Assessing Adoption of New Communication Technologies for Co-Operative Development in Kenya

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Abstract: New Media Technologies, arguably, are reshaping modern day public lives and business ventures by transforming and expanding the scopes of new potential networks and deepening existing networks and creating a more consistent communication pattern across the globe beating aspects of time and space; to date, ICT has liberalized the business environment world over. The Co-operative sector as an enterprise, has had a long tradition especially in Africa in low uptake of ICTs in their operations. This assertion has arguably affected operations and efficacy of co-operatives making them prone to financial mismanagements, among others. For the co-operative movement to rejuvenate itself in the New Technology era, adoption of ICTs may not be an option. This paper’s objective is to find out the extent to which the co-operative economies have adopted ICTs in their operations for growth. This paper relied on secondary data and used qualitative research design. The study found out that to a large extent, cooperatives have adopted new media technologies in their operations. However, more intervention measure need to be employed to make these technologies of value to co-operatives.

Keywords: Internet, communication, exploratory, digital divide, ICTs, networks

1. INTRODUCTION

Co-operatives in Kenya have had low uptake of ICTs to streamline their communications and enhance their growth compared to other business ventures. This low use of new communication technologies, and business ideas involving Information Communication Technologies (ICTs) are being taken on by corporations and individual business people; a missed opportunity for the co-operative movement in Africa (Nyaga, 2014). In Africa, Kenya’s cooperative business model is the best and 7th best in the Globe. (ICA, 2014).

Various arguments have been staged on the numerous benefits of adopting new communication technologies in cooperatives. For instance, cooperatives can cultivate new markets by reaching out to different customer bases online; further, they can keep up-to-date with developments and new innovations and receive training remotely. Such can transform the management of co-operatives by improving, communication, marketing and management practices, financial information and reporting and records management as well as create an online presence. These improvements help increase efficiency and lower operating costs (Tom, 2015).

Drawing a clear example from the Kenya’s electronic money transfer system, “M-PESA”, based on SMS messaging is said to have changed the lives of millions of Kenyans including the rural poor and liberalized mobile money transfer in Kenya pitting the nation as the leader in the world. (FSD, 2015)

In June 2012, UN argued that, “ICT’s are transforming co-operatives by expanding the scope of potential networks and deepening existing networks through more consistent communication.”: it was further noted by the UN that Co-operatives are a clearly identifiable group with an existing community of over a billion people and growing. They have unifying cooperative principles which keep their members in a cohesive and coherent union (UN, 2012).

Co-operatives in Kenya have failed to create more jobs and eradicate poverty due to low uptake of new communication technologies. To be a key driver in this, uptake of New Communication technologies is key (Nyaga, 2014). Across the world, co-operatives are gearing up to internet ownership a fact that perhaps may leave African co-operatives behind in the future of co-operatives.
This new dimension of internet platforms and case in point ‘platform cooperativism’ will challenge the corporate sharing economy online (Tom, 2015).

1.1. Adoption of New Communication Technologies by Cooperatives

Concerns have been raised over the low uptake and adoption of new communication technologies by cooperatives as a booster towards the digital economy being embraced across the globe thus creating a huge entrepreneurial gap among members of co-operatives. This has created a debate on the potential of the new communication technologies in development and growth of cooperatives (Nyaga, 2014).

Emerging new technologies and digital apps including platform cooperativism may not have had a way into the co-operative sector in Kenya. Whereas ICT remains a key component in all sectors of the economy and remains a key driver of businesses and enterprises in the digital world, its uptake among other sectors of the economy across Africa has had significant in positive growth of those sectors a case in point the banking sector and the mobile money transfer services like Mpesa in Kenya which is a recent development compared to the existence of the co-operative sector; This disparity is a case in point which requires address (Wanyama, 2014).

The extent to which new communication technologies can change business operations and the bottom line in the co-operative sector in a year in Kenya and around the world is undisputed (KNBS, 2016). Even, day-to-day business operating systems such as online accounting software are moving to the cloud; flexibility like this allows business owners to process invoices and manage cash flow on the go (Tom, 2015).

2. METHODOLOGY

This was a qualitative study. The study adopted an exploratory research design. An exploratory design is conducted when a research problem has few or no earlier studies to refer to or rely upon to predict an outcome (McGregor & Murnane 2010). The focus of the researcher in this study was on gaining insights and familiarity for later investigation or more studies in the area. This design helped establish an understanding of how best to proceed in studying the issues in future and or what methodology would effectively apply to gathering information about the area of study (Taylor & Bogdan 1998).

