

Influence of Policy Framework and Technology on Change Management in Selected Telecommunication Companies in Tanzania

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ABSTRACT

The general objective of this study was to assess factors that affect change management in telecommunication companies. The design adopted for this study was descriptive research design. The study targeted managerial employees in selected telecommunications companies. The findings of the study revealed that both regulatory framework and technological advancement have a positive and significant influence on change management. The study concluded that regulatory framework and technological advancement are key factors in change management and therefore recommended the need to enhance both regulatory framework and technology as support mechanisms for change management in telecommunication companies. Based on the findings, the study recommended further studied in change management.

KEYWORDS

Change Management, Organizations, Regulatory Framework, Technology, Telecommunication

INTRODUCTION

Change is a necessary evil as the famous dictum rightly states. The inevitability of change can never be overstated especially in modern society, driven, and characterized by innovation and a need for improvement. The strategic and operational agendas that preoccupy the 21st century organizations agenda is the concept of change. Today's business environment comprises of new realities such as disruptive technology, fierce competition, unpredictable economy, globalization which require companies to develop abilities to adopt these changes in a bold manner to gain competitive advantages and hence acquire superior performances. Change is a transition with a variety of occurrences among them new ways of doing work, a new system installed, new job role, new product/services, mergers, acquisition or change in market location. Change management is the process of dealing effectively with the changes by an organization. It involves introducing the change and careful monitoring and controlling the changes (Hiatt & Creasey, 2012). According to Kang, (2015), change management is the method of constantly renovating an organization's structure, direction, and capabilities to cater to the external and internal needs of customers. During this process, organizations that tend to skillfully steer change flourish while those who are unable struggle to exist in the market (Ogochi, 2018). To

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manage change in organizations successfully depend on behavioural and systemic attributes of an organization.

Change management is an opportunity for stakeholders in the organization to participate in sharing ideas on how best to implement the needed changes. Change management reduces employee resistance and facilitates them to embrace changes and adopt new skills, behavior, and values to attain company's objectives (Hiatt & Creasey, 2012; Kunze, Bohm & Bruch, 2013). Telecommunication industry is one of the industry experiencing a lot of changes from liberalization of regulation, privatization of national carriers to advancement in technology like wireless network and internet. These transformations have resulted into the restructuring of the industry from traditional nationalized carrier to information and communication era which include integrating and facilitating transmission of information to numerous distances (Grishunin & Suloeva, 2015). According to Aljohani, (2016) the change process is strongly motivated by strategic consideration such as the need for organizations to improve their business processes and incorporate them in the ways of working. The end result of these considerations includes a well-structured program of change management which is developed on the assumptions that change is managed with minimum interventions that are linearly manageable, objective and measurable in short period of time.

A review of existing literature shows that studies have been conducted to examine the factors that affect change management. Though there are numerous factors that affect change management in companies, most studies focused on leadership and culture. A study conducted by Rioba, (2018) on the factors affecting change management at Telkom, concentrated on structure, leadership and culture and found that there is positive correlation with change management process. Another study by Wambua, (2017) looked at communication, culture and employee preparedness to change in state corporations in Kenya and found that these variables affect change process in a great way and managers in the organization ought to ensure proper communication on change should be done at all level in order to reduce resistance to change by employees. Van der Voet, Kuipers, & Groeneveld, (2016), looked at the relationship between leadership and commitment to change in public sector context and found out that for a successful implementation of change to take place, transformation leadership behavior of direct supervisors is an important contribution. Many of the studies in change management have focused on behavioral factors leaving a gap for policy framework and technological factors which this study seeks to fill.

LITERATURE REVIEW

Policy Framework and Change Management

Government legislation tends to be important, because at a governance level, many firms don't have sufficient visibility into the impact of regulatory change on their organization because their processes are fragmented and managed in silos (Jones, 2013). Departments and individuals manage regulatory updates and compliance in their own way, which causes them to lose sight of the bigger picture. According to OECD, (2017), governments and organizations are constantly reforming to become more effective, efficient, responsive and open to policy challenges. These reforms are encouraged by changes in the framework in which they operate due to changes in technology, economic or social environment, political change etc. which in turn lead to change in policies and practices they pursue.

