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Enterprise Resource Planning Integration and Performance of Safaricom Public Limited Company Kenya

Wambui Caroline[1], Tumuti Joshua[2]

[1]Student, Department of Management Science, School of Business, Kenyatta University, P. O. Box 43844-00100, Nairobi, Kenya

[2]Lecturer, Department of Management Science, School of Business, Kenyatta University, P. O. Box 43844-00100, Nairobi, Kenya

Abstract: ***In the wake of the 21st Century, there has been a great need for firms to restructure operations to adapt to the changing industry guidelines and emerging trends. Several organizations use an Enterprise Resource Planning (ERP) system for business operationsworldwide to enhance their organizational performance. The ERP system has distinct modules to aid different business processes. Various scholars have researched ERP system implementation and success. However, little research has been done on ERP integration and non-financial performance. This research focused on ERP system integration and non-financial organizational performance of Safaricom Public Limited Company (PLC) in Kenya. The study objectives were to establish the impact of integrating the financial module, procurement module, human resource module, and customer service module on the performance of Safaricom PLC. The study employed a cross-sectional survey research design.Additionally, the target respondents of the survey were the staff (4,839) at the head office across various departments, where a study sample of 357 was obtained by use of stratified sampling technique. The researcher used a semi-structured questionnaire to collect first-hand data that was analyzed using SPSS software. The researcher conducteda descriptive and inferential analysisto describe and determine the degree of relationship and influence between the independent and dependent variables. From the analysis findings, the four independent variables (human resource, procurement, financial, and customer service module) seemed to have a strong positive relationship, significant p-value, and positive impact with the dependent variable (organizational performance). However, the study recommended reviewing performance, staffing requirements, compensation, and staff training by Safaricom PLC HR function. It would also be prudent for the HR department to align itself with the objectives/goals of other departments, as this would greatly help them measure more accurately their business performance. The study recommended that Safaricom PLC needs to increase support towards the general effectiveness and efficiency of its financial module integration (timeliness, relevance, and reliability) for greater organizational performance for the financial department. Another recommendation was to incorporatea corporate support model and the basic disciplines of a learning organization and sensitization of customers and staff to achieve all the milestones of financial module integration. Research into the integration of the procurement module revealed that the management of Safaricom PLC should make sure that the procurement departmentsets clear procurement guidelines and complies with the set standards. In addition, services management should address procurement issues according to the set standards to benefit the entire organization through a bottom-up approach. The Safaricom PLC procurement department could also adopt a cross-culture to continuously improve, collaborate, and actively make strategic procurement informed decisions. Lastly, the study recommends that Safaricom PLC's customer service team collect customer feedback via a customer relations management feature in-built into the ERP system to build long-term customer relationships and hence, improve the organization's performance. The study also recommends that the ERP customer service interface be regularly upgraded and updated to generate reports that can be used to make informed decisions by the management.***

Keywords: Enterprise Resource Planning, System Integration, Safaricom PLC, Organizational Performance, Non-financial Performance

1. Introduction

In the advent of the 21st Century, there have been consistent technological advancements that impact or are perceived to affect businesses. Enterprise Resource Planning Systems (ERPs) is one such technological advancement. ERP systems in one form or another have been in use for slightly over six decades. As the business processes that drive organizations become more complex and sophisticated, companies are looking for ERP solutions. These solutions are more innovative, robust, and seamlessly integrate multiple business operational units in real-time, improving a company's overall performance.

ERP systems enable a company to acquire a competitive edge. Organizations must fully integrate Enterprise Resource Planning solutions in telecommunications for maximum operational efficiency andenhance organizational effectiveness. According to [7], ERP brings the following benefits to telecommunications companies: processes across business units happen in real-time; increased gains in non-financial performance; "cautious administration of administrative consistence hazard; "the arrangement of new operational and innovative models; expanded incomes from items and administrations; successful administration of existing resource base and cautious arranging of new resource ventures" [4].

Internationally, two of the largest telecommunication companies are China Telecom Corporation and AT&T. China Telecom; formerly, China Telecommunications Corporation, is listed at the top of the world's giant players in the telecommunication industries. It has a workforce of over 350,000 employees working domestically and internationally. According to [3], as a publicly traded international telecommunications company, China Telecom required a modern IT infrastructure to comply with reporting regulations. Secondly, the company needed its business functions integrated and business operations to happen in real-time.