The researchers in adopting exploratory research for this study aimed: to gain Familiarity with basic details, settings, and concerns, to get well-grounded picture of the situation to generate new ideas and assumptions for future studies, to determine whether a study is feasible in the future to get direction for future research and techniques (McGregor & Murnane 2010).

Exploratory research design is a useful approach for gaining background information on a particular topic, it is flexible and can address research questions of all types (what, why, how). It also provides an opportunity to define new terms and clarify existing concepts. Further, an exploratory research is often used to generate formal hypotheses and develop more precise research problems. In the policy arena or applied to practice, exploratory studies help establish research priorities and where resources should be allocated (Taylor & Bogdan 1998).

However, an exploratory research generally utilizes small sample sizes and, thus, findings are typically not generalizable to the population at large. Further, an exploratory nature of the research inhibits an ability to make definitive conclusions about the findings. They provide insight but not definitive conclusions. The research process underpinning exploratory studies is flexible but often unstructured, leading to only tentative results that have limited value to decision-makers (McGregor & Murnane 2010).

3. STUDY FINDINGS AND DISCUSSIONS

This section presents data analysis, interpretation and discussion of the research findings. This section looks at the communication process of cooperatives, explores the efficacy of the channels of communication, and explores the ICT infrastructure in a cooperatives.

The study findings are on the adoption of New Communication Technologies for Co-operative Development in Kenya. The data was gathered exclusively from the questionnaire as the research instrument.
3.1. Co-Operatives Effectiveness in Communicating with the Publics

According to the respondents, on the co-operatives’ communication to the staff 41% indicated very good, 23% cited good, 15% indicated excellent, 14% stated average, 4% poor and 3% below average. On the co-operatives communication to the heads of department, 32% cited good, 20% average, 20% very good, 13% excellent, 9% poor and 6% below average. On top management communication, 31% indicated very good, 20% average, 15% good, 14% excellent, 14% poor and 6% below average. On board of management director’s communication, 40% cited average, 20% excellent, 18% very good, 11% below average, 9% poor and 2% average. On shareholders communication 38% cited very good, 22% average, 13% below average, 10% poor, 10% good and 7% excellent. On regulatory body’s communication, 50% cited very good, 30% excellent, 7% below average, 6% good, 4% poor and 3% average. On the government communication, 40% indicated very good, 25% average, 20% poor, 6% good, 6% excellent and 3% below average. On board of management director’s communication, 40% indicated very good, 25% average, 20% poor, 6% good, 6% excellent and 3% below average. On potential shareholders communication, 40% indicated good, 20% average, 14% very good, 11% excellent, 10% below average and 5% poor. Lastly, on customer’s communication, 44% cited very good, 20% excellent, 14% good, 8% below average 6% average and 6% poor.

From the above findings, the researchers can deduce that co-operative societies are above average in communicating with their various key publics. It is prudent for researchers to conclude that co-operative societies internal communications are well managed. However, externally, there seems to be a challenge that perhaps calls for further studies in this area.

3.2. Co-Operatives Use of Communication Channels

According to the study on use of organization’s website, 30% of the respondents stated it was good, 21% stated excellent, 17% very good, 16% average, 11% poor and 5% below average. That a small number rate their website as poor and below average; combined percentage of 16% however should not be taken for granted. This percentage bearing in mind the technologically constantly changing world should be taken as a matter of concern. However the other 84% that rate their websites as above average is a pointer towards improvement. Perhaps further studies need to be carried out in this respect to find out whatever gaps are in the area.

On social media sites, the researchers found out that 38% indicated very good, 30% good, 20% excellent, 6% average, 4% below average and 2% poor. These findings, the researchers deduce that
cooperatives in Meru County have adopted the use of social media sites as channels of communications both for internal and external publics. The researchers can deduce that social media are a commonly used tool because of availability of gadgets and internet. In that most of the social media applications are easy to navigate, information is easy and simple to comprehend, anyone can air their opinions and also the tools for accessing the sites especially mobile telephone are, most of them internet enabled.

On direct telephone calls, 40% indicated very good, 32% good, 11% average, 8% excellent, 7% poor and 2% below average. This is a rather traditional but effective method of communication. It has however grown and developed with time owing to accessibility and penetration of mobile telephone is rural areas. About 72% of the respondents termed it has very good and excellent. This is perhaps of the personal touch and immediacy in getting feedback. This method is not limited to literacy levels of the users and seems to be the most effective according to the research findings.

