WIRELESS NETWORK ACCESSIBILITY AND ORGANIZATIONAL PERFORMANCE OF UNDEVOLVED GOVERNMENT MINISTRIES IN MACHAKOS TOWN, KENYA

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ABSTRACT

The wireless network revolution has transformed lives and business performance with unprecedented speed and scale, delivering real-time data and it can be quickly and easily installed. The objective of this study was to determine the influence of wireless network accessibility on organizational performance in the undevolved government ministries in Machakos town. To achieve the objectives, 96 respondents were chosen and interviewed. The sample comprised of the top, middle and lower-level managers, and all other employees who were not in management. There were 49(53.26%) males and 43(46.74%) females. Pearson correlations and ordinal regression models were applied to data analysis. Based on the study findings, 53(57.6%) of the respondents cited that, due to wireless network uptake the set targets were met and 66(71.74%) stated that, wireless network usage enabled the timely completion of tasks. There was a positive and significant relationship between the wireless network accessibility and the organizations' performance with Pearson Correlation values of 0.199 and the p-values (2-tailed) of 0.005. The univariate ordinal regression analysis indicated that for every one unit increase in wireless network access, there was a 2.876, increase in the ordered log odds of being in a higher level of performance, given all of the other variables in the model were held constant. Wireless network access was significant at in the multiple ordinal regression models, with P-values of less than 0.05 thresholds. Induction manuals and provision of multiple channels and ample wireless network coverage within the workstations were recommended. Similar research but at different counties and institutions, to ascertain the result's validity, reliability, and generalizability of the study was recommended for further research.

1.0 INTRODUCTION

1.1 Background of the Study

The study focused on establishing the effect of wireless network accessibility on organizational performance in undevolved government ministries. The background of the study covered the evolution of wireless networks, and wireless uptake in organizations both globally and locally, and also shows how organizational performance relates to the study.

1.1.1 Wireless Uptake in Organizations Globally and Locally

Wi-Fi has turned out to be of great importance in our daily lives with over a billion Wi-Fi access points connected to billions of devices such as smart phones, tablets, laptops, desktops and other user devices to the internet to make it possible for millions of applications to get to all people in everyplace (Kaveh & Prashant, 2021). The authors noted that in recent decades, the world is experiencing the beginning of the information age and the third industrial revolution, wireless access which has enabled a lot of innovations in the cyberspace applications leading to a significant impact in how people live, contact their businesses or even interact with the world. According to Rani et al (2020), the world of wireless telecommunications is changing quickly with the wireless industry seeing a new growth in the last few years with diverse generations being formed.

The Government of Kenya (2019) on its study of uptake of ICT and mobile telecommunications found out that Kenya has made enormous step in encourging the uptake of ICT services and that mobile telecommunications constituted about 44.1 million subscriptions for a collection of over 46.4 million people. The study noted that the digital divide should be looked at if all Kenyans are to take part actively in the knowledge economy. In some parts of the country for instance, such as Turkana, Mandera, Tana River, the uptake seemed far low with people walking to over 2km to access mobile cellular signal.

After fibre optic cables were introduced in Kenya, the internet access point of Kenyans began moving from cyber-cafes to mobile phones, with these devices being readily within reach with greater ability to make use of, and connect to the internet, this is according to Ndemo and Weiss (2017) in their study on fostering innovation. One of Kenya's big attainment is the new uptake and use of mobile services. Kenya's mobile sector is defined by innovation, especially mobile money. Today all mobile operators have a mobile money service (Msimang, 2011). According to the author one of Kenya's strengths is found in the fundamental role that ICT generally, and high-speed communications infrastructure specifically, performs in the implementation of its national strategy, vision 2030.

1.1.2 Organizational Performance

Performance management is now a duty for most governmental and non-governmental organizations and in many countries, legislation and cabinet level entities have been made to reinforce it. Poister, Aristigueta and Hall (2015) in their study on organizational performance further found out that performance measurement consists of day-to-day measurement of the outcomes and efficiency of services or programs and that it is also the organized regulated collection of quantitative data on laid key indicators of organizational performance. Organizational performance is the analysis of a company's performance in comparison to the achievement of its goals and objectives. It consists of the real outcome of an organization as calculated based on its premeditated outputs. This means that all staff in the undevolved

government ministries in Machakos town have a vital role to play if their organizations are to achieve their intended output.

A study carried out by Cascio and Montealegre (2016) showed that ICT is moving towards a fresh level which is founded on ubiquitous computing whose thought relate to a situation in which computational technology penetrates almost everything hence making people able to access and command their environment anywhere at any time. Cascio et al further noted that computer networks enable workers to perform their duties from their places of work, their homes and anywhere making them to end up getting together with new acquaintances, be in new places which they have not been before and generally be able to stay connected to their offices anytime while being anywhere.

