

# Firm competitiveness and sustainability in telecommunication industry. Study of MTN Rwanda.

Innocent AFRICA<sup>1</sup> Francis Mwangi<sup>2</sup> and Dr David Nyambane<sup>3</sup>

<sup>1</sup>School of Business and Economics, Mount Kenya University Kigali, Rwanda

<sup>2</sup>School of Business and Economics, Mount Kenya University, Kigali, Rwanda

<sup>3</sup>School of Business and Economics, Mount Kenya University, Kigali, Rwanda

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**Abstract-** This research sought to find out whether the firm can be competitive and remain sustainable when other firms enter in the in-telecommunication sector and increase the highly competitive age. The study was guided by the following objectives; to investigate competitiveness of MTN Rwanda in telecommunication industry, to assess sustainability of MTN Rwanda in telecommunication industry, and to find out the relationship between competitiveness and sustainability of MTN Rwanda. The study used case study approach, mixt methods approach quantitative and qualitative were adopted to conduct the study. The targeted population of this research was 287 MTN Rwanda' employees. 167 employees were selected purposively as sample size. The research used a case study approach to give an in depth understanding of competitiveness and sustainability of MTN Rwanda. The study used both primary and secondary data where primary data was collected using questionnaires and interview and secondary data was collected from report, and other publications at MTN Rwanda. Information was gathered using quantitative, qualitative and historical data approach, close ended questionnaires and interview guide were employed to achieve better results. Information gathered were presented using tables, charts and figures while analyzing data collected. The study revealed that MTN Rwanda uses number of strategies to remain competitive and sustainable such as Porter's generic strategies (product differentiation, low cost leadership and focus), Brand and product line, and channel of distribution/ value chain. The study discovered that MTN Rwanda is competitive on telecommunication industry as it keeps increasing the market share (54%) compare to its competitors (46%), the number of subscribers is kept on increase trend 4, 874 797 against its competitor Tigo-Airtel 4,165,530. The study highlights MTN Rwanda increased it profit in past 3 years under scope and the rating received on industry stability between 3 and 5 which is high rating. The study further concluded that there is a positive relationship between competitiveness and sustainability based on market share and profit increase that the firm has had in 3 consecutive years. The study recommends that a firm to be competitive and sustainable should have a competitive advantage and clear strategies in place. The study was case study of one firm could not be expended to include more firms. Hence further research should be done to include other firms in different industry to enhance the comparison.

**Index Terms-** Competitive, Sustainability, Market Share, Telecommunication, MTN, Airtel

## I. INTRODUCTION

Information age had led the telecommunication sector increase into diversification to help the development of technological development for good services required by government (Sultan & Mehmood, 2012). Telecommunication in Africa has opened up new vistas of business opportunities. Africa was the fastest growing mobile market in the world during the past ten years with 650Mn subscribers (World Bank report December 2012). Mobile usage is increasing day by day in Africa compare to United States, European Union and anywhere else in the world. The mobile telecommunication industry in Rwanda recently become competitive. There was a high competition MTN Rwanda and Tigo related to price. Tigo strengthened its market and started more products to attract more customer and MTN Rwanda responded by new products and by revising its price downward. Recently, the price wars resulted to reduce price rates on telecommunication product in Rwanda with the tree firms trying to maintain and fascinate additional customers and remain competitive in the market, hence growing their market share and find sustainability. Rwanda Government allowed the third telecom company to operate on Rwanda telecoms market, this means Rwanda regulatory authority (RURA) has licensed tree mobile operators namely, MTN Rwanda 2006, Tigo 2008 and airtel 2011 respectively, the continued growth of telecoms in the industry is clear indication that there is still a market share to operate that may offer competitiveness.

In light to the above considerations, the greatest impediments underlying telecommunication companies, sales growth emanating from primary demand is less costly and more profitable than attained by taking share from competitors. However, losses in market share may signal serious long-term issues that necessitate strategic change (Farris *et al.* 2010). Initially there was only one player operating in Rwanda market since 1998 with 100% market share with 138,728 subscribers in 2004 after being licensed in 2003. However, two new licensed telecommunication firms namely (Tigo 2008 and Airtel 2011) made the industry vibrant and very competitive where MTN had 3,033,421, tigo Rwanda 1,615,585 and Airtel 10,304 subscriber respectively.

The firm employ various competitive strategies to sustain in the industry. Many researchers have conducted study on firm competitiveness and sustainability industry, For example, a study by Ishimwe (2013) concentrated on marketing strategy or market share growth in telecommunication for Tigo Rwanda and a study by Isabane (2012) focused on competitiveness in Microfinance in Rwanda, but none of them focused on Firm competitiveness and sustainability in telecommunication industry. This paper assess the correlation between competitiveness and sustainability of a company in telecommunication industry in Rwanda.