On direct emails, 37% cited good, 33% very good, 11% average, 8% poor, 7% average and 4% below average. On bulk SMS services, 29% stated very good, 23% poor, 18% below average, 12% good, 10% excellent, 8% average. On other communication channels, 31% cited poor, 23% good, 14% below average, 12% average, 11% very good and 9% excellent.

The researchers can conclude that Social media communication channels are vibrant in most of the co-operative societies. This is used to communicate with internal and external clients of the co-operatives. Such sites can also be used to reach out to both members and non-members of the co-operative society.

3.3. Communication Channels used

From this study, it has been found out that co-operatives use various channels of communications. The most commonly used include dedicated telephone line, social media and dedicated email. Some also have a complaints register and websites as a channel of communication. According to the study, communication channels used, 79% of the respondents stated that their organizations used dedicated official email while 21% cited not at all, 83% indicated they used social media while 17 stated not all, 48% stated they used websites while 52% indicated not at all, 89% stated they used dedicated telephone line while 11% cited not at all, 51% stated they used complaints register while 49% stated not at all and lastly 23% cited that they used other forms of communication while 77% indicated not at all.
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Communication Channels used by Cooperatives

|                       | Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------------------|-----------|---------|---------------|--------------------|
| Valid                 | Yes       | 40      | 63.5          | 63.5               |
|                       | No        | 23      | 36.5          | 100.0              |
| Total                 |           | 63      | 100.0         | 100.0              |

According to the study, the researchers found out that 63.5% of the respondents who were the majority stated that their co-operatives had a website while 36.5 cited not at all. It can be deduced that co-operatives may not be having websites because of the technical support and the IT infrastructure required to build a website and maintain it. Also the human resource required and skills may not be at the reach of the co-operatives and also the availability of the internet bandwidth. With a huge percentage of the co-operatives literally operating without a website, intervention measures perhaps need to be put into place by policy makers to address this gap.

Use of Social Networking Sites to Enhance Uptake of Services

|                       | Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------------------|-----------|---------|---------------|--------------------|
| Valid                 | Yes       | 37      | 58.7          | 58.7               |
|                       | No        | 26      | 41.3          | 100.0              |
| Total                 |           | 63      | 100.0         | 100.0              |

According to the respondents, 58.7% who were the majority stated they used social networking sites to enhance uptake of services while 41.3% stated not at all. Co-operatives use social media sites for various reasons. This question tested, specifically the use of social networking sites to enhance uptake of co-operative services. This means the social networking sites are populated with co-operative information that would enhance uptake of the services. The 42.3% of the respondents who use social networking sites not for enhancing increased uptake of co-operative services perhaps us social media for other information purposes.

3.4. Social Networking Sites Used by Cooperatives

According to the study, 58% of the respondents who were the majority stated that they used Facebook as a networking site while 42% stated not at all, 51% indicated that they used twitter while 49% indicated not at all, 85% stated they used Whatsapp while 15% indicated not at all, 21% cited they used LinkedIn while 79% stated not at all, 33.1% indicated they used Instagram while 66.9% cited not at all and lastly 46% stated they used other networking sites while 54% indicated not at all.
3.5. Website Aspects and Efficacy

According to the study on website aspects, on the general look of the website, 30% stated it was very good, 24% cited average, 17% good, 12% poor, 9% excellent and 8% below average. On website regular updating 32% cited it was poor, 20% average, 16% good, 13% very good, 12% below average and 7% excellent. On factual website information 40% indicated very good, 21% good, 15% average, 15% excellent, 6% below average and lastly 3% poor. On the website being rich in information and content 36% cited average, 20% below average, 13% poor, 12% good, 11% excellent and 8% very good. On interactivity on website 40% indicated average, 23% below average, 18% good, 8% excellent, 7% poor and 4% very good. On the website being educative 35% cited good, 20% average, 15% excellent, 12% very good, 10% poor and 8% below average. On ease to navigate 30% cited below average, 27% average, 14% good, 13% very good, 10% excellent and 6% poor.