1.1.3 Profile of Machakos Town Undevolved Government Ministries

All sectoral Ministries, Departments and Agencies (MDAs) of the national government contribute to the county governance and service delivery through rendering services based on their prescription, and national ministries are needed to give technical aid and aid the improvement of county governments' capacity (The County Governance Toolkit, 2020). The County Governance Toolkit (2020) further established that almost all national MDAs have deconcentrated structures at the county and sub-county levels – that is staff consecrated to and/or offices found in every county. To guarantee appropriate joint effort of all national government activities at the county level, the President – or the Cabinet Secretary in charge of national co-ordination appoints County Commissioners whose core responsibility among others include coordination of National Government roles and service delivery.

A paper on Machakos County Integrated Development Plan (2015), noted that mobile network coverage within Machakos town was greatly on the rise with only a few areas known to have poor network. The improved network has influenced performance in that it has made work easy and enabled workers spare effort to accomplish other tasks. Land line connection and its use was found to be on the decrease, especially due to internet usage being the chief source of communication on the rise.

1.2 Statement of the Problem

Some offices seem to be facing some challenges to adapt to the new life of wireless networks, while others already adapted. Some adapt to changes outrightly as they come while others do so gradually. Various government organizations have different connectivity experiences where their technology practices and digital literacies vary. Some organizations find themselves lagging behind in terms of wireless network uptake. This study thus sought-after understanding the influence of wireless networks uptake on organizational performance of the undevolved government ministries within Machakos town. From the Machakos County Intergrated Development Plan of 2018 - 2022, on the statistics gathered from the County's plan and on its objective of ensuring handiness of obtainable, adequate, dependable and inexpensive ICT services in the County, the key performance indicators showed that in 2018 there were only 3 offices installed with LAN and no free public wifi access centres. The government had a plan of increasing these targets, improving network connectivity and increasing internet coverage within the County. The research carried out gave the results on if this has actually been done.

A research done by Okeyo & Kioko (2017) found out that many county governments are confronted with several challenges in efficiency and effectiveness due to poor levels of ICT infrastructure which has led to poor service delivery causing important services to take too long. Okeyo & Kioko further found out that inadequate and insufficient ICT facilities have given rise to pitiable degree of consciousness of internet facilities in the midst of policy makers, and inferior state of computer proficiency and ICT knowledge. A report done by the Machakos County Government in November 2015 on ICT road map for the years 2015 - 2020 showed that there is need to avail services online in Machakos to enable citizens access and pay for government services online. The report also discovered that the levels of ICT skills among the staff is low and that there are no ICT strategies and policies. The government hoped to address the above weaknesses in its road map for the year 2016 - 2020. Since this presents an unresolved problem, organizations have to embrace the uptake of wireless network uptake to improve their organizational performance

Some studies were undertaken in the area of uptake of information technologies and employee or organizational performance in different organizations and sectors, which include a research done by Okeyo & Kioko (2017) who focused their study on the Uptake of Information Communication Technology in Machakos County in Kenya. Also, Rezaei, Zare, Akbarzadeh, & Zare (2014) who did their study on the Effects of Information Technology (IT) on worker productiveness in Shahr Bank, which was a case scenario of Shiraz in Iran. However, these studies though quite useful, have not addressed the problem of establishment of the effect of wireless networks uptake on organizational performance in government organizations, and particularly the undevolved government ministries in Machakos town. This study therefore aimed at investigating the effect of wireless networks uptake on organizational performance in the undevolved government ministries in Machakos town.

1.3 Objectives of the Study

The main objective of this study was to establish the effect of wireless networks accessibility on organizational performance in the undevolved government ministries in Machakos town. The sub variables for accessibility in this study are speed, coverage area and interruptions.

2.0 LITERATURE REVIEW

2.1 Theoretical Review

Theoretical Framework relates to theories that will direct the study on determining what to measure and the statistical relationships between the dependent and independent variables in the study.

2.1.1 The Technology Acceptance Model

The Technology Acceptance Model was introduced by Davis in 1986. This theory is one of the widely used models that explains user acceptance behaviour. The model of Technology acceptance assist in predicting the acceptableness of a communication means and helps in identifying changes being introduced into the system causing it to become more acceptable to end users (Davis, Bagozzi & Warshaw, 1989). According to Davis et al (1989), the contents of the technology acceptance model include the detected helpfulness outlined as the level to

which an individual has the belief that making use of a system will make performance better. The authors noted that the identified use of any system determines the attitude of a person in a remarkable way amidst the mechanisms of instrumentality and effectiveness. Davis et al (1989) noted that the identified ease of use can lead to an helpful way in making one's performance better. This is supported by the fact that the user need to make use of little attempt with a means which is simple to make use of hence sparing effort to execute other duties.