This research was conducted basing on the following objectives:

- i)To investigate competitiveness of MTN Rwanda in telecommunication industry
- ii)To assess sustainability of MTN Rwanda in telecommunication industry
- iii)To find out the relationship between competitiveness and sustainability in Telecommunication industry case study of MTN Rwanda.

## II. LITERATURE REVIEW

Husso (2011), carried out a study in USA and Europe on competition mobile phone market of United State of America and Europe, that research used a descriptive research design. The findings revealed that the USA and European markets were fundamentally not the same. Despite the fact that European numerous corresponding sale channels of distribution occur. In addition, in United States market phones were considerably sold deeply subsidized and bundled the operation brand of co-branding contracts, moreover, the United States market had fragmented in two technologies, GSM and CDMA as contracting with Europe where GSM has been the pertinent technological elements adopted.

A study on subject of strategic management in telecommunication sector to establish a strong competitive advantage has been carried out in Europe by Zuhdi (2012) with the aims to assess strategies and model that telecommunication companies may control not only to withstand but to struggle in ever-adjusting technology intensive telecommunication sector. This survey assessed structure of telecommunication sector and their competition. It was demonstrated that companies were facing clear competition pressure from old and new companies. For the moment, technological advancement and telecommunication companies are progressing. Firms had to change their setup and transactional approach to adjust and ameliorate the sector. The research found that the survey outcome was in line with elements in the blue ocean strategy.

Zhang (2008), conducted a research on complete advantage analysis of the telecommunication companies in post Chinese telecommunication reconstruction era. This research evidenced the impacts of reforms on competitive advantage for firms with reference to Chinese mobile with special emphasis on reform in 2008.

Several challenges affected Chinese telecommunication companies after a reform in comparison to China Unicom and China Telecom, there are more competition for China Mobile. The greatest impediments comprises of low capacity of advancing full services business and attaching challenges, weak marketing

resources for home and group market as well as poor internet business assistance were unprotected after this reform.

According to Wallin (2007) who conducted a study on how companies can increase their market shares. The study used descriptive methods where evidences emanates from the existing literature, internet source and firm reports, interviews and questionnaire survey with qualitative and quantitative approaches have been adopted for workers, staff members, competitors and clients and vast volume of information obtained were recapitulated and discussed by utilizing various marketing strategies culminating in concluding remarks and recommendations for the company to attain the right marketing decision targeting for large share of marketplace.

The research established that markets demand various products or services and is expected to be managed in dissimilar way. Japanese market is highly secured for foreign corporation, desire to be advanced in Japanese language, demand high quality and quick service plus the highest technical level. However, Russian market is improving at the moment. The Russian market includes much of possible.

Ade (2012) also did a study on strategic quickness and focused on success in Nigerian telecommunication sector. The research revealed that it impacts the focused performance of media transmission firms in Nigeria and that there exists a big connection between strategic quickness and competitive success. Twagira (2012) conducted a study on Marketing for the competitiveness of the telecommunication Rwanda case study MTN Rwanda. The aim of the study was to found out if the marketing contribute to the competitiveness of MTN Rwanda, to achieve this the study applied descriptive method where the analytical and comparative techniques were used, the primary and secondary data were gathered through questionnaire, interview, historical information and reports. The study found that marketing contribute significantly to the competitiveness of MTN Rwanda, where the customer base continue to increase year on year basis as result of brand awareness, strong marketing such as advertisement, publicity and promotion across the country and finally roadshow to attract more customer to use MTN Rwanda product.

) investigated the nature of competition in the Ghanaian telecommunication sector. The purpose was to evaluate the nature of competition and its effects on telecommunication sector adopting airtel Ghana Limited as a case study. Results evidenced that the sector is focused, the competitive used were cost leadership, differentiation and emphasis, motivational factors in competitive ways between recent competitors and making a deal of clients and the stations competitive way are costs, new product progress and promotional strategies. This research assesses the gap including ignorance of some strategies including client loyalty, investments in study on new product growth and knowledge at internal marketing.