3.6. New Media Communication Tools

According to the study on the use of new media communication tools, 38% of the respondents cited the use of website was average, 22% cited good, 20% below average, 8% very good, 7% poor and 5% excellent. On use of official emails, 32% of the respondents indicated it was good, 25% very good, 21% average, 13% excellent, 6% poor and 3% below average. On the use of Facebook, 29% indicated average, 24% good, 20% very good, 14% excellent, 9% poor and 4% below average. On use of Twitter 25% cited below average, 22% cited poor, 20% good, 19% average, 11% excellent and 3% very good. On use of Whatsapp 43% cited very good, 24% excellent, 18% good, 7% average, 5% poor and 3% below average.
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On use of LinkedIn 35% cited below average, 20% indicated average, 19% poor, 16% good, 7% very good and 3% excellent. On the use of Instagram 27% cited average, 24% below average, 17% very good, 15% good, 10% poor and 6% excellent. On the use of bulk SMS services, 31% indicated good, 26% average, 19% very good, 12% excellent, 8% below average and 3% poor. On the use of YouTube, 32% of the respondents stated average, 27% good, 21% below average, 10% very good, 7% poor and 3% excellent. On the use of other new networking sites 28% of the respondents stated it was below average, 23% indicated poor, 20% very good, 10% excellent and 2% very good.

Access to Reliable Internet connections

| Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------|---------|---------------|-------------------|
| Yes       | 50      | 79.4          | 79.4              |
| No        | 13      | 20.6          | 100.0             |
| Total     | 63      | 100.0         | 100.0             |

3.6.1. Access to Reliable Internet Connection at your Workstation

According to the study 79.4% of the respondents who were the majority agreed that they have access to reliable internet connections at work while 20.6% stated they don’t have.

Specialized Mobile Application to Enhance Uptake of Services

| Valid | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| Yes   | 34        | 54.0    | 54.0          | 54.0               |
| No    | 29        | 46.0    | 46.0          | 100.0              |
| Total | 63        | 100.0   | 100.0         |                    |

According to the study, 54% of the respondents who were the majority agreed that their Co-operative societies had specialized mobile applications to enhance uptake of the services while 46% indicated not at all.

3.6.2. New Media Tools in Fostering Competitive Positioning

| Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------|---------|---------------|--------------------|
| Yes       | 37      | 58.7          | 58.7               |
| No        | 16      | 25.4          | 84.1               |
| Not sure  | 10      | 15.9          | 100.0              |
| Total     | 63      | 100.0         | 100.0              |

3.6.3. New Media as a Communication Tool in Foster a Competitive Positioning

According to the study, 58.7% of the respondents who were the majority stated that the new media as a communication tool fostered a competitive positioning for their Co-operative societies, 25.4% indicated not at all and lastly 15.9% indicated they were not sure.

Use of New Communication Tools on Customer Management

| Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------|---------|---------------|--------------------|
| Effective | 24      | 38.1          | 38.1               |
| Not effective | 7  | 11.1          | 49.2               |
| Exploitative | 16 | 25.4          | 74.6               |
| None of the above | 16 | 25.4          | 100.0              |
| Total     | 63      | 100.0         | 100.0              |

3.6.4. Use of New Media as a Communication Tool on Customer Management

According to the study, 38.1% indicated that the current use of new media as a communication tool by the organization on customer management was effective, 25.4% indicated it was exploitive, 25.4% indicated it had no effect and 11.1% stated not at all.

ICT Innovations on Youth Customer Growth

| Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------|---------|---------------|--------------------|
| Yes       | 44      | 69.8          | 69.8               |
| No        | 10      | 15.9          | 85.7               |
| I don’t know | 9  | 14.3          | 100.0              |
| Total     | 63      | 100.0         | 100.0              |
3.6.5. Use of ICT Innovations to Increase Youth Customer Growth

According to the respondents, 69.8% of the respondents who were the majority stated that the use of ICT innovations helped to increase customer growth especially the youth, 15.9% cited not at all and 14.3% indicated that they didn’t know.

**ICT innovation(s) adopted by Co-operative society**

| Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------|---------|---------------|--------------------|
| Bulk sms  | 1       | 1.6           | 1.6                |
| Facebook groups | 15      | 23.8          | 25.4               |
| Mobile Banking | 7       | 11.1          | 36.5               |
| n/a       | 3       | 4.8           | 41.3               |
| Online loans application | 1      | 1.6           | 42.9               |
| Social media | 18      | 28.6          | 71.4               |
| Whatsapp and Facebook groups | 1      | 1.6           | 73.0               |
| Whatsapp groups | 17      | 27.0          | 100.0              |
| Total     | 63      | 100.0         | 100.0              |

According to the study on recent innovations, 28.6% of the respondents who were the majority argued that used social media platforms, 27.0% stated Whatsapp groups, 23.8% indicated facebook groups, 11.1% stated Mobile banking, 4.8% stated not applicable, 1.6% stated bulks SMS, online loan application and both Whatsapp and Facebook groups.

