

# Effects of Outsourcing on Employment Generation: Evidence from the Telecommunications Sector of Uganda

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**Abstract:** Outsourcing has emerged as a globally embraced business strategy that involves restructuring geared at improving flexibility, inducing innovation and creativity, whilst simultaneously creating greater employment opportunities. Telecommunications companies worldwide have adopted outsourcing strategies leaving them to concentrate on their core business. In Uganda almost all telecommunications companies have also followed the outsourcing trend. However, despite the increasing adoption of outsourcing strategies, there is a dearth of literature about how outsourcing in the telecommunications sector has contributed to the generation of employment in Uganda. MTN Uganda and Airtel Uganda were selected as study sites and a mixed-methods approach was followed for the data collection and analysis. The quantitative data was analysed through descriptive statistics and inferential analysis using version 23 of the statistical package for social sciences (SPSS). The descriptive statistics were analysed, confirming that a multitude of business functions are being outsourced to other companies in Uganda. Correlation analyses were performed for purposes of generating inferential statistics and the findings revealed that the outsourcing of Human Resource Management (HRM) functions, Information Technology (IT) functions and Facility Management (FM) functions by the telecommunications companies in Uganda has a significant positive relationship with employment generation in Uganda. The qualitative data was analysed using thematic analysis and content analysis, with these findings supporting information revealed through the quantitative analysis. Based on the study's findings, the researchers recommend that more activities and/or services should be strategically outsourced by companies in the Ugandan telecommunications sector so as to maximize flexibility, and induce innovations and creativity while creating increased employment opportunities in the country.

**Keywords:** Telecommunications sector, Outsourcing, Information technology, Human resource Management (HRM), Facility management (FM), employment generation.

## 1. INTRODUCTION

The concept of outsourcing refers to “the practice of having certain non-strategic activities or business processes done outside a company instead of having an in-house department or employee handle them” (Nakanjako 2016:6). These “functions can be outsourced to either a company or an individual” (Tomas and Victor (2006:52). Globalization has increased the market's space and the demand for specialized service providers to meet the varying needs of the market economy. Numerous organizations in both the public and private sector are outsourcing some of their services to specialized firms so as to focus on maintaining their competitive advantage (Ancarani & Capaldo 2005:234; Mahmud *et al.* 2012:74; Patil & Patil 2014:401; Tallman 2011:3). In the earlier stages of this outsourcing practice, the subject generated great controversy in many countries, as many people who opposed it argued that it caused a loss of domestic jobs, particularly in the manufacturing sector (Patil & Patil 2014:411; Tallman 2011:3).

In Africa, outsourcing has been welcomed in both the private and public sectors. A study by Badenhorst-

Weiss and Nel (2008:631) indicated that the South African government had adopted the outsourcing of its none-core, non-strategic activities and a few of its strategic activities so as to improve cost efficiency and services delivery. From this study, complicated strategic services related to engineering and IT were frequently outsourced because of the availability of the required technology and insufficient domestic skills (Badenhorst-Weiss & Nel 2008:632). The introduction of an incentive programme by South Africa's Department of Trade and Industry (DTI) on Business Process Outsourcing (BPO) in 2012 showed an increase in investment by foreign countries in the South African economy. Within the same period, Business Process enabling South Africa (BPESA) conducted research in the Western Cape province and reported that numerous jobs had been created for South Africa with over 65% of the clients based in foreign countries (BPESA 2012:1).

In Uganda in 2010, the Ministry of Information Communication and Technology, through the National Information Technology Authority-Uganda (NITA-U), developed policies, strategies and initiatives to enhance BPO so as to attract foreign investors into the country (NITA-U 2012:1. These strategies led to an incremental increase in the services and products offered in the Ugandan telecommunications sector.

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Since 2012, the Uganda Telecommunications infrastructure has shown a “10 percent annual growth rate” with the following mobile companies in operation: Airtel Uganda, MTN Uganda, Africell Uganda, Uganda Telecom, and Smile Telecom (Export-Uganda 2017:1). These telecommunications companies are currently providing a wide variety of products ranging from “cellular and wireless telephone systems, data transmission equipment, fibre optic equipment, trunked mobile phone systems, switches and routers, wireless access equipment, [and] voice over internet telephony”, among others (Export-Uganda 2017:1). Uganda Business Process Outsourcing Association (UBPOA), an advocacy platform created by the support of NITA-U in September 2012, has since registered over 40 companies and organizations (NITA-U 2012:1). As noted by Mahmud *et al.* (2012:74), BPO companies provide “more flexible, faster, cheaper and effective services”.

The strong growth rate of the telecommunications firms in Uganda has created a multitude of opportunities for the nation at large. The transformations in communications technology and cloud trends in this sector in Uganda has cut into formally impossible ventures like the Internet of Things, drones and the unstoppable cloud computing trends. However, this increasing demand for various products and services has also created many opportunities as well as challenges for the telecommunications firms. In order to gain a competitive edge, telecommunications firms in Uganda are adopting outsourcing strategy so as to focus on their core business of selling airtime and of the more recent notion of mobile money (Nalubega & Uwizeyimana 2019:7).

Investment in technology, networks infrastructure and human resource is vital to the telecommunications industry so as to meet the demands arising from the growing communication technology trends. This calls for timely upgrades in IT and connectivity infrastructure while ensuring the security of the networks. Outsourcing has been discussed as one of the best strategies for meeting the increasing communication technology demands whilst simultaneously providing employment opportunities. However, in spite of the highly lauded benefits of outsourcing to employment creation, the Ugandan telecommunications sector still faces various operational challenges arising from insufficient staff skills. The management structures of Airtel Uganda and MTN Uganda have expressed challenges surrounding their domestic staff skills/competences to operate the outsourced

technology and processes after having outsourced multinational companies to handle their IT and engineering activities. The kind of skills required and departments created by these multinational companies has created challenges for the employees as well as companies in the telecommunications sector. It takes a long time to train the recruited Ugandan staff, which sometimes leads to the contracting of foreign experts to perform those required tasks.