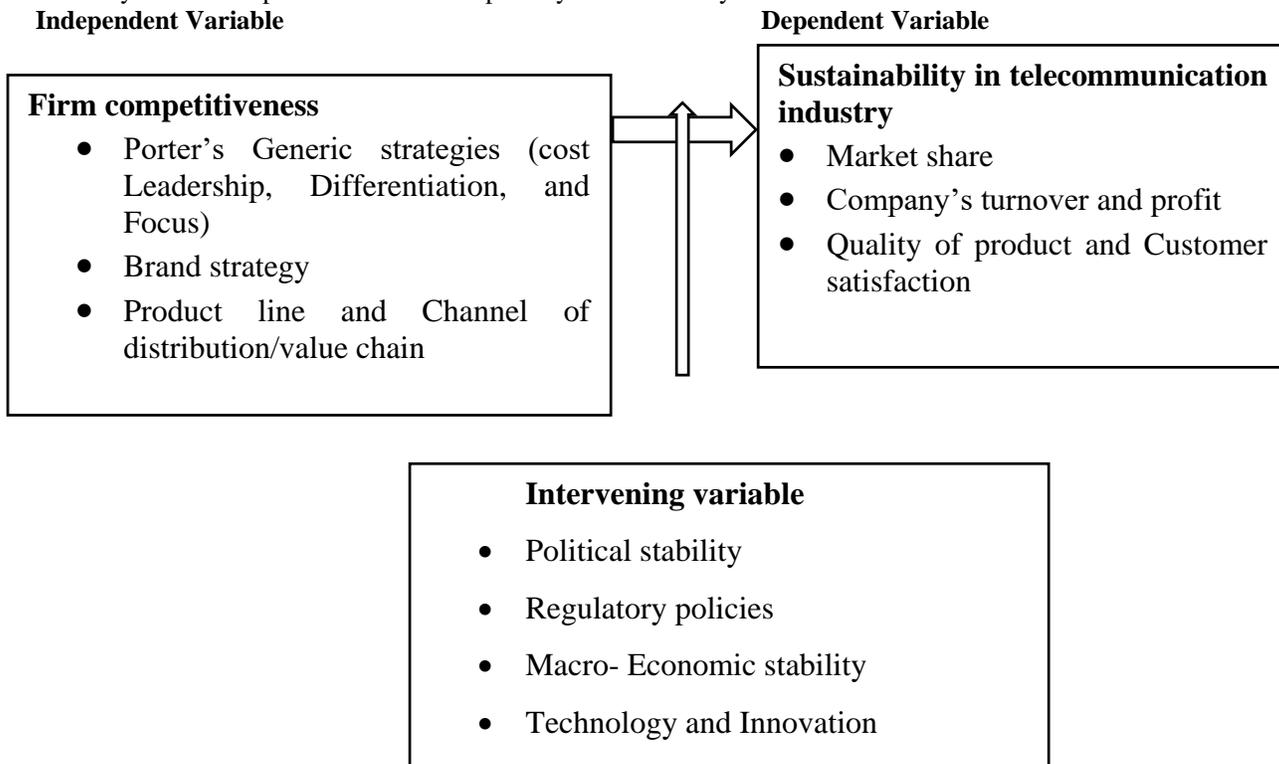
Ndhiwa (2010) while looking at the relationship of competitive approaches in Safaricom Kenya, he found that the strategies used by Safaricom included cost diminishments, excellent client service, operational productivity, creating brand or name among numerous techniques. The investigation moreover showed a noteworthy connection between strategies used by companies including Safaricom Kenya and its profitability.

Uwimana et al (2016), assessed the contribution of marketing mix the success of Rwanda communication companies

with reference to MTN Rwanda. It found that the marketing mix is effective in MTN Rwanda and contribute to the success of the company, additional studies establishes that return on equity for MTN during the period understudy has increased where ROE was 8.3%(2013), 5.3% (2014) and 17.8% (2015) respectively, therefore that means on Frw 100 invested by MTN generate 8.3%, 5,3% 17.8% in the respective years, while return on asset were 8.1%, (2013), 2.8%(2014) and 1,1% (2015) respectively hence decrease trend but with positive income. The study concluded that the firm had a good performance as result of marketing mix implemented during the said period understudy. To achieve this, the study used descriptive method where primary and secondary

information has been gathered using questions, interview, report and documented strategy.

The conceptual framework focuses on the interaction among intendent, dependent and intervening variables. For this study, it is to access the factors, which ensure MTN Rwanda competitiveness and its sustainability in telecommunication industry such as competitive strategy, brand strategy, product line and channel of distribution or value chain, market share, company turnover and profit, quality of product and customer satisfaction, customer base, etc. The said factors can be demonstrated in figure 1 named independent and dependent variables.



### III. MATERIALS AND METHODS

This study, qualitative and quantitative methods for analyzing information were employed. The research design used was mixt Method (quantitative and qualitative).Therefore, a descriptive research was chosen as the same meaning, it is expected to define the current status while discussing the existing and be taken for visual assistance like graphs and charts analyzing the existing data and be used for visual aid such as graphs and charts.