Attitude influences intention which in turn influences actual behavior. Davis et al (1989) found out that there are two elements that influence behavior directly in regard to decisions regarding using unprecedented technology which they named as the intent to make use of, and the facilitating conditions. Davis et al (1989) further found out that the effort expectancy determinant concerns the subjective attitudes of possible users of the ease with which technological innovations can be made use of while the performance expectancy determinant can be shaped by extra factors like extrinsic motivation and expectations relating to the suitability of innovations and the improved performance which is likely to result from using them. The Technology Acceptance Model principally relies on two factors which are detected usefulness and ease of usage, in addition to a person's beliefs and mental attitude towards a new technology approval (Zaineldeen et al, 2020). The Technology Acceptance Model relates to this study in that wireless networks are a recent innovation whose sole purpose is meant to improve performance mainly at the work place. If personnel at the work place adopt and accept the use of this new technology, then their work would move faster and with great ease and they will have spare time to do other tasks.

2.2 Empirical Review

2.2.1 Accessibility of Network Uptake and Organizational Performance

2.2.1.1 Speed and accessibility of Network Uptake

Information networking has come out as a multifaceted varied area of research in previous decades (Pahlavan, 2021). The objective for Pahlavan's study on understanding communications networks for rising cybernetics applications was to show how the wireless internet has evolved over the years. Pahlavan in his study found out that networking has evolved from the old wired telephones to cellular voice telephones and from access that is wired to wireless access to the internet information networks and this has had a deep impact on people's lives and it has led to enormous growth in the wireless networking field. Pahlavan's study relates to the current study in that his study shows how organizations should try and keep up with the pace of changing technology in as far as wireless networking is concerned.

Cell phones, smartphones, and tablets are now outnumbering desktop computers (West, 2014). The objective for West's study on going mobile is to show how mobile technology is giving look to society, communications and the world economy. West found out that a great change has been witnessed in how people gain access to, utilize and share information. The author further found out that powerful mobile devices and advanced digital applications make users to form business enterprises, gain right to financial and health care records, interact with officials in public offices or even make transactions online. West (2014) further found out that worldwide such devices and applications have assisted to minimize social imbalance, raised involvement in federal life and education levels. This change in the way consumers and

business enterprises gain the right to information and the extensive aftermath of comparable use, depicts an important critical point. West's findings relate to this study's objective in that his study shows how wireless networks can make work easier leaving one with time for accomplishing other tasks since one is able to take a shorter time and work with more speed on a given task.

2.2.1.2 Coverage Area and Accessibility of Network Usage

Wireless networking is possibly a fast, simple and efficient option which works amid nodes and is done with no use of wires around offices (Martin, 2012). Martin's study on Introduction to wireless networks' main objective was to ensure that wireless networking gives possibilities for connecting buildings that are several kilometers away from each other. Martin found out that wireless networks have been an important part of communication which enables transmission of communication between people and devices from whatever place. This study relates to the current study in that it gives the value of embracing wireless network uptake in any organization.

2.2.1.3 Interruptions and Accessibility of Network Usage

The world of wireless and mobile devices is developing at a very high rate, with a large number of people depending entirely on their wireless devices in the workplace and at home (Doherty, 2021). Doherty's study on Wireless and Mobile Devices Security's main objective was to explore the development of wired networks to wireless networking and get to know its effect on the business world. Doherty's findings involved the increasing usage of mobile devices which require organizations to become more enlightened in securing this technology and decide on how well they can safeguard their assets. This study relates to the current study in that it brings to light the fact besides having access to wireless networks, organizations need also to think about the security of their data hence avoid such forms of interruptions.

3.0 RESEARCH METHODOLOGY

The study adopted a descriptive research design. Target population means all the members of a real or hypothetical set of people, events, or objects to which one wishes to generalize the results of the research (Pandey & Pandey, 2015). The population of this study was the 8 undevolved government ministries in Machakos town which comprised of a target population of 96. This was the unit of analysis. However, the unit for which data was collected was the top, middle, and lower level managers, and all other employees who were not in management levels in each of the undevolved government ministries in Machakos town.

3.1 Sample Size and Sampling Procedure

Since the target population for this study was small, the study conducted a census instead of sampling. Census is an effort to outline all elements in a group and to measure one or more characteristics of those elements (Cantwell, 2011). Cantwell further stated that a census generally attempts to gather information on all eligible elements in a specific population. For this study, the researcher made use of the entire targeted population of 96.