There have been many situations where certain of the recruited domestic staff are trained over a period of time and acquire the necessary skills, after which they start to demand incremental increases in their salaries and welfare benefits. These persons sometimes vacate their assigned jobs or absent themselves, which affects the project’s estimated period of delivery. It eventually becomes more expensive to keep training newly recruited staff who also choose not to remain faithful to their employment contracts. Some positions within Ugandan telecommunications companies have been left vacant whilst sometimes they are offered to foreign staff in order to deliver the services required.

With all these concerns in mind, to our knowledge no studies have attempted to determine which kinds of services are being outsourced in the Ugandan telecommunications sector, and whether outsourcing in this sector is contributing to employment generation in Uganda. Hence this study sought to bridge the gap in literature by assessing which activities are being outsourced and by analysing the extent to which the outsourcing of these activities affects employment generation in Uganda. The main objective of this study is to be achieved through a critical assessment of the effect of the outsourcing of the IT, Human Resource Management (HRM) and Facility Management (FM) functions of telecommunications companies on employment generation in Uganda.

## **2. GENERAL STATE OF EMPLOYMENT IN UGANDA**

In describing the employment status in Uganda, the researchers consulted legal national and international standards, datasets and definitions. The International Labour Organization (ILO) describes employment as being an arrangement where people who, during a specified brief period such as one week or one day, “(a) performed some work for wage or salary in cash or in kind, (b) had a formal attachment to their job but were temporarily not at work during the reference period, (c) performed some work for profit or family gain in cash or in kind, (d) were with an enterprise such

as a business, farm or service but who were temporarily not at work during the reference period for any specific reason" (OECD 2002:1). The Uganda Bureau of Statistics restricts employment to "only working age population who are engaged in any activity to produce goods or provide services for pay or profit" (Uganda Bureau of Statistics 2018:xvii). Before discussing Uganda's employment, let us briefly describe the population of this country.

For over the past two decades, Uganda's population has grown tremendously from a population of 16.7 million in 1991 to 24.2 million in 2002 and 34.6 million in 2014 (Uganda Bureau of Statistics 2018:11). By mid-2018, the population of Uganda was estimated to be 39 million and the figure for 2019 is estimated to be more than 44 million (Uganda Bureau of Statistics 2018:11; United Nations 2019:1; World Population Review 2019:1). According to the statistics provided by the Uganda Bureau of Statistics in 2018, the ratio of males to females was 1 to 1 with over 75% of the population below 30 years of age (Uganda Bureau of Statistics 2018:12). The statistics also reveal that Uganda's population is constituted of approximately 47.5% people of reproductive age which is 15–49 years (Uganda Bureau of Statistics 2018:12).

In 2017, the total working population of Uganda was estimated to be 15 million with the majority (76%) of these people residing in the rural areas of the country (Uganda Bureau of Statistics 2018:27). According to the Uganda National Household Survey of 2016/2017, 38% of Uganda's population were paid employees; 46% males and 28% females (Uganda Bureau of Statistics 2018:30). It was reported that 57% of Uganda's employed population in 2017 were classified as being in possession of "vulnerable employment" (Uganda Bureau of Statistics 2018:30). Vulnerable employment has been defined as "the sum of the employment status groups of own-account workers and contributing family workers... who are less likely to have formal work arrangements, are therefore more likely to lack decent working conditions, adequate social security and a voice through effective representation" (Uganda Bureau of Statistics 2018:30). The Uganda National Household Survey of 2016/2017 further unveiled that the education levels of the people in employment were low with only 23% who had completed secondary or post-secondary training (Uganda Bureau of Statistics 2018:31).

These statistics clearly reveal the quality and productivity levels of Uganda's employment sector and

subsequently describes the levels of unemployment found in Uganda. Unemployment has been defined by the World Bank as "the share of the labor force that is without work but available for and seeking employment" (World Bank 2019). At a country level, the unemployment rate is referred to as "the number of unemployed people as percentage of the labour force of that country" (World Bank 2019:1; The Global Economy 2019:1). The labor force excludes children, the retired, and all those persons in the country that are not seeking employment (The Global Economy 2019:1). According to the Uganda Bureau of Statistics, Uganda's 2017 unemployment rate was 9.2% with high levels among urban residents compared to the rural residents (Uganda Bureau of Statistics 2018:34). This can be explained by looking at the predominant industry of employment in the country which is agriculture, forestry and fishing, and whose activities are mainly situated in the rural areas (Uganda Bureau of Statistics 2018:30). From worldwide labor statistics, according to the International Labour Organization, Uganda's unemployment rate stands at 1.7%, placing Uganda at 165<sup>th</sup> position of unemployment in the world (Uganda Data Portal 2019:1). The worldwide labor statistics indicate that South Africa, Lesotho and Namibia have the highest unemployment rates in Africa (Uganda Data Portal 2019:1).

The statistics above speak volumes about how any form of employment generation is critical for Uganda's development and economic transformation. Various government policies, public and private initiatives have been developed and implemented with the aim of generating employment opportunities in Uganda. Some of the initiatives have been targeted at international investors by encouraging them to invest in Uganda, while some initiatives have directly provided capital and hands-on skills to promote local business start-ups in order to create jobs. Policies, strategies and initiatives aimed at enhancing BPO in Uganda were developed to attract foreign investors into the country (NITA-U 2012:1). Since the implementation of the outsourcing strategies, Uganda's telecommunications sector has been experiencing remarkable annual growth rates and indeed the creation of many opportunities for the nation at large. However, no studies have been undertaken in Uganda to ascertain which services have been outsourced by the telecommunications companies, and whether these outsourcing practices are creating job opportunities in Uganda. For purposes of this study, employment generation has been conceptualized as the dependent variable and measured in terms of

formal employment and informal employment arising directly or indirectly from the companies' outsourcing strategies and/or activities. The researchers were constantly aware that employment generation is not solely influenced by outsourcing, but that other factors such as government policy, availability of infrastructure, and technological advancement can exacerbate employment generation in tandem with the phenomenon of outsourcing.