Target population is composed of MTN Rwanda’s employees. The study indicates that there are twenty-five (25) members of senior Management and Board of Directors: thirty (30) Middle Managers and rest of employees are two hundred and thirty two (232). In total, there are 287 MTN employees all over the country. To define the Sample size Yamane’s simplified formula was used as follow:

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

Source : Yamane (1967:886).

When n is the Sample Size, N is the population size and e is the degree of precision. The confidence level was considered to be 95%, this formula was practice in Table 3.2 below. With N=287 employees; e=5%; considering the confidence levels of 95%; n is equal 167 employees grouped in 3 levels.

The 167 staff members were purposively chosen as a sample size for the study to meet qualities depending on the information that they most likely have and since the positions they occupy in the organization were the strategy of the organization is developed and operationalized. Therefore, the sample was drawn from form part of the high-level management, middle management and the rest of employees of the company and are usually involved in the business planning and hence strategic planning and implementation process of the company. They range from, Executives/ General Managers (First level), Senior Managers (second level), Middle Managers (third level), and rest of employees.

For analyzing quantitative information, statistical package for social sciences (SPSS) version 22.0 and Ms Excel were used.

Interview and questionnaires were expressed in different format such as tables, graphics and the analysis of percentages were done through Microsoft excel spread sheet application which organizes data in columns and rows to be manipulated through formulas to allow researcher to easier interpreted the collected data from interviews and questionnaires. Qualitative information was analyzed based on information collected from interview using a content analysis

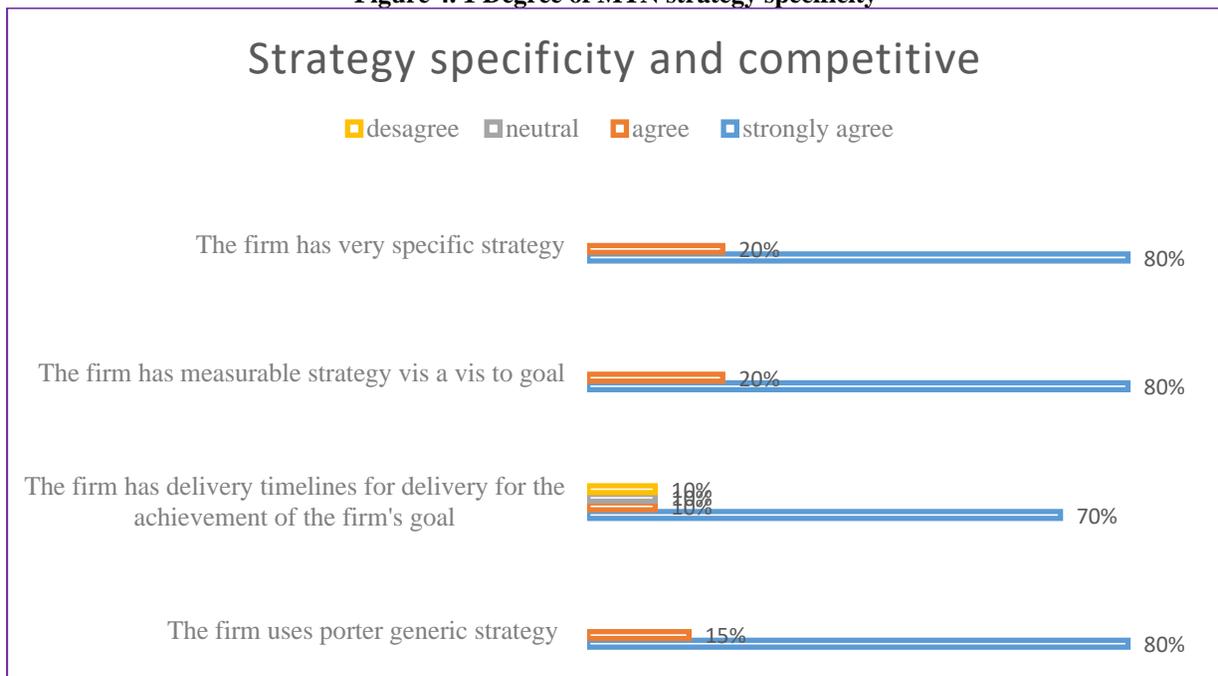
competitiveness strategies used by MTN in telecommunication sector of Rwanda. The second part comprises of the level of sustainability of MTN in telecommunication sector in Rwanda, and the third part established the correlation between competitiveness and sustainability in telecommunication industry in Rwanda.