The nudge theory emphasizes the need to rethink the political workings of habit and habituation in the telecommunication industry. According to Thaler & Sunstein, (2008), by implementing minor alterations to everyday architectures and infrastructures, governments and private institutions steer people towards making better decisions with the potential to fundamentally improve their performances. Nudge theory works best in complimenting the already existing government policies rather than placing it within traditional policy tools which share different traits (Kosters and Van der Heijden, 2015). Globalization poses several benefits but also it compels the companies to make

various adjustments to accommodate these changes. For instance, different countries have different sets of regulatory and administrative rules which govern the way businesses are run (Kiplimo, 2004). In order to operate in different countries, companies have to comply with these rules, as need be, so as to be legally compliant and not face legal suits for non-compliance. Legal compliance is expensive as new legal staff have to be contracted to ensure that the company is always in adherence to the country's regulatory laws. Also, the companies have to pay attention to other key concerns, such as taxation fees and employee working conditions, which may hurt the company's profit margins (Waema et al., 2012).

Madden and Savage (1998) recommended for the need for countries to fashion their policy environments favorable for investment to take place to precipitate economic development. Though in a nascent environment policy can be a good thing, care to be taken for there not to be a situation of overregulation. Due to globalization policy makers tend to get extra frisky with increasing regulations that tend to impact multiple jurisdictions and risk areas (Cunningham & Kempling, 2009). Reformation of policies is inevitable which has resulted to various, complex, and interrelated sets of requirements for compliance. The timelines and scope for compliance are frequently uncertain. There is also the cost factor - substantial funds are required for regulatory change management and restructuring (Jaros, 2010). Government intervention in regulating functions in the market through proper industrial policy framework and support of an efficient bureaucracy, infrastructure, skilled workforce etc. is very much needed for organizations in developing countries to propagate in the competitive world. According to the surveys conducted for the 2015 by (UNCTAD, 2015b), disclosed that unsuited regulatory frameworks are amongst the critical hindrances to entrepreneurship and innovation in Tanzania.

Although policies tend to the preview of management to ensure implementation, it normally falls on the entire organization to drive development of policies pertaining to change management. According to Kotter (1996) it is impossible for a single person to have the ability to lead and manage the change process in an organization hence, composing a correct guiding coalition of individuals to lead change initiatives is very critical in the success of the organization. This guiding coalition should be made up of people with position power, expertise, credibility, and leadership (Kotter, 1996). Success of the change process is dependent on facilitative management and continuous support from the top. This commences from the very notion of development of organization policies to manage change. Good managers retain the process of change management under control whereas good leaders generate the vision to drive the change (Kotter, 1996). According to Caldwell, (2003), change leaders are those executives or senior managers at the very top of the organization who envision, initiate, or sponsor strategic change of a far-reaching or transformational nature. In disparity, change managers are the middle-level managers and functional specialists who carry over and create change support within key functions.

The question of restructuring of telecommunications companies, through privatization, was also debated due to changes in the legislation and regulatory frameworks of the industry. Wallsten, (2000) describes privatization as a collective term for the definition of a set of policy initiatives aimed at altering possession or administration of an economic entity, in preference of the private sector outside the state. According to Estrin and Pelletier, (2020), privatization is no longer contended to automatically create economic gains in developing economies. A well-structured policy framework and a proper privatization process are significant when countries want to attain a positive result. This includes the formation of regulatory capacity, a well sequenced and functional reforms, the enactment of complementary policies, paying attention to social and poverty impacts and creating robust public communication. Privatization aimed at strengthening the economy of many countries, changes to privatization have been unsuccessful. Thambu (2006) observed that many countries in developing countries were not prepared for these changes including proper frameworks to regulate privatization process. This brought about several unsuccessful stories of privatization process by many countries, especially in the developing economies. Kumssa, (1996) who argued using successful story of Zimbabwe whose national railway was reformed instead of being privatized.