In Kenya, the largest telecommunication company is Safaricom PLC. In 2013, Safaricom contracted IBM Global Services to upgrade its ERP systems to introduce new functionality, enable significant automation; and increaseSafaricom's core business process integration. "Having already invested heavily in technological infrastructure, Safaricom sought to capitalize on the capabilities of modern cloud-based ERPs to automate the major stock management, payments processing, human resources, and governance."[5].The core objective of this study project was to establish how the ERP systems integration has impacted the non-financial organizational performance of Safaricom PLC. What operational efficiencies have are to be realized? Is there an enhancement of service delivery? Are there any improvements in management reporting? The researcher studies this and other performance metrics to give an extensive comprehension of the impact of ERP System integration on organizational performance.

1.1 Statement of the problem

In the wake of the 21st Century, there has been a great need for firms to restructure operations with the need to adapt to the changing industry guidelines and emerging trends. Traditionally, enterprises across the world manage the critical resources at their disposal using manual processes. These resources include but are not limited to human resources, investors, customers, suppliers, information technology, and fiscal capital. The success of an organization is not only attributed to financial performance but also non-financial performance. Companies have to structure their existing resources as well as synchronize them to achieve desired goals. Hence the need to implement and integrate systems such as Enterprise Resource Planning systems (ERPs).

Like every other sizeable multinational organization, Safaricom PLC seeks to integrate its business processes into one enterprise solution that enhances the consistency of data and modular applications. As a telecommunication company, Safaricom has several vital departments: Human Resource, Information Technology, Procurement, Customer Service, and Finance. According to the IBM 2019 case study, Safaricom's manual business processes could not accommodate its rapid growth, negatively affecting business operations. Safaricom employed the ERP systems to streamline operations for efficiency of its core businesses, including Mpesa transactions and Mobile telephone services. By implementing an integrated suite of Oracle ERP solutions, Safaricom's main goal was efficient process automation to boost customer satisfaction and nurture customer loyalty through better service delivery[1].

A corresponding ERP module supports each department. The wide range and dynamic nature of Safaricom's business processes mean that most ERP modules are constantly customized to keep abreast and ahead of the competition. New functionality is also continuously implemented. Some of the central business processes are, to begin with, complex payment processes that need to completion quickly, accurately, and automatically. Second, identity management of a workforce of over 6000 employees with a need to track every employee. Third, online platforms to carry out all the procurement business processes and consolidate supply chain processes. Fourth, Asset Management and Asset Tracking. Fifth, automated audit reports to prevent fraud, and lastly, Customer Experience Management [2].

According to [5], the adoption of ERP systems has resulted in a mix of much-acclaimed successes and failures that sometimes result in significant service downtimes. The customization of different ERP modules in itself is expensive. The need to run departments as stand-alone due to the robust nature of the company has also made synchronization of financial and non-financial operational reporting at high levels quite difficult.

This research seeks to establish how integrating Safaricom's existing ERP solution modules into various business units/departments has affected the overall non-financial organizational performance. The key focus was on the dependent variables: the employee satisfaction index, customer satisfaction index, operational efficiency, and operational effectiveness. These variables are vital in enhancing seamlessness in business functions. The research investigated first which aspects of the ERP integration have resulted in improved non-financial performance. Secondly, which factors have hurt performance, and lastly, gaps in integration that have a significant constructive impact on its organizational performance if implemented.

1.2 Objectives of the Study

The overall goal of this research was to determine how the integration of ERP systems affects organizational performance by doing a case study of Safaricom PLC Kenya.

1.2.1 Specific Objectives

1) To determine the effect of financial module integration on the performance of Safaricom PLC Kenya
2) To establish the effect of procurement module integration on the performance of Safaricom PLC Kenya
3) To determine the effect of human resource module integration on the performance of Safaricom PLC Kenya
4) To determine the effect of customer service module integration on the performance of Safaricom PLC Kenya

1.3 Significance of the Study

The research result outcomes help identifyfunctional non-financial parameters that can help associations measure the effect of coordinating ERP systems to improve business operations. Organizations can use the knowledge and recommendations in strategic managerial decision-making for new information technology integration instances. The study is of great use for future academic research work. It can also act as a template or guideline for further discussion relating to integrating ERP systems for organizations in the telecommunications industry to improve non-financial performance and efficiency.

2. Theoretical Review

For this research work, four prime theories concerning ERP integration and the performance of organizations were identified. These are the Stakeholder Theory, the Multi-motive Information Systems Continuance (MISC) Model, the Task Technology Fit Theory, and the Technology Acceptance Model. The theories are discussed in detail as follows.