The investigation of competitiveness strategies used by MTN was measured by strategy specificity and competitiveness: One of the parameter addressing the perception on the level of using strategy specification contains mission, objectives, policies or action plans and resource allocation activities or decisions made by organizations. Respondents were asked to provide their level of agreement relying on their experience

IV. RESULTS AND DISCUSSION

The researcher collected both qualitative and quantitative information from 167 respondents. The first parts contain

Figure 4. 1 Degree of MTN strategy specificity

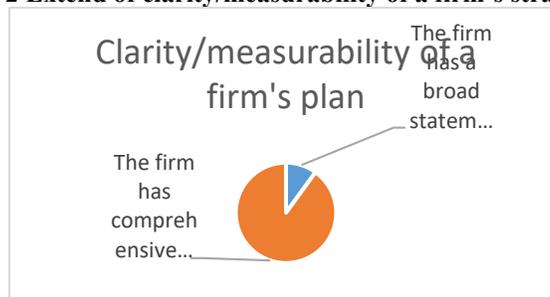


Source: Field survey (2020)

The average of 80% of respondents strongly agree that a firm had a very specific strategy. In response to specific questions, 80% strongly agreed that an organization had clear strategy. Moreover, 80% of respondents strongly agreed that company had quantifiable strategy concerning their objectives, 70% of respondents strongly agreed that company had adequate time provision. Moreover, 80% and 20% of respondents strongly agreed and agreed that company

utilizes Poter’s generic and SWOT analysis as competitive strategy instruments. The key difference in opinion between the (90%) who were of the view that an organization had written, widespread statement of its plans as well as suitable and quantifiable activities to follow up the success or development.

Figure 4. 2 Extend of clarity/measurability of a firm’s strategic plans



Source: Field survey (2020)

The study demonstrate that the organisation possess clear statement of its plans which strongly and quantifiably activities to follow up the success of the organization and continue to progress, further it clarify that the firm is flexible to change based on fundamental circumstance to ensure it remain competitive and sustainable on the market. The measurement was to understand how a firm's strategy plans are communicated to members.

Calantone & Schatzel (2000) on communicating one's strategic was to "inform or influence the target audience in several ways. Porter (1980) describes the means of communicating with customers as any action by a firm that provides a direction or indirect indication of its intentions, motives, goals, or internal situation."