Technological Advancements and Change Management

Technology is a significant element in organizational change management. It is used to drive change in organization or itself drives the changes in organization. The problem with using technology to drive change in organizations is that, technology can change quicker than people. Technology is used to support the process rather than depending on it to make the change. When technology itself introduces change in organization or industry. Roe (2019) observed that the role technology plays in an organization cannot be overrated.

Technology serves both to centralize and decentralize systems. Developments in technology offer companies with the prospect to dwell their decision-making authority at the optimal level. Telecommunication firms use technology to centralize purchasing and logistics to take advantage of cost savings. Decentralizing responses to customer needs has provided the opportunity for firms to tailor marketing decisions to fit local markets (Schwab, 2016). These companies take advantage of advances in communications technology to integrate their computer systems with their customers and suppliers. Pfeifer, Schmitt and Voigt (2005) argue that verifying the credibility of vision and strategy through the use of measurable results is the main goal for gathering first successes. Management will require these first successes to plan for the further change process, and be able to partially justify the short-term costs incurred through change.

The path to an effective automation implementation could be smooth and seamless for some companies, but also strenuous and prolonged for others. Successful automation is closely correlated to the organization's capability to comprehend, design, and manage change (Stumpf, 2018). According to Stumpf, (2018), automated material handling systems are certainly complex, hence, complex organizational change is essential to successfully implement and manage these systems. Moreover, understanding people and all the areas in the organization being affected indirectly and directly by the project marks the first step in attaining success. According to Bresler, (2019), in the process of making sure new automation system results are highly supported, executed effectively and actually used by employees, change management best methods should be followed and customized to the inimitable challenges automation present. This can be attained by closely working with key stakeholders in the company, communicate main challenges and concentrating on the benefits that will be brought by new solutions.

While traditional inventions such as telegraphs, fax, and fixed-line services helped jumpstart data communication, the mobile telephony is the technology with the highest level of impact, with regards to fast and automated communication (Waema & Ndung'u, 2012). Postal services, fax, and telegraph services are limited as they are slow and bulky; for example, for one to receive a letter from the postal services, one had to wait a week or so. However, with mobile phones, message communication is instant, hence greatly reducing the wait time. According to Gachagua, (2004), the need for technological advancements stems from the pressure from consumers on service providers, and manufacturers, to provide products and services that have a high quality, are simple to use, are cheap and affordable, and have a long lifespan.

Competition pressure has changed a lot the way businesses function in this technology era. Companies are forced to look not only at the processes but also how products and services are delivered. In order for companies to survive especially telecoms delivering exceptional product and service should be their top priority. According to Abd-Elrahman, (2018), the increased customer awareness and knowledge, use of Information Technology (IT), open market etc. requires new understanding of quality product and services by companies in order to navigate through these changes. Santos, (2003), emphasized that, provision of quality product and service is highly correlated with company's competitive advantage. In order for firms to increase their performances, profits, customer loyalty and customer satisfaction, it is important for firms to measure the quality of their products and services in order to recognize problems and manage delivery of products and services which in turn becomes a basis for employee's rewards.

Technology is a catalyst to globalization. Lebesmuehlbacher (2016) argued that globalization, as a result of technological advancements, influences several changes in the running and administration of the industry players in the telecommunications sector. To begin with, globalization helps increase a company's profitability since more customers use the service to reach out to their counterparts overseas, hence more revenue for the firm. The company also gains recognition in other countries, hence higher opportunities for business expansion and market penetration overseas. Crossover to other countries help the company to get into profitable contracts with other firms, as well as secure foreign direct investments from potential investors (Aker & Mbiti, 2010). For these reasons, companies are really encouraged to widen their market, past the national scopes, and into international zones, as they can greatly benefit from a wider international clientele, as well as a global market share, especially if their domestic domain is limited.