### 3. CLARIFICATION OF THE CONCEPT OF OUTSOURCING

Outsourcing is believed to have started in the eighteenth century, when the Romans outsourced tax collection. However, outsourcing as a strategy became more popular in the 1970s when large corporations were "considered to be underperforming" (Ancarani & Capaldo 2005:233; Kakabadse & Kakabadse 2005:183). According to Handfield (2006:1), "outsourcing was formally identified as a profitable business strategy in 1989". Outsourcing has been found by many firms to be the answer to the big questions of how to remain in business in a highly competitive global market (Ancarani & Capaldo 2005:233; Nyangau *et al.* 2014:5). For many decades now, firms have been outsourcing various services ranging from facilities maintenance to providing catered food to employees (Ancarani & Capaldo 2005:233; Patil & Patil 2014:401; Tallman 2011:3).

Outsourcing is defined by Mahmud *et al.* (2012:74) as "a strategy in which a firm delegates some of its in-house operations to a third party so as to invest more time, money and human resources into core activities to facilitate the growth of the firm". Similarly, according to Barthelemy (2003:87) outsourcing is "turning over all parts of an organisational activity to an outside vendor". Ghodeswar and Vaidyanathan (2008:24) compared the outsourcing decision to a "make-or-buy decision" in which an organization chooses to "purchase an item that previously was made or a service that was performed in-house". The firm acquires services from the third party "while maintaining ownership and ultimate responsibilities for the processes" (Badenhorst-Weiss & Nel 2008:621; Kakabadse & Kakabadse 2005:183; Mahmud *et al.* 2012:74). Outsourcing is explained by Ghodeswar and Vaidyanathan (2008:23) as an "act of transferring some of the organization's recurring internal activities and decision rights to the outside provider as defined in their contract". Outsourcing can be done domestically or in a foreign country.

Several researchers have reported that outsourcing has become motivated by politics, cost and strategy in both the private and public industries (Ghodeswar & Vaidyanathan 2008:23; Hsiao *et al.* 2010:75; Kakabadse & Kakabadse 2005:183; Kremic *et al.* 2006:468; Lee *et al.* 2012:541; Patil & Patil 2014:401; Suraju & Hamed 2013:23; Tallman 2011:3). In politics, outsourcing practices have been employed "because of the belief that private firms were more efficient and provide better services" (Kakabadse & Kakabadse 2005:183; Kremic *et al.* 2006:470). Cost-driven outsourcing was done mainly because of the desire to save costs or to cut down cost-related issues both directly and indirectly (Kremic *et al.* 2006:468; Lee *et al.* 2012:541; Patil & Patil 2014:401; Suraju & Hamed 2013:23). Strategy outsourcing was more inclined to shift from cost to strategic issues like flexibility and core competences (Kremic *et al.* 2006:469; Lee *et al.* 2012:541). Scholars like Kakabadse and Kakabadse (2005:197) as well as Patil and Patil (2014:412) believe that firms that use outsourcing strategies widen their prospects through improving their effectiveness and efficiency.

According to Handfield (2006:1), the outsourcing model "arose as a best model that answered the diversification model many organizations wanted so much in the 1950s and 1960s due to economies of scale that were involved in contracting out". He further elaborated that many companies in the 1970s wanted their goods and services to be marketed and distributed globally so as to protect their investments and profits, but were limited by management structures in particular parts of the world (Handfield 2006:1). Outsourcing strategy is a popular option for large firms since it keeps costs down, allows saving on short-term costs, and maximizes the benefits realized when there are strong cooperation efforts with the suppliers (Kakabadse & Kakabadse 2005:185; Lee *et al.* 2012:541). However, there are also associated risks with outsourcing and the magnitude of these is stronger when the outsourcing decisions are not well researched, consulted and implemented (Barthelemy 2003:96; Lee *et al.* 2012:542). Van Weele (2005:120), cited by Badenhorst-Weiss and Nel (2008:621), explained that outsourcing is majorly characterized by: 1) some of the "activities that were initially performed in-house being transferred to an external party; 2) assets, and/or people going over to that external party; 3) creation of extended relationships between the parties involved over a longer period of time; and 4) exposure to both cost- and risk profile of transferring the activity to the external party".

Barthelemy (2003:96) re-asserted that outsourcing is one of the ways that firms can “cut costs and improve performance through focusing their limited resources on their core business”. However, he warns that if the firm outsources activities or functions that should not be outsourced, wrongly selects the third party and writes contracts poorly, the likelihood of the success of such an arrangement is close to zero (Barthelemy 2003:95). For example, in the 1990s, research by Bryce and Useem (1998) as well as Vining and Globerman (1999) as cited by Kremic *et al.* (2006:46) reported that some corporations had overestimated the cost savings and some incurred higher costs after outsourcing. In a survey by Gillet (1994) as cited by Kremic *et al.* (2006:469), indirect and social costs like “contract monitoring and oversight, contract generation, intangibles, transition cost”, were reported to have been incurred in some corporations after outsourcing.

In the business world, outsourcing is also referred to as Business Process Outsourcing (BPO) (Ghodeswar & Vaidyanathan 2008:24). In BPO the entire business process is managed by a third party, i.e. human resources, facilities management, as well as accounting and procurement (Ghodeswar & Vaidyanathan 2008:24). In outsourcing, a firm could choose to transfer both “people and physical assets to the supplier”, a process which is often termed vertical integration or disintegration (Badenhorst-Weiss & Nel 2008:621). In the public sector, the outsourcing of public services to the private business sector is often considered as privatization (Badenhorst-Weiss & Nel 2008:621, Uwizeyimana 2015:70). Depending on the location of the firm and the global market competition, firms opt for more strategic directions in BPO. Predictions reveal that the scope of outsourcing is to widen even further, considering the constant growth in markets and the advent of specialized service providers in local and global markets (Jennings 1997, cited by Patil & Patil 2014:407). Many government agencies and authorities make use of outsourcing strategies so as to improve service delivery through harnessing the resources, project management capacity, the technology and knowledge that resides in the private sector (Badenhorst-Weiss & Nel 2008:620). Before embarking on outsourcing it is very important for firms to “map out core processes which give it strategic advantage over competitors” (Van der Waldt 2011:74). Firms should strategically outsource all non-core business processes so as to save time and resources,

thus freeing them up to focus exclusively on their core competencies (Ghodeswar & Vaidyanathan 2008:24).