3.2 Data Collection and Data Analysis

The researcher made use of questionnaires to collect data. According to Kothari & Garg (2014), a questionnaire is a list of questions organized in a definite order. The study used descriptive statistics to analyze data since the researcher's aim was to establish the relationship between the variables. The statistical tools for analysis of data were means, frequencies, percentages and standard deviations. The study used ordinal logistic regression analysis in establishing the relationship between the dependent variable and the explanatory variable accessibility.

$$\log\left(\frac{P(Y \leq j)}{1 - P(Y \leq j)}\right) = \alpha + \beta x$$

Where;

Y = response variable

4.0 RESULTS AND DISCUSSION

The findings of this study were summarized and discussed as follows:-

4.1 Response Rate

Eight state departments chosen from which a sample comprising of 96 were picked, the questionnaires were completed by 92 of 96, making a response rate of 95.8%. The high response rate minimized the chances for nonresponse bias and simultaneously enhanced the reliability and validity of the study findings. The response per department is summarized in figure 1 below.
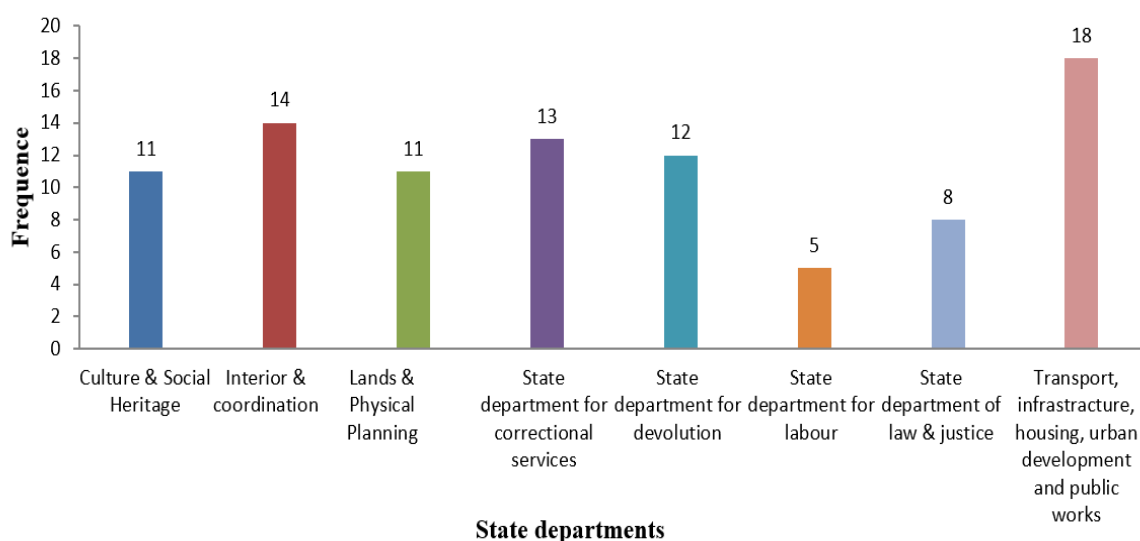
Figure 1: Questionnaire Response Rate

Transport, Infrastructure, Housing, Urban development and Public Works had the highest number of respondents 18(19.57%) followed by Interior and coordination 14(15.22%). The least responses were in the State department for labour and state department of law and justice with 5(5.43%) and 8(8.70%) respondents respectively.

4.2 Respondents Demographic Information

The respondents' demographic information such as gender, years of experience and formal training level status were determined and summarized.

On gender, most of the respondents 49(53.26%) were male while 43(46.74%) were female.

In terms of the respondents' years of experience, most of the respondents 34(36.96%) ranged between 5 to 15 years, followed by those with 16 to 25 years of work experience, constituting to 28(30.43%). Those with less than 5 years' experience were the least 14(15.22%) while 16(17.4%) respondents had an experience of over 25 years. On the level of formal training level, out of the sampled respondents, 44(47.83%) had a bachelor's degree, 13(14.13%) had a post graduate degree. Only 5(5.43%) had a form four certificate with 30(32.61%) having middle college certificates. The respondents were categorized into either management or non-management levels, where the non- management formed 58(63.04%) of the sample. The management level was regrouped into top, middle and lower management, with 7(7.61%), 11(11.96%) and 16(17.39%) falling under top, middle and lower management levels respectively.

4.3 Descriptive Analysis

The summary statistics quantitatively describing the organization's performance and the wireless network access were presented in terms of frequencies and percentages as shown in the succeeding sections.

4.3.1 Descriptive Analysis of Wireless networks Accessibility Level and organizations' performance

The study sought to determine how wireless networks accessibility level affected the organizational performance. About three quarters of the respondents could access the wireless networks as summarized in table 2.