RESEARCH METHODOLOGY

This study adopted descriptive design and focused on employees holding managerial positions in three telecommunication companies. The study collected primary data from Vodacom, Tigo and airtel telecommunication companies in Tanzania. The targeted population of the study were managerial employees working in central branches of the three companies. Data was collected using questionnaires with five level Likert scale ranging from strongly disagree, disagree, neutral, agree and strongly agree. Analysis was done using both descriptive and inferential statistics to measure the relationships between regulatory framework and technology and change management. The first level of data analysis focused on descriptive statistics where both the mean and the standard deviations were computed and interpreted. The findings showed an average mean of 4 meaning that the respondents were generally in agreement with the questionnaire items while in terms of standard deviation, there were no outliers. In terms of inferential statistics, correlation was used to determine the significance of the association while regression models were used to establish the nature and magnitude of the relationships. The findings were presented in tables as indicated in data analysis section.

RESULTS AND FINDINGS

Policy Framework and Change Management

The first objective of the study sought to establish the relationship between policy framework affect change management in telecommunication companies. Both correlation and regression were used to establish the relationship between policy framework and change management.

Correlation Analysis for Policy Framework and Change Management

Correlation analysis between policy framework and change management was conducted to assess the significance factor of policy framework on change management. The results show that policy

Table 1. Correlation analysis for policy framework and change management

		Policy Framework	Change Management
Policy Framework	Pearson Correlation	1	.225*
	Sig. (2-tailed)		0.022
Change Management	Pearson Correlation	.225*	1
	Sig. (2-tailed)	0.022	

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

framework was significant on change management with a positive correlation ($r=0.225$, $p<0.05$). this means that the relationship between policy framework and change management was positive and significant.

Regression Analysis for Policy Framework and Change Management

Model Summary for Policy Framework and Change Management

Summary of a regression model is presented in table 2 below for policy framework and change management. It shows R square as 0.051 which means that only 5.1% of the variance in change management could be explained by policy framework. The remaining 94.9% of variation is explained by other factors not considered in the study and the error term.

Table 2. Model Summary for Policy Framework and Change Management

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.225 ^a	0.051	0.041	1.04466

a. Predictors: (Constant), Policy Framework

ANOVA for Policy Framework and Change Management

Table 3 below shows the analysis of variance (ANOVA) for policy framework and change management. The results show the existence of statistically and significance variance between policy framework and change management.

Table 3. ANOVA for Policy Framework and Change Management

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	5.894	1	5.894	5.401	.022 ^b
Residual	110.223	101	1.091		

Total
116.117
102

a. Dependent Variable: Change Management.

b. Predictors: (Constant), Policy Framework.

Coefficients for Policy Framework and Change Management

Table 4 below, shows the regression coefficients for policy framework and change management. The results for P-value for policy framework was <0.05 which means there exists a positive and statistically significant relationship between policy framework and change management. The results also further explains that, a unit increase of policy framework would result in .225 increase in change management in telecommunication companies in Tanzania. when other factors remain constant.

Table 4. Coefficients for Policy Framework and Change Management

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.045	0.505		6.027	0.000
	Policy Framework	0.260	0.112	0.225	2.324	0.022
a. Dependent Variable: Change Management						

Technological Advancement and Change Management

The second objective of the study sought to find out the relationship between technological advancement and change management in telecommunication companies. Both correlation and regression were used to establish the relationship between technological advancement and change management.

Correlation Analysis for Technological Advancement and Change Management

Correlation analysis between technological advancement and change management was conducted to assess correlation between technological advancement on change management. The results in table 5 indicate a positive and significant relationship between technological advancement and change management.

Table 5. Correlation analysis for Technological Advancement and Change Management

		Technological Advancement	Change Management
Technological Advancement	Pearson Correlation	1	.615**
	Sig. (2-tailed)		0.000
Change Management	Pearson Correlation	.615**	1
	Sig. (2-tailed)	0.000	
**. Correlation is significant at the 0.01 level (2-tailed).			

Regression Analysis for Technological Advancement and Change Management

Model Summary for Technological Advancement and Change Management

Summary of a regression model is presented in Table 6 below for technological advancement and change management. It shows R square as 0.378 which means that 37.8% of the variance in change management could be explained by technological advancement. The remaining 62.2% of variation is explained by other factors not considered in the study and the error term.