As mentioned, for purposes of this study outsourcing has been conceptualized as the independent variable and assessed in terms of IT, HRM and FM outsourcing. IT outsourcing is described as a process where an organization decides to transfer its IT functions to be managed by a third party for an agreed fee over an agreed period of time (person, group of people or organizations). This study's outsourced IT functions included applications development, support services for application users, website development and website management services, data management, systems integration, data centre management, IT systems design, task management, telecommunications and network management, system planning and distributed computing services (Lacity *et al.* 2017:5214). HRM outsourcing has been defined as a process of transferring the HRM functions of an organization to a third-party service provider while maintaining ownership and ultimate responsibility for the process (Mahmud *et al.* 2012:74). The HRM functions for outsourcing in this study included employee recruitment and selection, employee appraisal, employee training and development, job design, employee compensation and benefits management, strategic HR planning, temporary staffing and employee counselling (Ghodeswar & Vaidyanathan 2008:33; Gilley *et al.* 2004:233; Mahmud *et al.* 2012:79). FM outsourcing is described as the transferral of the firm's “facilities management services to an external provider for a fee over a given period of time” (Ikediashi *et al.* 2012:301). The outsourcing of FM services as a phenomenon is reported to have been noticed after the arrival of new network players such as DHL in the 1990s, who widened the scope of transportation services that could be offered (Hsiao *et al.* 2010:75). Since then, some governments and private companies, globally, have outsourced these support services. South African government institutions in the 2000s are reported to have mainly outsourced support services like “security services, catering, cleaning, maintenance and traveling services” so as to concentrate on core functions (Badenhorst-Weiss & Nel 2008:624). In this study FM outsourcing mainly constitutes task management and electronics equipment, movable and immovable property management, cleaning services, waste and recycling services, catering services and security services

(Ancarani & Capaldo 2005:232; Badenhorst-Weiss & Nel 2008:624).

#### 4. RESEARCH METHODOLOGY

The study adopted a pragmatic research philosophy so as to obtain better research results on the effects of outsourcing on employment generation in the Ugandan telecommunications sector (Auriacombe 2013:725; Auriacombe & Holtzhausen 2014:20; Simpson 2009:1333). With IT, HRM and FM outsourcing conceptualized as the independent variables and employment generation as the dependent variable, the study employed both quantitative and qualitative methods in its data collection (Auriacombe 2013:725; Auriacombe & Holtzhausen 2014:18). Airtel Uganda and MTN Uganda were used as a case study for the research so as to understand the effect of outsourcing on employment generation in the Ugandan telecommunications sector. A mixed-methods approach of data analysis was adopted by the researchers so as to triangulate the quantitative and qualitative data. The use of a mixed-methods approach generated more reliable and valid information (Auriacombe 2013:725; Kothari 2004:44). The mixed-methods approach was complemented by the use of unobtrusive research techniques to obtain more information about the study's most appropriate respondents (Auriacombe 2016:7).

The study utilized simple random sampling and purposive sampling to collect primary data using structured questionnaires and in-depth interviews respectively. Fifteen (15) interviewees who were senior officers from the telecommunications companies, were purposively sampled and 88 junior officers from the same companies were sampled through simple random sampling. Simple random sampling was used in the selection of the junior officers because of their potentially fresh yet reliable perspective on outsourcing within their respective companies. Unobtrusive research techniques were used to complement the purposive sampling technique during the selection of the senior officers. The work environment in the telecommunications companies was described to be "tightly busy" in such a way that all senior officers were totally occupied. In order to attain fairly positive responses from the senior managers in the telecommunications companies, the researchers first conducted a background study on almost all the senior officers to determine which employees would be the most appropriate and easy to reach for purposes of fulfilling the study's objectives. Upon generating a list of the

most appropriate and easy to reach senior officers, the purposive sampling technique was employed. The researchers reached out to the senior officers with the most experience and knowledge about outsourcing in Uganda's telecommunications sector.

Secondary data was collected from the companies' published and unpublished records, legal reports and published scholarly material about outsourcing. The study adhered to the qualitative and quantitative research ethics principles of informed consent, anonymity and confidentiality. This implies that, upon having obtained their informed consent to participate in the research, the respondents were assured that their anonymity would be protected and their right to privacy and dignity respected.

Quantitative data from the structured questionnaire was analysed using version 23 of the Statistical Package for the Social Sciences (SPSS) and the results tables were modified to illustrate the required information using Microsoft Excel 2016. The researchers used frequency and percentages as measures to visualize and describe the study sample's descriptive characteristics. These descriptive statistics described respondents' gender, age group, education level, and years of employment in Uganda's telecommunications sector so as to understand the respondents' background. Percentage was also used as the measure for quantifying the respondents' responses to elements relating to the study's variables in the structured questionnaire. Qualitative data from the in-depth interviews was analysed via thematic analysis using both inductive and deductive approaches to identify themes. For supplemental information arising from the interview as a result of further engagements with the interviewees, an inductive approach was employed. The data was analysed using an inductive approach, and a new theoretical framework was developed so as to increase knowledge in the subject area. The results from the analysis were further enhanced with content analysis of the secondary data obtained from the companies' published and unpublished records, legal reports and scholarly materials. Content analysis refers to the analysis of qualitative textual data, which can be arranged in clusters of related issues (Auriacombe 2016:8). Findings from the qualitative data analysis were used to supplement findings and interpretations from the quantitative data analysis.