**Figure 4. 3 Firm's strategic plan communication**



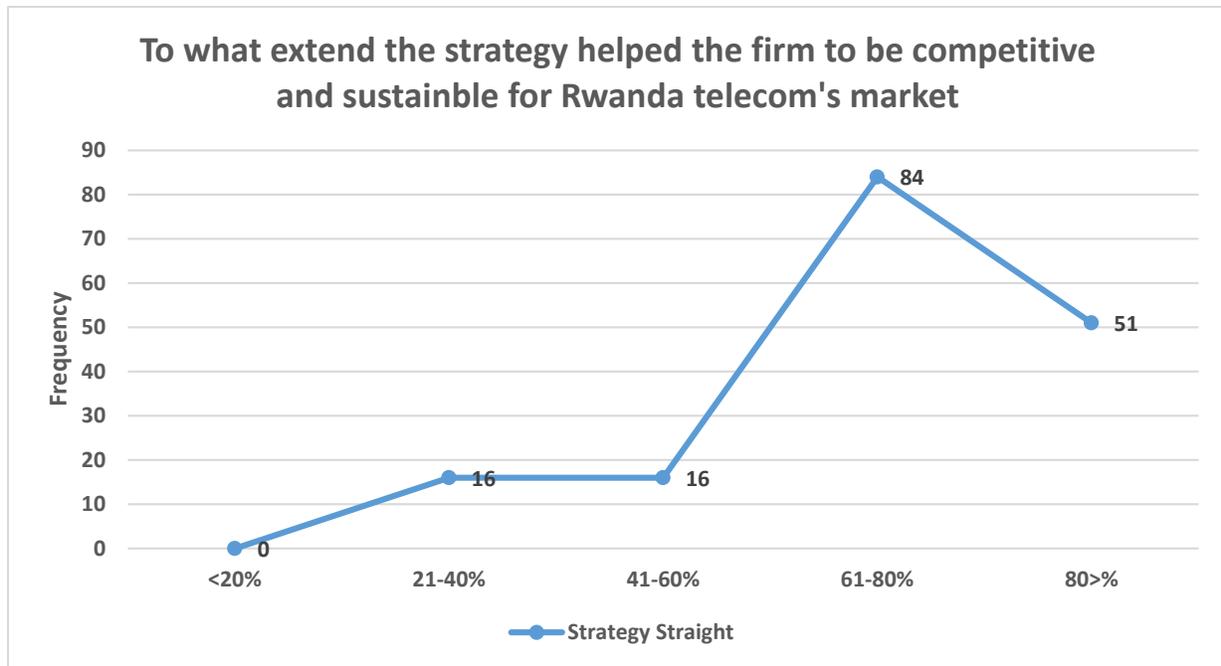
**Source: Field Survey (2020)**

Majority of respondents ascertain that (70%) indicated that verbal communication was the most widely used method. It is however evident that some effort is put in disseminating the firm's strategy plans to all members of the organization through either a documented or verbal approach. In this instance, majority indicated based on their experience in MTN that the verbal approach was widely used.

The second research objectives assessed the level of sustainability of MTN Rwanda. In telecommunication sector in

Rwanda. The sustainability was assessed using to what extent does the strategy in place helped to be more competitive and sustainable on Rwanda telecommunication market. Based on the study findings, 50 of the firm confirmed between 61-80% while 30 indicated that the strategy in place helped the firm to be competitive and sustainable over 81%. It is pertinent that most of respondents (80%) opined that the strategy in place helped the firm to be competitive and sustainable between 61% and above

**Figure 4. 4 To what extend the strategy helped the firm to be competitive and sustainable for Rwanda telecom’s market**



Source: Field survey (2020)

However, On question to ensure that distribution channel strategy is among strategy that is helping the firm to be competitive and sustainable on telecommunication market in Rwanda 60 % (101) of respondents strongly agreed that the distribution channel strategy is being used to deliver MTN products to the end user, while 20% (33) agreed and 20% neutral (33), despite the 20% (33) neutral, this was evidenced by vehicles and motorcycles that MTN Rwanda distributed currently to super and sub-dealers as means of delivering their products to end user.

**Table 4. 1 Telecommunication company subscribers**

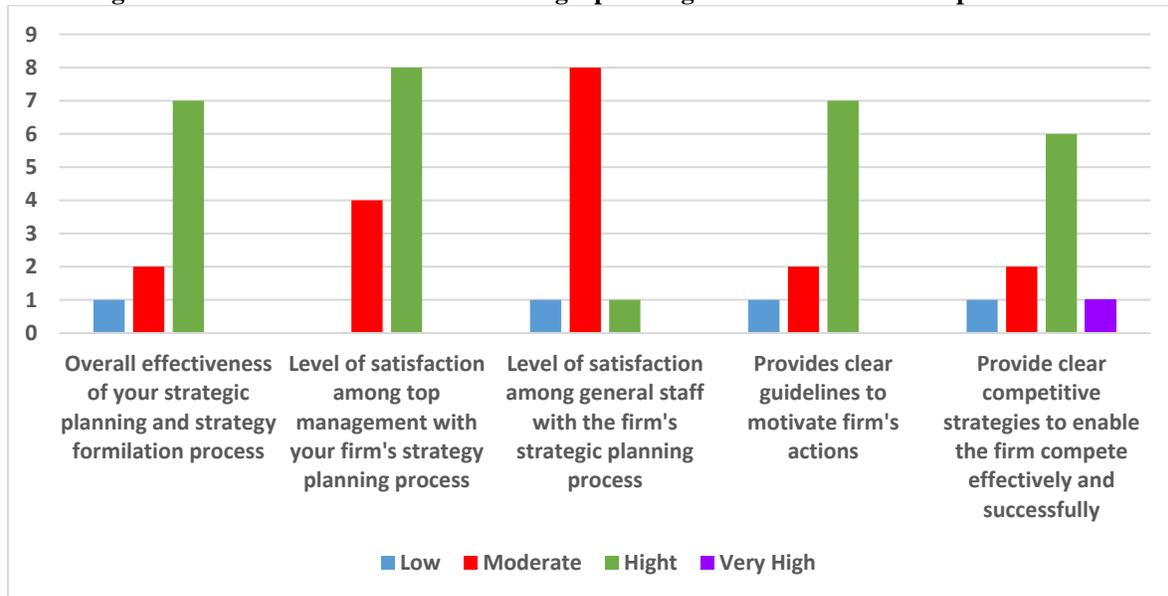
Operator	Mobile active subscribers'	Percentage
MTN	4,874,797	54%
AIRTEL -TOGO	4,165,530	46%

**Total 9,040,327 100%**

Source: Source RURA report (2019)

Looking at the table 1, there is a clear indication that MTN Rwanda has performed considerably well compare to its peers in telecoms industry, particularly in market share. The company has shown growth in market share even in the mist of strong completion in the past 2-3 years. None of its competitors may also boast of the consistent degree of overall performance and success that MTN has achieved in Rwanda, therefore this indicator shows that the firm is profitable and financially stable in telecoms markets. The respondents indicated that MTN Rwanda is not yet listed on stoke exchange in Rwanda rather their shareholders (Cristal Venture). All respondents did not respond on this question because they felt it was not applicable to this market.