### 3.7. Internet Series

According to the study on internet series used in the Cooperatives, 54% stated they used mobile subscriptions while 46% stated not at all, 53.2% indicated they used fiber optic connections while 46.8% indicated not at all, 41.3% stated they used broadband internet connections while 58.7% indicated not at all and lastly 44% cited that they used other internet series while 56% stated not at all.

### 3.8. Co-Operative Policies

According to the study on the policies, 62.30% indicated their cooperatives had communication policies while 37.70% cited not at all, 48.90% agreed they had ICT policies while 51.10% stated not at all, 72% cited they had membership policy while 28% cited not at all and lastly 52.40% indicated that they had marketing policies while 47.60% indicated not at all.
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4. REGRESSION ANALYSIS OF THE FINDINGS

The researcher conducted a multiple linear regression analysis so as to assess the adoption of new communication technologies for co-operative development in Kenya and the four independent factors namely: Communication Process (CP), Efficacy (EF), ICT Infrastructure (IF) and Human Resource Policies (HRP).

The regression equation was

\[ Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon \]

Whereby

- \( Y \) = Co-operative information (CI)
- \( X_1 \) = Communication Process (CP)
- \( X_2 \) = Efficacy (EF)
- \( X_3 \) = ICT Infrastructure (IF)
- \( X_4 \) = Human Resource Policies (HRP)

Table 4.21. Model Summary

| Model | R   | R Square | Adjusted R Square | Standard Error of the Estimate |
|-------|-----|----------|-------------------|-------------------------------|
| 1     | 0.843 | 0.742 | 0.724 | 0.4216 |

a. Predictors: (Constant), Communication Process (CP), Efficacy (EF), ICT Infrastructure (IF) and Human Resource Policies (HRP)
b. Independent variable: Co-operative information

The study used the R square. The R Square is called the coefficient of determination and tells us how Co-operative information varied with Communication Process (CP), Efficacy (EF), ICT Infrastructure (IF) and Human Resource Policies (HRP). The four independent variables that were studied explain 74.2% of the factors are affected by Co-operative information as represented by R Squared (Coefficient of determinant). This therefore means that other factors not studied in this research contribute 25.8% of the factors affected by Co-operative information among youths in Meru.

ANOVA

| Model | Sum of Squares | df | Mean Square | F     | Sig. |
|-------|----------------|----|-------------|-------|------|
| 1     | Regression     | 11.72 | 9 | 1.302 | 44.231 | .000(a) |
|       | Residual       | 3.432 | 52 | 0.066 |       |      |
| Total | 15.152         | 61 |          |       |      |

a) Predictors: (Constant), Communication Process (CP), Efficacy (EF), ICT Infrastructure (IF) and Human Resource Policies (HRP)
b. Independent Variable: Co-operative information (CI)

The study used ANOVA to establish the significance of the regression model from which an f-significance value of p less than 0.05 was established. The model is statistically significant in predicting communication Process (CP), Efficacy (EF), ICT Infrastructure (IF) and Human Resource Policies (HRP) are affected by by Co-operative information among youths in Meru. This shows that the regression model has a less than 0.05 likelihood (probability) of giving a wrong prediction. This therefore means that the regression model has a confidence level of above 95% hence high reliability of the results.

4.1. Coefficients Results

|                  | Unstandardized Coefficients | Standardized Coefficients | t     | Sig.  |
|------------------|-----------------------------|---------------------------|-------|-------|
|                  | B                           | Std. Error                | Beta  |       |
| (Constant)       | 0.116                       | .186                      | .623  | .535  |
| Communication Process | 0.577                       | .068                      | .559  | 8.478 | .000  |
| Efficacy         | 0.157                       | .043                      | .257  | 3.676 | .036  |
| ICT Infrastructure | 0.082                       | .042                      | .301  | 2.252 | .020  |
| Human Resource Policies | 0.021                       | .002                      | .245  | 6.906 | .001  |
b. Predictors: (Constant), Communication Process (CP), Efficacy (EF), ICT Infrastructure (IF) and Human Resource Policies (HRP)

c. Independent Variable: Co-operative information (CI)

The established regression equation was

\[ Y = 0.116 + 0.577X_1 + 0.157X_2 + 0.082X_3 + 0.021X_4 + \varepsilon \]