In order to derive statistical inferences from the quantitative analysis, the study relied heavily on

Pearson’s statistical correlation analyses. The researchers used the Pearson correlation test ( $r$ ) to establish the strength of relationship between the study variables. According to Lane (n.d.:1) the “Pearson correlation coefficient (also referred to as Pearson’s  $r$ )” is a tool used to explore relationships between two or more variables. In this analysis, the Pearson correlation between the independent variables (i.e. outsourced functions such as IT, HRM, and FM) and the dependent variable (employment creation) was established. The value of the correlation coefficient is normally “between -1 and 1, with 1 or -1 indicating perfect (positive or negative) correlation” (Lane n.d.:1). When a positive correlation coefficient was obtained, this indicated a positive association between the variables and when a negative correlation coefficient was obtained, this indicated a negative association between the variables. When the correlation coefficient was equal to zero, this indicated that there is no association between the variables (Lane n.d.:1). In order to be able to interpret the strength of the correlations, the range of absolute correlation provided in Table 1 below was used.

**Table 1: Absolute Correlation Range for Interpretation of Correlation Strength**

Absolute Correlation( $r$ )	Interpretation
0.00 - 0.50	Weak correlation
0.51 – 1.00	Strong correlation

Source: Table created by authors.

In order to establish if the correlation coefficients were statistically significant, each of the corresponding  $p$ -values of correlation were compared with the statistical significance of  $\alpha = 0.05$ . The  $p$ -value, also known as the calculated significance, is defined as “the probability under the assumption of no effect or no difference, of obtaining a result equal to or more extreme than what was actually observed” (Dahiru 2008:22). The  $p$ -value lies between 0.00 and 1.00, and the closer the value tends to 0 the higher the chances of obtaining the value that was actually observed. According to Dahiru (2008:23), when the  $p$ -value is less than the statistical significance level where  $\alpha = 0.05$ , then the value of the corresponding correlation coefficient is considered to be statistically significant. However, the value of the corresponding correlation coefficient is considered to be “not statistically significant” if the  $p$ -value is greater than the statistical significance of  $\alpha = 0.05$ .

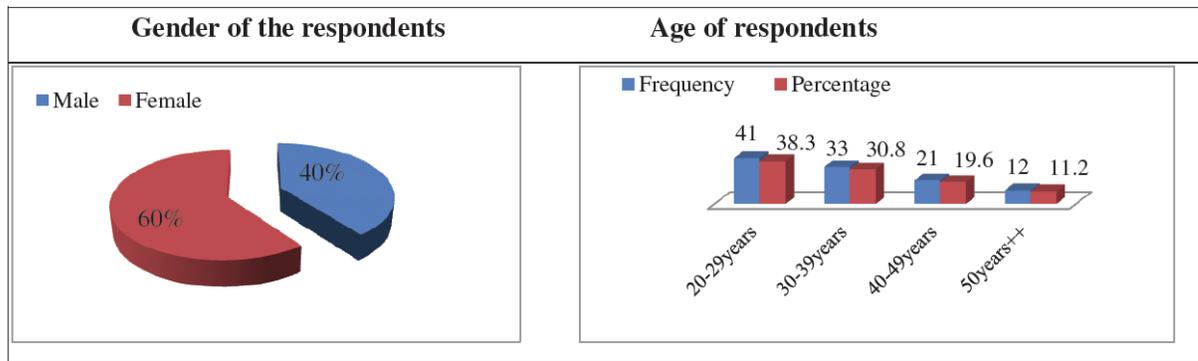
## 5. DATA ANALYSIS AND INTERPRETATIONS OF OUTSOURCING IN UGANDA’S TELECOMMUNICATIONS SECTOR

Having used a mixed-methods approach for the study’s data collection, this section presents both the quantitative and qualitative analysis of the data. In the interpretation of the findings, results from the qualitative data analyses were used to supplement results from the quantitative data analysis.

### 5.1. Study Sample Characteristics

In the study’s collection of primary data, structured questionnaires and in-depth interviews were used for the groups of 102 respondents and 15 respondents respectively. However, for the structured questionnaire only 94 respondents returned the questionnaire. For the in-depth interview, 13 interviewees out of 15 were reached. This placed the overall study response rate at 91.5%. Sixty per cent (60%) of the respondents were male and 40% female. These gender statistics quite closely resembled the individual companies’ top leadership gender composition. With reference to the MTN Group website, the executive committee’s composition is such that it is comprised of 10 members with only 1 of those being female (MTN Group 2019:1). Concerning Airtel Uganda, within the total of 13 top company management positions, only 2 are female, giving a male to female top management ratio of approximately 85% to 15% (Airtel Uganda 2019). Respondents in the age bracket of 20-29 years constituted the majority (38.3%), followed by those of 30-39 years of age (30.8%), then 40-49 years (19.6%), and those above 50 years of age constituted 11.2% of the sample. As indicated, most respondents were between 20 and 49 years of age, which is the age group actively seeking employment in the telecommunications industry. Figure 1 below offers a graphical illustration of the gender and age brackets of the study’s respondents.

In this study sample, the education level of the majority of the respondents was at university level, whereas 51.3% of respondents were educated to bachelor’s degree level, 15.8% to master’s degree level, and 2.6% to doctorate level. The study was thus conducted among people with the cognitive capacity to provide substantive responses. Amongst these respondents, 67.3% reported having worked in the telecommunications sector for over 10 years, 17.8% had worked for 6-10 years, 11.2% had worked for 1-5 years, and 3.7% had worked in the telecommunications sector for less than 1 year. This indicated that the



**Figure 1:** Gender and age of respondents.

Source: Authors.

majority of the study sample had sufficient experience and adequate internal information on the status and functionality of Uganda's telecommunications sector.

## 5.2. The Outsourcing of IT Functions in Uganda's Telecommunications Sector

In assessing the IT functions which were being outsourced by the companies, the study considered certain elements such as application development, application support, website management, data management, systems integration, data centre management, IT system design, task management, telecommunications and network management, system planning and distributed computing services.