Freeman established the Stakeholder theory in the year 1984. The theory stipulates that for an enterprise to effectively and consistently attain success, there must be procedural consideration of the input from interested parties who make up the organization. The stakeholder theory argues that every legitimate entity associated with an organization benefits from the organization. As such, the importance of the interests of all stakeholders is not entirely self-evident but can be evidenced in the cooperation the stakeholders accord the organization. The theory is built on four propositions which are: cooperation; a correlation between the organization's performance and the practice of managing stakeholders; identification of interests of stakeholders and how important these are; and the recommendation of attitudes, structures, and practices that simultaneously work to achieve the interests of the legitimate stakeholders. In this study, the theory can be used to identify stakeholders with interest in the ERP system and consider the input of these vested interests in integrating the ERP systems at SafaricomPLC.

In 1975, Fishbein and Ajzen established a model that was a subset of reasoned action theory. In the successive years 1989 and 1993, Davis and Davis et al. advanced to the technology acceptance model by showing why their users more readily accept some information systems. The premise of reasoned action theory was that an individual's conduct is connected to their will or expectation to act a specific way—their disposition and emotional intelligence control this conduct. The theory states that performance is measured based on establishing the perceived use (PU) and perceived ease of use (PEU) by the persons or organizations using a system. This performance is often measured on a five-point Likert scale. It enables the users and stakeholders of integrated technology to score a systemon how best it delivers in various assigned roles. In this research, the Technological Acceptance theory will enable the researcher to establish Perceived Use and Perceived Ease of Use of the integrated ERP system at Safaricom. Through establishing these PU and PEU and analyzing the same, the researcher can correlate ERP system integration with organizational performance based on findings.

In the year 1995, Goodhue and Thompson established the theory. According to Goodhue and Thompson, information technology has a higher probability of positively impacting a company's individual and holistic performance if and only if the integrated management information systems match the tasks that users must undertake. Eight variables are used to measure performance: quality, authorization, compatibility, ease of use, reliability, time factors, and the interrelation it created with end-users. For this research, this theory provides a basis for understanding reports issued regarding the performance and effectiveness of organizations with integrated management information systems such as an ERP System. The ERP system must provide users with the applications needed to perform their everyday tasks. Lastly, the MISC model by Lowry (2015) stipulates that there is a discrete cognitive process in which systems attain a given set of goals and expectations. With the continued expectation to fulfill, there is a continuance of intentions for the system. It further emphasizes design-related constructs that can build a system already in use or already integrated. The constructs include design features, seen usability, and plan assumptions fit. The MISC model argues that an individual's or organization's expectations predict their level of satisfaction with the experience obtained through a product or service. It can be used to establish whether or not an experience is in line with what it is expected to be. This is achieved by measuring whether the constructs mentioned above are positively or negatively inclined on a five-point Likert Scale.

For this research, the interaction with the ERP system thus has its satisfaction predetermined by the users' expectations at Safaricom PLC. It is essential to take this into account since the MISC model enables the researcher to consider attitudes and expectations of staff regarding the integration of ERP. In data collection, the findings are most likely inclined to reveal what the perception of expectations is amongst users.

2.1 Conceptual Framework

According to [6], the conceptual framework refers to a diagrammatical presentation tool designed to illustrate the relationship between the research variables. Through the literature review, four performance metrics were identified that could be used to analyze how ERP Integration affects organizational performance. These are the Employee Satisfaction index, Customer Satisfaction Index, Operational efficiency, and Operational Effectiveness. Therefore, the independent variable ERP Integration has four constructs: Customer Service module, HR module, Finance module, and Procurement module.

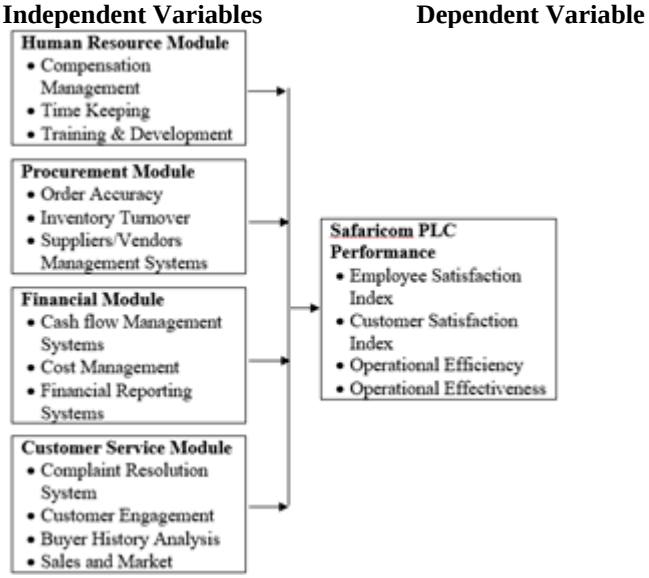

Figure 1: Conceptual Framework
Source: Author (2019)