The regression equation above has established that holding all factors (predicting communication Process (CP), Efficacy (EF), ICT Infrastructure (IF) and Human Resource Policies (HRP)) constant, factors influenced by Co-operative information and hence affects youths performance in Meru will be 0.116. The findings presented also shows that taking all other dependent variables at zero, a unit increase in Co-operative information will lead to a 0.577 increase in the scores of communication process. A unit increase in Co-operative information will lead to a 0.157 increase in Efficacy. On the other hand, a unit increase in Co-operative Information will lead to a 0.082 increase in the scores of the ICT Infrastructure; and a unit increase in Co-operative Information will lead to a 0.021 increase in the scores of Human Resource Policies. This infers that Communication process is influenced by Co-operative information among youths in Meru most followed by Efficacy, ICT Infrastructure and then Human resource policies. The study also established a significant relationship between Co-operative information among youths in Meru and the dependent variables; Communication process (p=0.00<0.05), Efficacy (p=0.036<0.05), ICT Infrastructure (p= 0.20<0.05) and Human resource policies (p=0.001<0.05) as shown by the p values. The researcher dropped the regression model because p>0.5 and t<1.96. Therefore the restated model is as follows:

\[ Y = 0.577X_1 + 0.157X_2 + 0.082X_3 + 0.021X_4 + \varepsilon \]

4.2. Non-Parametric Correlation

A Spearman correlation is used when one or both of the variables are not assumed to be normally distributed. The values of the variables were converted in ranks and then correlated. The study correlated communication process, Efficacy, ICT Infrastructure and Human resource Policies under the assumption that both of these variables are normal and interval.

4.3. Correlations

| Spearman’s rho | Communication Process | Efficacy | ICT Infrastructure | Human Resource Policies |
|----------------|-----------------------|----------|--------------------|------------------------|
| Correlation Coefficient | 1.000 | 0.617 | 0.547 | 0.667 |
| Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| N | 61 | 61 | 61 | 61 |

| Correlation Coefficient | 0.617 | 1.000 | 0.437 | 0.235 |
| Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| N | 61 | 61 | 61 | 61 |

| Correlation Coefficient | 0.547 | 0.437 | 1.000 | 0.441 |
| Sig. (2-tailed) | .000 | .000 | .000 | .002 |
| N | 61 | 61 | 61 | 61 |

| Correlation Coefficient | 0.667 | 0.235 | 0.441 | 1.000 |
| Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| N | 61 | 61 | 61 | 61 |

The results suggest that the relationship between Communication Process and Efficacy (rho = 0.617, p = 0.000) is statistically significant. Communication process and ICT Infrastructure had a rho of 0.547 and a p value of 0.000 therefore denoting statistical significance. Similarly, the Communication Process and Human Resource Policies posted a rho of 0.667 with a p value of 0.000 therefore providing a statistical significance. Efficacy and ICT Infrastructure had a rho of 0.437, p=0.000 further pointing to a statistical significance. On the same note, Efficacy and Human Resource Policies correlated at rho=0.235 and p=0.001. This therefore is statistically significant. Finally, the ICT Infrastructure and Human Resource Policies stood at a correlation of rho=0.441 and p= 0.002 revealing statistical significance.
5. **CONCLUSION AND RECOMMENDATIONS**

5.1. **Communication Process**

From this study, the findings indicate that majority of co-operatives use various channels of communications. The most commonly used include dedicated telephone lines, social media and dedicated email. It has further been found out that majority of the respondents stated that their co-operatives had a website. From this it can be concluded that the social networking sites are populated with co-operative information that would enhance uptake of the services.

It was found out that cooperatives leverage on ICT innovations to increase customer growth especially the youth. According to the study on recent innovations, majority of the respondents argued that they used social media platforms like Whatsapp groups, Facebook groups, Mobile banking, bulks SMS and online loan application. Further, there are several internet series used in the Cooperatives, majority of the respondents stated they used mobile subscriptions, they used fiber optic connections, they used broadband internet connections and lastly that they used other internet series.

It is recommended that Co-operative societies need to come up with intervention measures to address their presence on social media sites. Such interventions may include having social media policies to the effect. Further the researchers recommend recruitment of human resource persons with ability to handle the social media; these are staff who would be fully dedicated to handling and manning social round the clock. We also recommend that messages sent out to the social media need to be intensified in terms of frequency and response to queries need to have zero lifespan.

Co-operatives invest in ICT infrastructure especially in provision of computers and other associated hardware. This will enable their staff to have their operations integrated and open opportunities for online information provision and communication especially on emails.

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