Table 1: Wireless Network Access

| Access Wireless Network	Frequency	Percentage
Yes	73	79.3
No	19	20.7
Total	92	100.0

About one fifth of the sampled population had no wireless network coverage at all within the working premises. The wireless coverage level is summarized in figure 2.
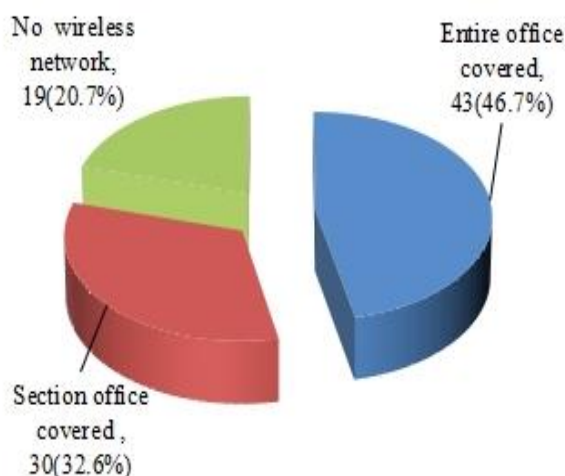
Figure 2: Coverage Level

According to the respondents, there were departments offices without any wireless coverage at all while others were partially covered as cited by 30(32.6%) of the respondents and other offices were entirely covered as cited by 43(46.7%) of the respondents. The coverage distribution per departments is summarized in figure 3.
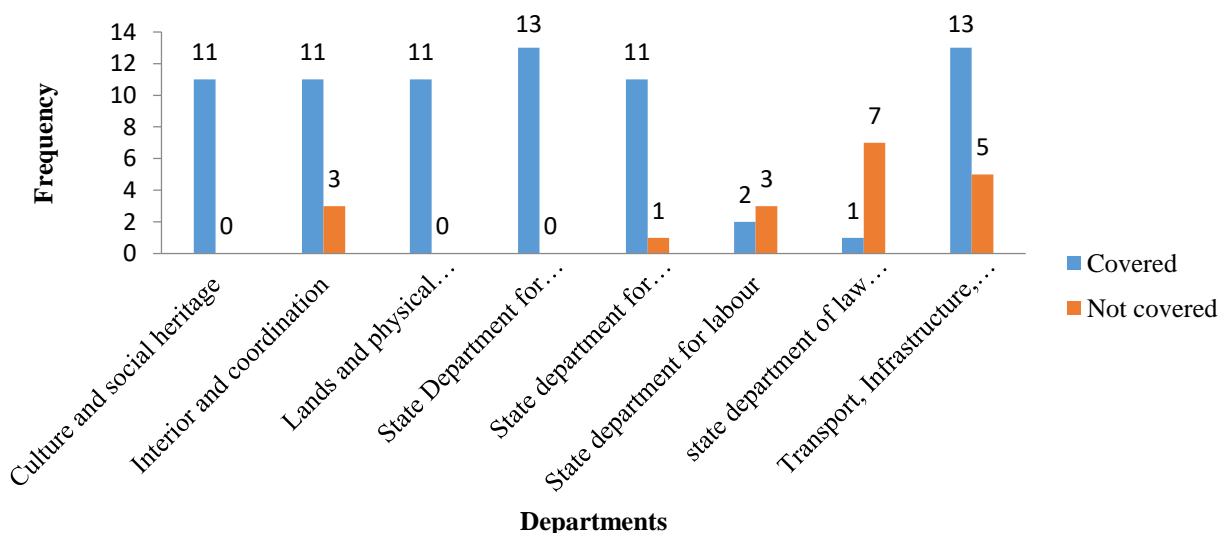
Figure 3: Departments Coverage

There was no department without the wireless network as a whole. However, there were some offices partially covered and others not covered completely. Departments entirely covered included; Culture and social heritage, Lands and physical planning and the State department for Devolution department. The rest had partial coverage.