Data findings from the structured questionnaire revealed that 100% of the respondents from Airtel Uganda and MTN Uganda recognized that the engineering services were outsourced. This was further confirmed by some of the interviewees at Airtel Uganda who informed the researchers that the company's engineering services were outsourced to the companies Huawei Technologies and Nokia. The interviewees from MTN Uganda confirmed that the company's engineering services were outsourced to ZTE Corporation, a Chinese company.

Ninety-eight per cent (98%) of the respondents to the structured questionnaire were aware that the data management, website management and programming were outsourced, and 97% of the respondents were aware that their company's e-commerce services were also outsourced. These results were comparable to the information provided by interviewees from Airtel Uganda. These interviewees informed the study's investigators that data management and e-commerce services were outsourced to IBM while the management of websites and programming at Airtel

Uganda were outsourced to Mahindra Comviva. Some of the interviewees from MTN Uganda indicated that data management and e-commerce was outsourced to Huawei Technologies.

Ninety-two per cent (92%) of the respondents stated that their companies depended on the sourcing of third-party companies to provide some of their IT equipment. These findings were elaborated on by the interviewees from Airtel Uganda who informed the study that Huawei Technologies, Nokia Siemens and Computer Point were supplying some of the company's equipment. For MTN Uganda, according to the interviewees, Huawei Technologies was the main company to which the provision of IT equipment was outsourced.

One of the interviewees informed the study that the outsourcing of IT had been greatly beneficial in managing the required IT capital investments and recurring operational expenses in the company. Another interviewee acknowledged how IT outsourcing had enabled his company to achieve greater flexibility and increased quality in this rapidly changing technological sphere. However, one of the interviewees expressed that the outsourcing of IT functions was challenging in the areas of contract negotiations, security and many other related technical functions.

Four of the longest serving interviewees in Uganda's telecommunications companies, as per the study sample, informed the researchers that originally all the telecommunications companies in Uganda had managed their IT functions through an in-house information system, and external vendors were involved in a limited capacity such as in the supply of hardware and software for small contractual arrangements. However, gradually, the outsourcing of IT functions in Uganda's telecommunications sector had become a trend. Scholars have traced the start of

global IT functions outsourcing to the mid-1980s by a large US corporation called Eastman Kodak (Patil & Patil 2014:401). In 1989, the CEO of Eastman Kodak formed “strategic partnerships with companies to whom Kodak had outsourced components of its IT infrastructure” (Gray n.d.:1). During that period, Eastman Kodak took a decision to save both capital and operational IT costs (Patil & Patil 2014:401). Since then many global corporations have outsourced IT functions with the primary goal of accessing cost-effective “specialized computing and systems development” (Kakabadse & Kakabadse 2005:185).

The majority of the study’s interviewees recommended continued outsourcing of IT functions by the telecommunications business. According to these interviewees, IT outsourcing provides room for the third-party service provider to also make a big contribution to physical and human resources for the entire IT infrastructure management, which is expensive to finance independently.

### **5.3. The Outsourcing of HRM Related Functions in Uganda’s Telecommunications Sector**

While assessing the HRM related functions which were outsourced, the study considered elements such as the company’s management of employee welfare services, training and recruitment, accounting functions and sales management.

Ninety-six per cent (96%) of the respondents to the structured questionnaire indicated believing that their company’s sales management was handled by external service providers. The Airtel Uganda and MTN Uganda interviewees explained that their companies had portioned Uganda into regions and each region has a different dealer who makes and manages their own sales. These interviewees further explained that these dealers conduct their operations independently within their allocated regions and are limited by the contractual arrangement they made with the headquarters in Kampala. The majority of the interviewees informed the study that their companies had opted to transfer some of the HR activities to a third-party company for strategic reasons.

One hundred per cent (100%) of the respondents to the structured questionnaire recognized that employee welfare services, as well as training and recruitment at their companies were being outsourced. Ten per cent (10%) of the respondents believed that the accounting functions of their companies were also being

outsourced. The Airtel Uganda interviewees informed the study that all employee recruitment, training and welfare had been outsourced to Centum Learning Uganda. Some of the interviewees from MTN Uganda informed the study that most of the employee recruitment services at their company had been outsourced to NFT Consult. This low score of accounting services outsourcing was further explained by the Airtel Uganda and MTN Uganda interviewees who informed the study that their companies’ accounting services were not outsourced but instead were done in-house and that external auditors were only contracted to perform audits as per contractual arrangements. Furthermore, this low score could also be expressive of the extent to which many of the junior officers were unaware of the fact that their company was managing its own accounting services.

The interviewees explained how their companies were assisted in leveraging employee performance through an outsourced HR firm, hence boosting the company’s overall performance. Some interviewees expressed how strenuous it had been before to source and select employees, to manage their payroll and administer benefits. Some interviewees informed the study how the company’s long-term corporate strategy on HR outsourcing enhanced the level of innovation at their companies. The findings surrounding the issue of innovativeness were similar to those by Gilley *et al.* (2004:238), Hsiao *et al.* (2010:77) and Lee *et al.* (2012:542), who reported that the firms who had adopted long-term HR outsourcing experienced higher levels of innovation and flexibility resulting from the frequency and type of trainings provided to the employees.

Some interviewees made mention of the hardships they had endured in re-negotiating the terms and conditions of employment for the redeployed staff and management after they had adopted the practice of HR outsourcing. Furthermore, some interviewees also expressed how difficult and complex it had become to categorize which kinds of activities fall within the HR functions, because of the much-increased use of the internet. A study by Kakabadse and Kakabadse (2005:195) also referred to the challenges inherent to the categorizing of which HR activities to outsource in light of the increasing use of internet-based applications such as information publishing and database enquiry to mention but a few. Furthermore, Ghodeswar and Vaidyanathan (2008:32) made mention of changing global business, where “cycle time for introducing products and services is getting shorter”

and customers' demands for better product and service quality is becoming too demanding. Similarly, Barthelemy (2003:93) highlighted that the transferral of all such HR activities to a specific third-party provider could cause difficulties in replacing or switching to another third-party provider at a later stage or in the reintegration of these activities.

