Non-State Actors	Community based organizations for PWDs	80	52
	Faith based organizations	25	16
TOTAL		212	139

Source: County Government of Turkana

Data collection instruments: The majority of the data was obtained from primary sources through the use of questionnaires, while secondary data was gathered through a literature review that encompassed published journals and websites. The researcher utilized closed-ended questionnaires to gather precise information from the respondents in this study.

Data analysis: The SPSS version 25 spreadsheet was used to enter the data that had been gathered. The next step entailed arranging the data in a format suitable for analysis and cleansing the data to remove discrepancies. Regression analysis was used in this study, and conclusions were drawn from the data evaluated. A straightforward linear regression model was used.

$$Y = \beta_0 + \beta_1 X_1 + \epsilon \dots \dots \dots \text{Formula 1.}$$

Participation in public decision-making is represented by the independent variable Y, while participatory decision-making is represented by the dependent variable X. The standardized regression coefficient is expressed as 1. In the context of linear regression, the y-intercept is denoted by 0 (zero).

Y Participative decision making is a form of decision making that involves the active involvement and contribution of individuals in the decision-making process.

X1 Technology is represented. The error term is a representation of the residual or unexplained variation in a statistical model.

4. Data Analysis, Results, Findings and Discussion

4.1. Descriptive Statistics for Technology

The fourth research objective aimed to determine the role of technology in the participation of disabled individuals in public decision-making processes in Turkana County. This was achieved by utilizing a set of five questionnaire items, as shown in Table 2, to assess the current status of technology in this context.

Table 2. Technology

Responses	VSE %	SE %	ME %	GE %	VGE %	MEAN	SD
Technology available can support pre, during and post public participation engagements	27.0	26.1	22.5	9.9	14.4	2.59	1.365
People with disability are trained on web accessibility guidelines	47.7	28.8	11.7	6.3	5.4	1.93	1.158
Technology-based applications are readily available	41.4	26.1	18.0	8.1	6.3	2.12	1.219
Lack of commitment to help the disabled with technological resources affects their participation	26.1	19.8	10.8	18.9	24.3	2.95	1.557

Disabled persons have the ability to purchase and own technological tools that support public participation	47.7	26.1	10.8	5.4	9.9	2.04	1.307
Technology						2.32	.892

Key: 5 = Very Great Extent (VGE) 4 = Great Extent (GE) 3 = Moderate Extent (ME) 2 = Small Extent (SE) 1 = Very Small Extent (VSE)

Based on the findings presented in Table 2, the respondents indicated that the available technology can support pre, during, and post public participation engagements to varying degrees. Specifically, 53.1% agreed to a small extent, 22.5% to a moderate extent, 9.9% to a great extent, and 14.4% to a very great extent (M=2.59, SD=1.365). Based on the mean score rating, most respondents expressed a moderate level of agreement regarding the capacity of available technology to facilitate pre, during, and post public participation engagements. Regarding the training of individuals with disabilities on web accessibility guidelines, the majority of respondents (47.7%) agreed to a limited extent, followed by 28.8% who agreed to a lesser extent. A smaller proportion (11.7%) agreed to a moderate extent, while 6.3% agreed to a significant extent and 5.4% agreed to a highly significant extent (M=1.93 SD=1.558). The mean suggests that individuals with disabilities receive limited training on web accessibility guidelines. Therefore, stakeholders should develop training programs on web accessibility guidelines to support individuals with disabilities in their efforts to provide services. Furthermore, 41.4% of respondents agreed to a limited extent, 26.1% agreed to a moderate extent, 18.0% agreed to a moderate extent, 8.1% agreed to a high extent, and 6.3% agreed to a very high extent that technology-based applications are easily accessible (M=2.12, SD=1.219). Overall, the respondents only partially agreed that technology-based applications are easily accessible, as indicated by the mean. This highlights the degree of exclusion regarding the compensation of limitations in public participation in decision-making through the use of technology. Therefore, it is necessary to allocate resources towards suitable technological solutions that allow individuals with disabilities to overcome specific limitations, thereby improving their involvement in public decision-making processes.

The majority of respondents (26.1%) expressed a limited level of commitment towards providing technological resources for disabled individuals. Additionally, 19.8% indicated a small extent of commitment, 10.8% expressed a moderate extent, while 18.9% and 24.3% agreed to a great and very great extent, respectively (M=2.95, SD=1.557). Based on the average score rating, respondents moderately agreed

that a lack of commitment to provide disabled individuals with technological resources affects their participation. Ultimately, current technological resources are insufficient in addressing the challenges faced by individuals with disabilities, hindering their inclusion. This highlights the need for a dedicated commitment to providing suitable technologies that cater to the specific needs of people with disabilities. In order to achieve inclusive public participation, it is necessary to utilize an appropriate technology that facilitates decision-making for all members of society. In addition, the respondents generally believe that disabled individuals have limited ability to acquire and possess technological tools that facilitate public engagement, with a mean score of 2.04 and a standard deviation of 1.307. In conclusion, the results regarding technology can be summarized as having a mean of 2.32 standard deviation.⁸⁹².