The respondents would access the wireless network through varied channels as summarized in figure 4.
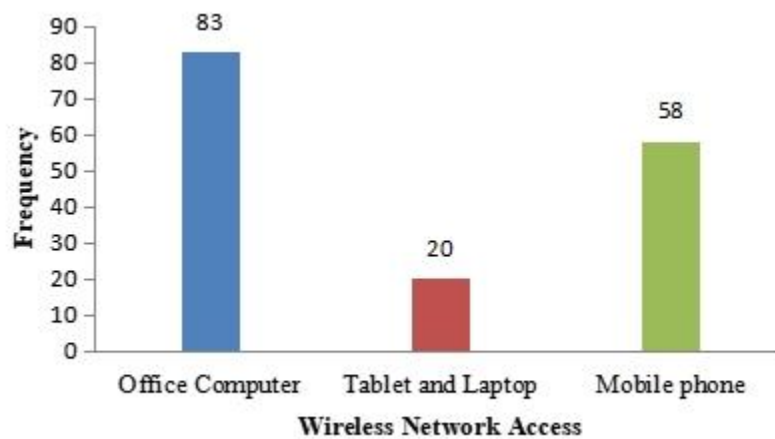
Figure 4: Network Access Channels

Majority 83(90.22%) of the respondents accessed the network through the office computer, 58(63.04%) accessed through their own mobile phones and 20 (21.74%) could access the wireless network through tablets and laptops. About three quarters 70(76.09%) of the respondents commented the fast speed of the wireless network within their offices.

The respondents were subjected into a five point Likert scaled items whose responses were assigned the values: 1-Strongly Disagree, 2-Disagree, 3- Neutral, 4- Agree, and 5-Stronly Agree which the researcher used mode to analyse the findings. Table 2 gives the summary of the responses on the items.

Table 2: Wireless Network Access Likert Responses

Statement	N	Min	Max	Mode
The entire office is wholly covered by a wireless network	92	1	5	2
Only a section of the office is covered by the wireless network	92	1	5	4
There is no wireless network available at all in the office	92	1	5	1

Based on the likert scale statements responses only 43.5% agreed to the statement that the entire office was covered by a wireless network. In a scale of 1-5 where the five point scale was assigned the values such that: 1- strongly disagrees and 5- strongly agree the mode was 2 and the average score and the standard deviation were 3.35 and 3.42 respectively for that statement. About 38% of the respondents consented to the statement that only a section of the office was covered by the wireless network and in scale 1-5 the mode was 4. While majority 82.6% disagreed with the statement that there was no wireless network available at all in the office and in scale of 1-5 the mode was 1. This implied the wireless network coverage and uptake was still at low levels within the offices of the respondents. Figure 5 gives the summary in percentage.
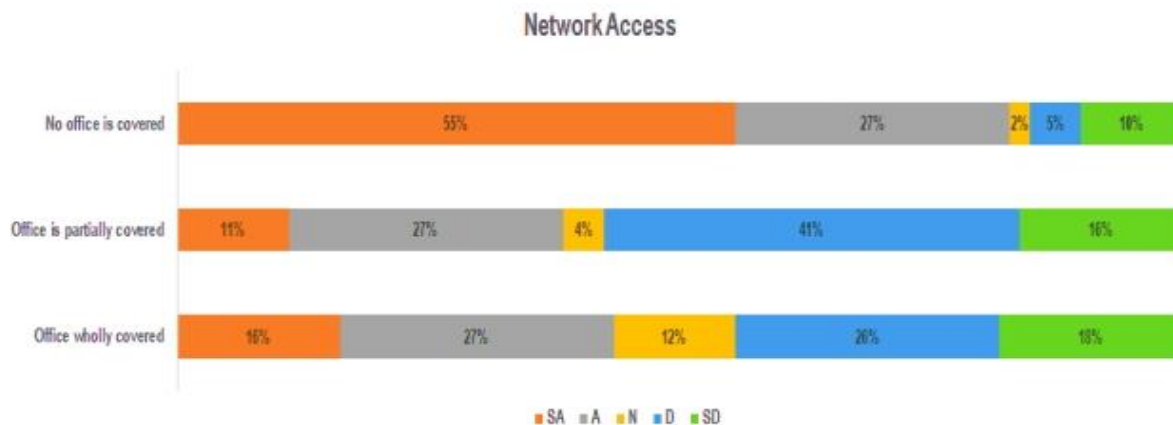
Figure 5: Network Access Likert

Based on the likert scale responses 82% of the respondents agreed with the statement that there was no wireless network available at all in the office. Only 2% were neutral and 5% and 10% disagreed and strongly disagreed respectively with the statement. Most of the respondents disagreed and strongly disagreed with the statement that only a section of the office was covered by the wireless network, where 41% and 16% disagreed and strongly disagreed respectively with the statement. The responses to the statement that the entire office was wholly covered by wireless network was fairly distributed whereby, 16% and 18% strongly agreed and strongly disagreed respectively, 27% and 26% agreed and disagreed respectively with only 12% being neutral. Although Doherty (2021) noted a world of wireless and mobile devices was gradually developing, with many individuals depending only on their wireless devices in their places of work and in their homes. This fact was yet to be realized among the undevolved government ministries in Machakos town as by the time of the study.