In conclusion, it was firmly acknowledged that telecommunications companies in Uganda do indeed outsource HR functions. In addition, many of the interviewees consented to Lacity *et al.*'s (2017:5222) study which in 2017 found that the "third-party HR providers with strong technical and methodological, domain understanding and client management capabilities produce better outcomes for their clients compared to others with weak capabilities".

#### **5.4. The Outsourcing of FM Related Functions in Uganda's Telecommunications Sector**

To assess which facility management related functions were outsourced by the companies, the study considered elements such as task management and electronics equipment, movable and immovable property management, cleaning services, as well as security services.

The data findings from the structured questionnaire revealed that 98% of the respondents believed that their company's task management and the electronics equipment were managed by external service providers. Ninety-seven per cent (97%) of the respondents also believed that the management of their companies' movable and immovable properties was also outsourced. The Airtel Uganda interviewees informed the study that these two functions had been outsourced to Innovis International while transportation services had been outsourced to Crystal Transport Solutions. At MTN Uganda, the interviewees informed the study that the supply and management of electronics equipment was outsourced to Huawei Technologies.

Concerning the outsourcing of security services, ninety-eight per cent (98%) of the respondents to the structured questionnaire confirmed that their companies' security was handled by external service providers. The interviewees from Airtel Uganda informed the study that security services were handled by Saracen Security Company, whereas MTN Uganda interviewees revealed that their security services were provided by KK Security.

Almost all of the interviewees explained that their respective companies had taken the decision to outsource FM functions in order to position themselves strategically while increasingly gaining access to new technologies and expertise. One of the interviewees expressed concern about the increasing complexity of FM service provision. The interviewee explained that the rapidly increasing levels of technology and customer demands for quality services and products were placing great pressure on companies to meet customer needs despite various risks.

One of the interviewees explained how the risks of losing facility control and inadequate skills in facility management contract negotiation could hinder the companies from obtaining their value for money. As further described by Ikediashi *et al.* (2012:303), some of these risks may include inadequate resources to manage client functions; inadequacies in implementation planning; potential loss of control over the outsourced facilities management activities like access to documents and knowledge; inadequate conditions for management of the facilities management contract; "inappropriate allocation of risks and rewards between the client", the organization and the service providers; and "inadequate clarification of the scope and content of services" (Ikediashi *et al.* 2012:303). A further problem lies in the "absence of benchmarks for cost and service quality against which to appraise the performance and improvement in outsourced functions" (Ikediashi *et al.* 2012:303).

In conclusion, FM functions are indeed outsourced by telecommunications companies in Uganda. However, the scope of the outsourcing of these services varies from company to company in Uganda's telecommunications sector.

#### **6. THE RELATIONSHIP BETWEEN OUTSOURCING IN THE TELECOMMUNICATIONS SECTOR AND EMPLOYMENT GENERATION IN UGANDA**

Findings from the data analyses pertaining to the structured questionnaire indicate that 85% of the respondents believed that the outsourcing strategies adopted by Uganda's telecommunications companies made a great contribution to employment generation in Uganda. One hundred per cent (100%) of the in-depth interviewees reported believing that outsourcing is generating more jobs in Uganda. The interviewees explained how new business opportunities had been established as a direct result of their companies' decisions to outsource most of its services. According

to the interviewees, some of the companies to which functions had been outsourced had introduced new technologies that enabled the creation of jobs while others directly employed more people to fill the newly created job opportunities within their companies. A correlation analysis was performed in order to establish whether there was a statistically significant effect between the outsourcing of IT, HRM and FM functions by telecommunications companies and employment generation in Uganda.

A Pearson correlation test ( $r$ ) was performed to establish the relationship between employment generation and the three outsourced variables at the significance level of 0.05. Table 2 provides the results of the correlation analysis.

**Table 2: Correlation between the Three Outsourcing Dimensions in the Telecommunications Companies and Employment Generation in Uganda**

Outsourcing of:		Employment generation
IT functions	Pearson's $r$	.718**
	$p$ -value	.013
HRM functions	Pearson's $r$	.865**
	$p$ -value	.007
FM functions	Pearson's $r$	.679**
	$p$ -value	.023

\*Correlation is significant at the 0.05 level (2-tailed).  
Source: Authors.

Table 2 above reveals a strong positive correlation coefficient for outsourced IT functions and employment generation ( $r = 0.718$ ); a very strong positive correlation coefficient for HRM functions and employment generation ( $r = 0.865$ ); and a strong positive correlation coefficient for the outsourcing of FM functions and employment generation ( $r = 0.679$ ). The strong correlation ( $r = 0.718$ ) of the three variables implies that there is a strong positive correlation between them and the practice of outsourcing IT functions at the Airtel Uganda company. Finally, Table 2 also reveals that the corresponding  $p$ -values of 0.013 (outsourced IT functions), 0.007 (outsourced HRM functions), and 0.023 (outsourced FM functions) are below the statistical significance level of 0.05. This means that a statistically significant positive relationship is to be found between the outsourced functions in the telecommunications companies and employment generation in Uganda.

These statistics are affirmed by the opinions of the study interviewees who discussed how their respective companies had contributed to employment generation in Uganda as a result of their outsourcing strategies. Some interviewees further explained how the strategies of sales outsourcing and mobile money agents had increased employment in Uganda. Moreover, some interviewees elaborated on how employment had also been generated as a result of their company's decision to outsource cleaning and catering services to local firms.