Regression analysis on the effect of technology on participation of disabled persons in public decision-making processes in Turkana County. The study hypothesized that:

H0: Technology doesn't significantly affect participation of disabled persons in public decision-making processes in Turkana County

The model summary presented in Table 3 below involves technology as the only independent variable.

Table 3. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.637 ^a	.406	.400	.755	1.944

a. Predictors: (Constant), Technology

b. Dependent Variable: Participation in decision making process

The R square value of 0.406 suggests that the model accounts for only 40.6% of the variation in the dependent variable. The remaining 59.4% can be attributed to factors other than technology in determining the participation of disabled individuals in public decision-making processes in Turkana County. The adjustment of the R square did not significantly alter the results, resulting in a decrease in the explanatory power of the predictor to 40.0%. The R-value indicated a moderate positive correlation ($r = 0.637$) between the independent and dependent variables. This suggests a strong positive correlation between the

independent and dependent variables. Table 4 was analyzed to assess the viability of the proposed model using the ANOVA output.

Table 4. ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	42.412	1	42.412	74.437	.000 ^b
	Residual	62.105	109	.570		
	Total	104.517	110			

a. Dependent Variable: Participation in decision making process

b. Predictors: (Constant), Technology

The F-statistic (F=74.437, p<0.05) indicated a significant model. The model greatly enhanced the predictive capacity of technology in determining participation in decision-making processes. Therefore, the null hypothesis that technology has no significant impact on the participation of disabled individuals in public decision-making processes in Turkana County is rejected. Technology has a significant impact on the participation of disabled individuals in public decision-making processes in Turkana County. This finding aligns with previous studies conducted by Kithuka (2018), Musyoki (2016), and Wong and Cohen (2012), which have also shown that technology has a significant impact on the participation of disabled individuals in public decision-making processes.

Table 5 displays the regression coefficients, which indicate the impact of the independent variable on the dependent variable.

Table 5. Regression Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		Model		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.977	.201		4.870	.000		
	Technology	.696	.081	.637	8.628	.000	1.000	1.000

a. Dependent Variable: Participation in decision making process

The study established regression equation that $Y = .977 + .696X1$.

Therefore, Participation in public decision-making process = $.977 + .696 \text{ Technology}$

The regression equation indicates that, when technology is held constant at zero, the participation of disabled individuals in public decision-making processes in Turkana County is estimated to be 0.977 units. In open dynamic cycles in the Turkana Region, an increase in innovation is significantly correlated with an increase in the assistance provided to individuals with disabilities, with a correlation of 0.696 ($B=0.696$, $P<0.05$). Overall, these discoveries provide evidence to refute the false hypothesis. This emphasizes the value of utilizing appropriate mechanical devices to enhance open-ended support for those with disabilities. This claim and its supporting evidence are founded on the premise known as the "Stepping stool of resident cooperation," which promotes residents' full participation in political processes and, as a result, promotes a society based on popular vote. Versatile innovation can help to reduce barriers that prevent persons with disabilities from participating in open dynamic cycles due to innovation.

5. Conclusion

The analysis found that innovation has a fundamental impact on how disabled persons are supported in open dynamic cycles in the Turkana Region. As a result, the unfounded theory was disregarded. This emphasizes the value of utilizing suitable mechanical aids to improve the support of those with disabilities in open navigation. The avoidance of innovation by individuals with disabilities can be reduced with the use of versatile innovation, enabling their dynamic assistance in active dynamic cycles. Given the average score rating, respondents slightly agreed that not being required to provide disabled people with mechanical assets affects their support. Finally, current mechanical resources are inadequate to address the challenges faced by people with disabilities, impeding their consideration. This calls for a commitment to providing practical ideas that meet their needs. The available technology can facilitate public participation at various stages, including before, during, and after the engagement process. People with disabilities receive limited training on web accessibility guidelines.

6. Recommendations

State and non-state actors should invest in suitable technological applications that allow individuals with disabilities to overcome impairments and increase their involvement in public decision-making. Training individuals with disabilities in web accessibility guidelines is essential to ensure their effective

participation in public engagements, both before, during, and after such events. Therefore, stakeholders should develop training programs that support web accessibility guidelines for individuals with disabilities in order to enhance service delivery. The adoption of adaptive technology is necessary to address the exclusion of people with disabilities from public participation in decision-making processes. The principle of mainstreaming should be strengthened to ensure that individuals with disabilities are not excluded from the benefits of the technological revolution. The government ought to provide assistance for the development and dissemination of technology accessibility tools and content that are tailored to local and cultural contexts.

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