**Figure 4. 5 Level of effectiveness of strategic planning and other indicator of performance**

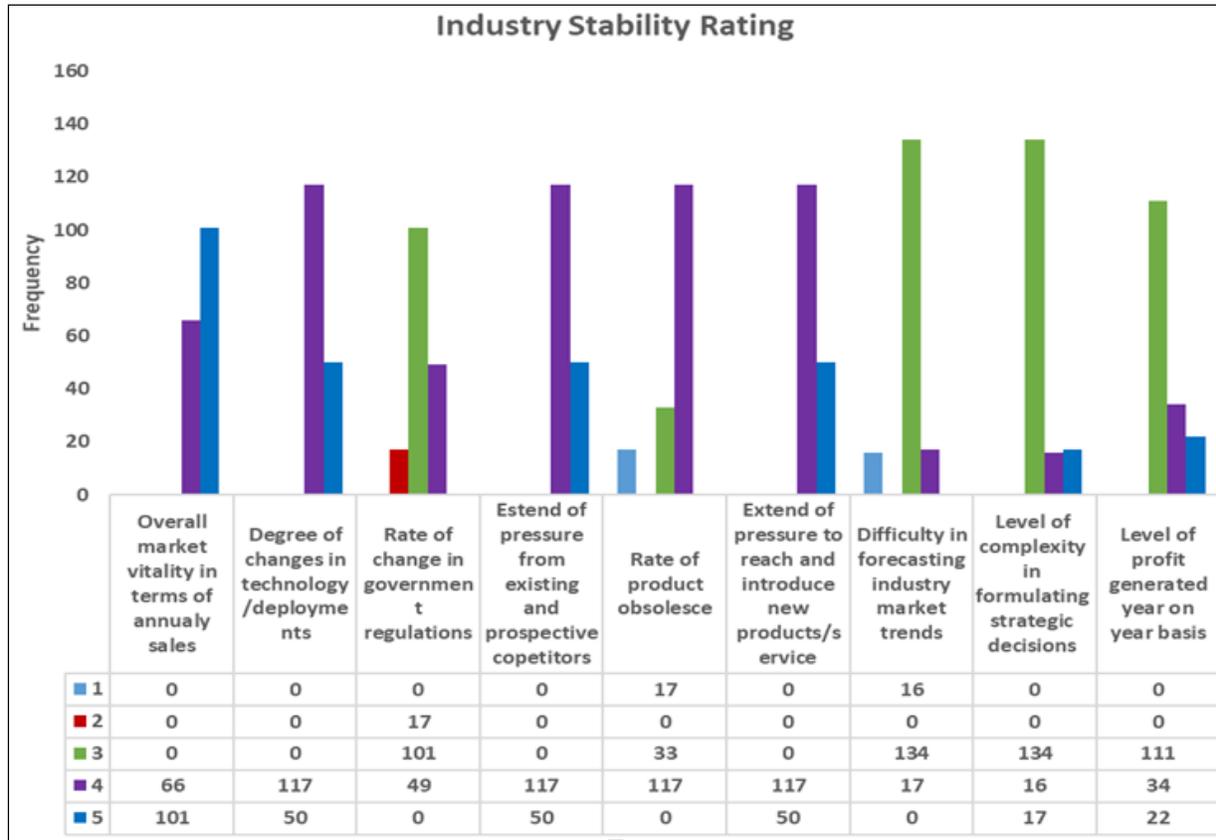


**Source: Field survey (2020)**

A smaller percentage of respondents selected 'low' for all the other variables except level of satisfaction among top manager where none of the respondent selected 'low' overall feedback on the effectiveness of strategy formulation and level of satisfaction among staff and management was favourable and this ascertain high level of organization performance which later translate in sustainability. The basic elements are to ascertain if market share had decreased, been stable or enhanced and to provide a clue of the degree to which any of these have occurred. There seem to be

challenges with component of data. Even though some MTN operating area (OPA) individual experienced some decline in market share, overall MTN as a firm has seen consistent growth in market share refer to subscribers. The level of growth compares to years before new entrance enter the market has however declined considerable and rightly so due to a new increase of new operators (compactors) in the marketplace (Tigo and Airtel).