Concerning the extent to which sales management outsourcing had contributed to employment generation in Uganda, one of the interviewees explained that before the company had adopted the outsourcing strategy, its marketing strategies had been more strongly focused in the urban areas. However, with the adoption of the sales management outsourcing strategy, coupled with benefits arising from some of the FM and IT outsourcing strategies, the company could widen its coverage and increase sales in the rural areas. The interviewee explained that having their services cover the rural areas resulted in employment generation in the given communities in various ways. The interviewee further elaborated that many people had taken up airtime vending as a job, thereby increasing their source of income. Furthermore, some people opened mobile money outlets in their rural towns and were able to run their own businesses at the outlets or were able to employ others to run the day to day operations of the mobile money services. The interviewee explained that without the outsourcing strategies, some of the company's goals and vision, like covering the rural areas in Uganda, would not have become a reality on account of the cost and management implications.

The interviewees also explained how the sales management outsourcing strategy enabled the dealers (sales management outsourcing companies) to fully own their recruitment and employment options. The interviewees from both Airtel Uganda and MTN Uganda explained that their dealers are free to recruit and employ as many people as they want in order to meet their business goals. With such an arrangement, many of the interviewees appreciated how many people in the remote rural areas have come to be directly or indirectly employed by their companies. Many of the interviewees also expressed how challenging it would have been to expand and centrally managing these huge numbers of employees without such a business management model. This model, according to one

interviewee, had enhanced their flexibility in the rolling out of new products and services, since the dealers in the various communities contributed to the plans for campaigns and the time required to reach out to their customers.

Some of the interviewees who have worked in the telecommunications sector discussed how many of the jobs that were seen as small and minor in their sector have grown to be big companies with huge numbers of employees. These interviewees explained how, with increasing sales as a result of a larger customer base, there was demand for the companies' enlargement of their physical facilities, e.g. office space and service centres. The interviewees elaborated that before the enlargement of the companies' physical facilities, the cleaning and security services were treated as small roles that needed only a small number of people. However, this changed with the growth in physical facilities in that the increased facilities now required greater numbers of people to properly manage and keep the facilities clean and secure. The interviewees reported believing that without the outsourcing of these services, i.e. cleaning and security, the company would not have excelled in its core functions. The interviewees now describe these cleaning and security services as being delivered by huge companies, thus creating many employment opportunities for Ugandan citizens.

The interviewees further explained how much more employment opportunities have been created directly or indirectly, in not only the telecommunications sector, but also other sectors due to the outsourcing decisions made by the Ugandan telecommunications companies. They elaborated on how these outsourcing practices had contributed to innovativeness in the telecommunications sector resulting from the diverse talent that was brought to the table. This incredibly diverse body of talent allowed people to flourish within their respective companies. This interviewee gave an example of how individuals who are best at IT activities and who were given the right environment and time to invent new technologies, gave rise to many groundbreaking innovations in the telecommunications sector. The interviewee went on to describe how innovations in cellular phone payment applications, enabled by mobile money technology, e.g. Pay TV, School Pay and tax payment have been developed and have positively altered financial services, transaction processes and payment procedures in Uganda. Here, users can make television subscription payments, school fee payments as well as tax payments via their mobile devices; a

technology that has revolutionized Uganda's financial sector.

However, despite all these positive innovations, outsourcing strategies are not always beneficial to employment generation in Uganda. One of the interviewees informed the study that while taking up a decision to outsource a given activity, profitability to the company lies at the heart of the issue. The interviewee elaborated that there have been outsourcing decisions that have led to job losses to many former employees, hence causing unemployment in the process. According to the interviewee, the reasons for job losses have varied from department to department, and company to company. For example, the interviewee explained that some of the companies to which functions had been outsourced had introduced new technologies requiring smaller numbers of personnel, but who were more highly skilled. In such situations, the number of people to be employed was reduced and some were automatically excluded from being employed because of their limited skills and knowledge in the newly introduced technologies. The interviewee further explained that, due to innovative products having been created as a result of the outsourcing strategies, many companies who had adopted the innovative technology were forced to cut down on the number of employees in a given field. This is because the innovation makes certain positions redundant, leaving certain employees with nothing to do. This implies that operations with such technological innovations require less people to operate and effectively manage. Such a situation, when viewed in isolation, causes unemployment, hence demonstrating the negative correlation that could be created between outsourcing and employment generation in Uganda.

## 7. CONCLUSIONS AND RECOMMENDATIONS

As indicated throughout this paper, the main objective of this study was to critically analyse the effect of outsourcing in the Ugandan telecommunications sector on the country's employment generation. The study investigated MTN Uganda and Airtel Uganda because these companies have the highest market share (approximately 90%) in Uganda's telecommunications sector. The results of this study indeed reveal that outsourcing is a great strategy for improving work flexibility and creating more employment opportunities, and may also provide opportunities for innovation and creativity in the telecommunications industry. However, as noted in the findings above, the outsourcing of technical functions

such as engineering activities can lead to loss of domestic jobs, especially in situations where a particular country might have limited numbers of highly skilled personnel. Outsourcing is not a panacea for all problems facing the telecommunications industry in Uganda, but it may assist in improving telecommunications operations and the quality of services provided to the customers.

The findings of this study reveal a statistically significant positive correlation between the outsourcing of three functions (IT, HRM and FM) within the telecommunications sector and employment generation in Uganda. Based on the findings described, it can be confidently concluded that the outsourcing of IT, HRM and FM functions by telecommunications companies has a significant positive effect on employment generation in Uganda. Based on these findings then, it is recommended that outsourcing be encouraged in other sectors in order to generate further employment opportunities in Uganda. However, because the study did not go into any detail to determine the specific kind of people who were drawing benefit from the new jobs directly or indirectly created as a result of outsourcing in Uganda's telecommunications companies, this avenue of inquiry would benefit from having further research conducted into the magnitude of the new jobs created and the type of citizen (gender, age, etc.) gaining from these employment opportunities in the Ugandan telecommunications sector and other parts of the world.

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Received on 14-11-2019

Accepted on 05-12-2019

Published on 23-12-2019

DOI: <https://doi.org/10.6000/1929-7092.2019.08.99>

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