4.4 Correlations and Ordinal Regression Analysis

The study conducted ordinal regression analysis where the response variable had an ordering four level response items on organizations' performance. The ordinal dependent variable four levels were categorized as; "poor" (1), "average" (2), "good" (3), and "excellent" (4) against the independent variables. Correlation coefficient was used to express the nature and strength of the relationship between the response and the independent variables

4.4.1 Ordinal Regression and Model Fitness

Prior to conducting the analysis, the model fitness was evaluated as discussed in the following subsections.

4.4.1.1 Model Fitness

The study carried out measures to determine how well the observed data corresponded to the fitted (assumed) model. The response variable level and the factor independent variable was analyzed. Tables 3 give the case processing summary.

Table 3: Case Processing Summary

		N	Marginal %
Performance	Poor	5	5.4%
	Average	27	29.3%
	Good	41	44.6%
	Excellent	19	20.7%
Access	Yes	50	54.3%
	No	42	45.7%
Total		92	100.0%

The case processing summary table clearly gives the labeled factor variables and the ordered dependent variable included in the analysis and their values. It also gives the descriptive statistics on the ordered response per category. This confirmed the variables needed for the analysis. Table 4 summarizes the model fitting information.

Table 4: Model Fitting Information

Model	-2log likelihood	Chi-Square	df	Sig
Intercept only	221.538			
Final	157.516	64.022	5	0.000

Link function: Logit.

The statistically significant chi-square statistic (P<0.000) indicates that the final model gives a significant improvement over the baseline intercept-only model. The study conducted the goodness-of-fit test to compare the observed values to the expected (fitted or predicted) values. Table 5 gives the summary of the goodness of fit analysis.

Table 5: Goodness of Fit Analysis

	Chi-Square	df	Sig
Pearso	330.744	265	0.004
Deviance	157.616	265	1.000

Link function: Logit.

The statistics in table 5 indicates that the study had a good model since the P value was large (P=1.000) hence the null hypothes is that the observed data was consistent with the fitted model could not be rejected. Table 6 analysis tests the relevance of wireless network to the organizations' performance.

Table 6: Pseudo R- Squared

	R- Squared
Cox and Snell	0.501
Nagelkerke	0.551
McFadden	0.289

Link function: Logit.

The results in table 6 indicated that 55.1% of the organizations' performance could be explained by the wireless network access. Therefore, wireless network access was relevant and

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key factor with regard to organizations' performance. The unexplained variation of 44.9% was due to other factors that affected organizations' performance but were not included in the study.

4.4.2 Accessibility Level and organizations' performance Correlation Analysis

Pearson coefficient of correlation was used to establish whether there was a significant relationship between wireless network accessibility and the organizations' performance. Table 7 gives the summary of correlation findings.

Table 7: Wireless Access and Organization's performance

	Wireless Access	Organization's Performance
Pearson Correlation	1	0.199**
Sig-(2-tailed)	-	0.005
N	92	92

**. Correlation is significant at the 0.05 level (2-tailed).

Based on the Pearson Correlation value of 0.199, it implies that, there was a positive relationship between the wireless network access and the organization's performance. Given that the p-value (2-tailed) 0.005 was less than 0.05 it meant that the null hypothesis was rejected at and therefore wireless network access could be used to predict the organization's performance significantly at.

4.4.2.1 Ordinal Regression of Wireless Network Access on Performance Level

To determine the influence of wireless network access on performance, the study conducted ordinal regression of access on the organizational performance. Table 8 gives the summary of the findings.

Table 8: Parameter Estimates for Wireless Network Access

Model	Estimate	Std. Error	Wald	df	Sig	95% CI	
						Lower Bound	Upper Bound
Threshold [perf=1]	-2.075	0.476	19.013	1	0.000	-3.008	-1.142
[perf=2]	0.786	0.329	5.714	1	0.017	0.141	1.430
[perf=3]	3.571	0.522	46.732	1	0.000	2.547	4.595
Location[access=0]	2.876	0.524	30.170	1	0.000	1.850	3.902
[access=1]	0ª	0.388	-	0	-	-	-

Link function: Logit

a. This parameter is set to zero because it is redundant.

Wireless network access was a significant factor at $\alpha = 0.05$ in predicting the organizations' performance given that $P-value = 0.000$ which was less than 0.05. The value of the ordinal regression coefficient 2.876 implied that, for every one unit increase in wireless network access there was 2.876 increase in the ordered log odds of being in a higher level of performance,

given all of the other variables in the model were held constant. Table 9 gives the summary of the categorical probabilities and odds ratio associated with particular levels of performance.