ANOVA for Technological Advancement and Change Management

Table 7 below shows the analysis of variance (ANOVA) for technological advancement and change management. The results show the existence of statistically and significance variance between technological advancement and change management. The significant F value of 61.295 df (1,101) is <0.05 which indicate that the regression analysis conducted was appropriate for the study.

Table 6. Model Summary for Technological Advancement and Change Management

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.615 ^a	0.378	0.372	0.80282
a. Predictors: (Constant), Technological Advancement				

Table 7. ANOVA for Technological Advancement and Change Management

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	39.506	1	39.506	61.295	.000 ^b
	Residual	65.096	101	0.645		
	Total	104.602	102			
a. Dependent Variable: Change Management						
b. Predictors: (Constant), Technological Advancement						

Coefficients for Technological Advancement and Change Management

The Table 8 below, shows the regression coefficients for technological advancement and change management. The results for P-value for technological advancement was <0.05 which means there exists a positive and statistically significant relationship between technological advancement and change management. The results also further explains that, a unit increase of technological advancement of .615 would result in an equal change in change management.

Table 8. Coefficients for Technological Advancement and Change Management

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.968	0.410		2.360	0.020
	Technological Advancement	0.722	0.092	0.615	7.829	0.000
a. Dependent Variable: Change Management						

DISCUSSION OF RESULTS

This study established that regulatory framework had a positive and significant relationship with change management. These findings resonated with Ndung'u, (2019) who praised the power of regulatory reform which led most countries to revitalized its ICT market, transforming it into digital economies by following, adapting or reinventing these approaches. This study revealed that current organization policies are influenced by government laws. Further, UNCTAD (2016) found out that the rise of China as an economic powerhouse and Global Value Chain (GVC) required countries to rethink their strategies and policies to accommodate these changes to be competitive.

Kotter (1996) stated that success of the change process is dependent on facilitative management and continuous support from the top which commences from the very notion of development of

organization policies to manage change. According to Salazar-Xirinachs, Nübler and Kozul-Wright (2014) who agrees by explaining that in an effort to improve economic dynamism of many countries after 2007-2008 financial crisis, industrial policy gained a lot of attention which forced government to work closely with different companies to put it back in their policy agenda. They further argued that any level of development a companies and countries at large can't proactively respond to current industrial changes without using industry policy. This findings were supported by Thaler & Sunstein (2008) who stated that by employing minor changes to everyday infrastructure and architectures, governments as well as private institutions can steer people in the direction of making better decisions with the potential to fundamentally transform.

This study established that technological advancement indicated that through automation, innovation and creativity positively and significantly influences change management processes. These findings agree with Stumpf (2018) who argued that successful automation is closely correlated to the organization's capability to comprehend, design, and manage change. This study showed that technology has played a great role in the success of change management initiatives. On the other hand, Roe (2019) noted that the role technology in initiating change in the organization cannot be overrated. He argued that in the digital age, companies require better resource connectivity to deliver improved focus, clarity and agility in order to quickly respond to the changes brought by digitization. Schwab (2016) concluded that developments in technology offer companies with the prospect to use technology to centralize purchasing and logistics to take advantage of cost savings, also decentralizing responses to customer needs which has provided the opportunity for firms to tailor marketing decisions to fit local markets.

CONCLUSIONS AND RECOMMENDATIONS

In a nutshell, new laws kept in place by the government and companies improve the change management process. Improvements on legislations, privatizations further enhance change management. Technological advancement catalyzes change management initiatives through innovation and creativity. Technology introduces changes in the company that makes companies competitive. Adaptation of new and advance technological system enhance offerings in the market through which new market opportunities for products have accelerated these change initiatives. Therefore, the level of technology has accelerated the implementation of change management initiatives. This study shed light to how policy framework and technological influences change management in telecommunication companies. The study recommends further studies to be done in change management to establish other factors which influence change management from the task environment.

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