**Figure 4. 6 Industry stability ratings**



**Source: Field survey (2020)**

Graph 4.6 shows the various responses elicited from respondents base on the different variables and associated ratings. Therefore, based on chart 4.12 we can interpret that MTN Rwanda is stable as result of rating received from respondents where most of criteria from respondents the rate vary from 3 to 5, and 1 is lowest performance and 5 highest performance.

The researcher established the correlation between competitiveness and sustainability in telecommunication industry.

In fact, the researcher wanted to correlate competitiveness (Cost leadership, differentiation and focus, brand strategy, product line and channel of distribution) and sustainability (market share, company turnover and profit, quality of product and customer satisfaction) with the intention to assess a significant or insignificant relationship between indicators of dependent and independent variables.

**Table 4.2 Correlation Analysis between Competitiveness and Sustainability in Telecommunication Companies**

		Market Share	Companies Turnover and Profit	Quality of Product and Customer Satisfaction
Cost Leadership	Pearson Correlation	.231**	.159**	.174**
	Sig.(2-tailed)	.006	.043	.014
	N	167	167	167
Differentiation and focus	Pearson Correlation	.274**	.187**	.324**
	Sig.(2-tailed)	0.039	0.035	0.032
	N	167	167	167
Brand strategy	Pearson Correlation	.854**	.873**	.750**
	Sig.(2-tailed)	0.018	0.035	0.036
	N	167	167	167
Product Line and Distribution	Pearson Correlation	.878**	.863**	.864**
	Sig.(2-tailed)	0.034	0.017	0.038
	N	167	167	167

**\*Correlation is significant at the 0.005 level**

**Source: Primary Data (2020)**

As reflected in Table 4.5, a positive correlation was found between cost leadership and market share ( $r=.231^{**}$ ,  $p=0.006$ ), cost leadership and company turnover and profit ( $r=.159^{**}$ ,  $p=0.043$ ), cost leadership and quality of service and customer satisfaction ( $r=.174^{**}$ ,  $p=0.014$ ). Results demonstrated that a positive correlation between differentiation and market share ( $r=.274^{**}$ ,  $p=0.039$ ), differentiation and company turnover and profit ( $r=.187$ ,  $p=0.035$ ) differentiation and focus and quality of services and customer satisfaction ( $r=.324$ ,  $p=0.032$ ). It was evidenced, a positive correlation between brand strategy and market share ( $r=.854^{**}$ ,  $p=0.018$ ), brand strategy and company turnover and profit ( $r=.873^{**}$ ,  $p=0.035$ ), brand strategy and quality of services and customer satisfaction ( $r=.750^{**}$ ,  $p=0.036$ ). Findings, indicated a positive correlation between product line and channel of distribution and market share ( $r=.878^{**}$ ,  $p=0.034$ ), product line and channel of distribution and company turnover and profit ( $r=.863^{**}$ ,  $p=0.017$ ), product line and channel of distribution and quality of services and customer satisfaction ( $r=.864^{**}$ ,  $p=0.038$ ). All the above, relationship are positively correlated given that the p value was  $< 0.005$  proposing that an enhanced in competitive strategies lead to the company sustainability in telecommunication sector.

#### V. CONCLUSION

Findings from the first objective lead the researcher to conclude that telecommunication companies are more competitive in the country. This competitiveness emanates from the use of cost leadership, differentiation, and focus, brand strategy, product line and channel of distribution/value chain. Consequently, this stimulates MTN Rwanda to used different adequate tactics to survival and withstand in competition with other telecommunication companies' strategies. Furthermore, taking

into consideration competitive strategies employed by MTN Rwanda.

Conclusion to the second specific objective indicates that a firm that employ competitive strategy remain competitive and adapts to stipulations that positively affect the constant success and profitability. Obviously, this led to the sustainability of MTN. Its sustainability was expressed in the context of its market share achieved, its turnover and profit, quality of product and customer satisfaction.

In light with the third specific objective, the researcher concludes that all independent variables are positively correlated with dependent variable given that the value was  $< 0.005$  proposing that an enhanced in competitive strategies lead to the company sustainability.

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#### AUTHORS

**First Author** – Innocent AFRICA, School of Business and Economics, Mount Kenya University, Kigali, Rwanda

**Second Author** – Francis Mwangi, School of Business and Economics, Mount Kenya University, Kigali, Rwanda

**Third Author** – Dr David Nyambane, School of Business and Economics, Mount Kenya University, Kigali, Rwanda