Table 9: Ratios from Wireless Network Access

Rate of use	Performance Levels			
	1	2	3	4
Cumulative logit	-	-4.951	-2.09	0.695
Cumulative odds	-	0.007	0.124	2.004
Cumulative proportion	1	0.993	0.890	0.333
Categorical probability	0.007	0.103	0.557	0.333
Odds ratio	17.74	17.74	17.74	17.74

The probability of progressing form level 1 (poor) to level 2 (average) was 0.007, from level 2 (average) to level 3 (good) was 0.103 and from level 3 (good) to level 4 (excellent) was 0.557.

The odds of the respondents with access to wireless network having their organizations achieve a higher performance level was approximately 18 times the odds for those without the access. Therefore, wireless network accessibility leveraged the organizations' performance.

5.0 DISCUSSION

5.1 Summary of the Major Findings

The study interviewed 92 respondents translating to 95.8% of the response rate. Most of the respondents 49(53.26%) were males while 43(46.74%) were females. About one third of the respondents 34(36.96%) had 5 to 15 years of experience, followed by those with 16 to 25 years of work experience, constituting to 28(30.43%). Out of the sampled respondents, 44(47.83%) had the bachelor's degree, 13(14.13%) had a post graduate degree. Only 5(5.43%) had a form four certificate with 30(32.61%) having a middle college certificate. The respondents were categorized into either management or non- management levels, where the non-management formed 58(63.04%) of the sample. The management level was regrouped into top, middle and lower management, with 7(7.61%), 11(11.96%) and 16(17.39%) falling under top, middle and lower management levels respectively.

The respondents cited several benefits of utilizing the wireless network such as; meeting the set targets as mentioned by 53(57.6%) of the respondents, reduced customer complaints as cited by 34(37%) of the respondents and 66(71.74%) of the respondents stated that, the wireless network usage enabled timely completion of tasks. For the purposes of the study analysis, the organizations' performance was categorized into four levels in an ordered manner; level 1 (poor), level 2 (average), level 3 (good) and level 4 (excellent). The specific levels were pegged on the respondents rating of their organizational performance with regard to the customers' satisfaction categorized.

5.1.1 Wireless Network Access and Organizations' Performance

About one fifth 19(20.7%) of the sampled population had no wireless network coverage at all within the working premises. Majority 83(90.22%) of the respondents accessed the network through the office computer, 58(63.04%) accessed through their own mobile phones and

20(21.74%) could access the wireless network through tablets and laptops. There was a positive and significant relationship between the wireless network accessibility and the organization's performance with a Pearson Correlation value of 0.199, and the p-value (2-tailed) of 0.005. The univariate ordinal regression analysis indicated that, for every one unit increase in wireless network access there was 2.876 increase in the ordered log odds of being in a higher level of performance, given all of the other variables in the model were held constant.

This study finding was in tandem with Martin's, (2012) definition of what wireless networking was all about. Where he said it is potentially a quick, easy and economical alternative that works between nodes and is executed without the use of wires around offices hence enhancing organizations' output. The findings were also a true reflection to the West, (2014) study on how the mobile technology is giving a new shape to the society, communications and the global economy. The study indicated that the smart phones and tablets usage was on the increasing trend and eased the transactions.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

Based on the study findings and their interpretations the following conclusion was made in relation to the objective of accessibility level:

The wireless network accessibility and coverage within the working area had a positive and significant effect on organizations' performance with a Pearson Correlation value of 0.199, and the p-value (2-tailed) of 0.005. The univariate ordinal regression analysis indicated that, for every one unit increase in wireless network access there was 2.876 increase in the ordered log odds of being in a higher level of performance, given all of the other variables in the model were held constant. The wireless network had the highest effect on performance among all the other independent variables in the study.

6.2 Recommendations

Based on the study findings and the preceding conclusions, the following recommendations were made.

The undevolved government's ministries managers need to be cognizant of the larger societal and generational contexts in which their staffs live their daily formal and social lives in order to install wireless network connectivity in every office.

The training institutions, government and other policy makers, should understand the importance and developmental necessity wireless network in learning and working hence incorporate it in the curriculum development.

The undevolved government's ministries managers should help staff members to develop the skills they need to engage with wireless network information and communications. This also should include development of wireless network manuals and form part of new staff

orientations. Organizations and managers should provide multiple channels and ample wireless network coverage within the work stations.

More rigorous similar research on the impacts of wireless network on organizations and institutions performance can be carried out so as to ascertain the validity, reliability and the generalizability of the study findings. The undevolved government's ministries managers need to be informed by further research on the wireless network knowledge and skills that the staff need to operate optimally in their formal duties. Researchers should further examine the efficiency and cost- effectiveness of conducting businesses online and level of attainment of the desired outcomes.

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