3. Research Methodology

"The design has a comprehensive arrangement.It not onlyprovides the examination approach and the information assortment but also decides to a critical degree other significant exploration issues"[6]. As indicated by [6],"the fitting examination configuration is of most extreme significance as it influences every one of the resulting exercises on information assortment, research approaches, and strategy." This research is qualitative, focusing on the non-financial performance of Safaricom PLC, and used a cross-sectional study design to gather information from the employees at Safaricom PLC. Further, the researcher proposes using stratified sampling to general populace limit with more prominent exactness and guarantees equivalent odds of portrayal from the sample. A sample size of 357 out of 4,839 available target respondents was determined using Krejcie and Morgan formula.

$$n = \frac{X^2 N P(1-P)}{d^2 (N-1) + X^2 P(1-P)}$$

Where:
n = required sample size.
X^2= the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).
N = the population size.
P = the population proportion (assumed to be .50) based on the number of people that believed to have the information the researcher is looking for
d = degree of accuracy (0.05)

3.1 Data Collection Instrument

This study used a questionnaire as the data collection tool. The questionnaire had open and closed-ended questions to allow respondents to share more specific information for the general background information. The open-ended questions enabled the respondents' issue as much information as per their knowledge, which is crucial for the study. The questions were also structured on a five-point Likert Scale. The questionnaire was handed to the selected heads of divisions or managers after an introductory conversation. But before the actual field study, reliability and validity were conducted to confirm if the instrument was suitable and the degree to which the research instrument regulated more than once would yield comparable outcomes. A Cronbach's Alpha coefficient of 0.7 and above was set as the minimum requirement.

3.2 Data Analysis

Using SPSS, the researcher conducted descriptive statistics, diagnostic tests, regression modeling, and correlation analysis to describe the level of agreement with various variable items and determine the degree of relationship and influence between the independent and dependent variables. The analysis result was presented using tables, bar, and pie charts with mean, standard deviation, and percentages. The multi-regression model equation was given as follows:

$$Y = \beta 0 + \beta 1 x_1 + \beta 2 x_2 + \beta 3 x_3 + \beta 4 x_4 + \varepsilon$$

Where:
Y= Performance of Safaricom PLC
X_1= HR Module
X_2= Financial Module
X_3= Procurement Module
X_4 = Customer Service Module
β1, β2, β3 and β4 = coefficients of determination
ε = error term

3.3 Ethical Consideration

The research process requires ethical compliance as per [6]. It is essential to seek permits and adhere to rules and regulations that guide the respondents and the researcher. The researcher avoided direct copying by paraphrasing and acknowledged the author of all review materials used. The researcher assured the respondents that the information shared washighly confidential and would not be disclosed to any third party for any other business. During the presentation of the findings, the researcher ensured that the data collected was de-identified and cannot be traced back to the respondents.

4. Research Findings

4.1 Respondents Response Rate

Out of the 357 questionnaires administered, 85 supervisory staff filled out the questionnaire giving a response rate of 85% among this staff category. Among the general staff, 236 participated, giving a rate of 91.5% response. The researcher attributes the high response rate achieved to the use of an online questionnaire. [6] Recommends a response rate of not less than 50%, whereas a high of 70% is considered excellent. As per the assertion, the study was, therefore, excellent.

4.2 Test for reliability

Table 1: Research instrument reliability test

Variable	Cronbach's Alpha	Number of items
Human Resource Module	0.849	9
Procurement Module	0.890	11
Financial Module	0.858	8
Customer Service Module	0.881	8
Organizational Performance	0.891	9

Source: Primary Research Data (2020)

Table 1 revealed that the study variables had attained a minimum coefficient of 0.7, which is a requirement. With a Cronbach's alpha of 0.849 (human resource), 0.890 (procurement), 0.858 (financial), 0.881 (customer service), and 0.891 (performance), it is a confirmation that the instrument was reliable to be used to collect final data for the study.

4.3 Descriptive Analysis

The analysis helps to reveal the extent to which the respondents agreed with the study variables. Tables with means and standard deviation were generated to present the analysis findings.

Firstly, as guided by the objective of the study to assess the impact of human resource integration on the organizational performance of Safaricom PLC, a list of statements was given to the respondents to state their level of agreement by ticking in the boxes on a scale of one (strongly disagree) to five (strong agree). Table 4.3 illustrates their responses.

Table 2: Human Resource module

	N	Mean	Std. Deviation
Do you find the ERP system very essential in the tracking of annual leave?	321	4.18	.825
Do you think the ERP system accurately tracks leave compensation?	321	4.27	.804
Is the ERP system is beneficial in disseminating company product knowledge?	321	3.70	.837
Do you find the ERP system's logging schedules easy to adhere to?	321	4.19	.855
The ERP system helps implement effective training programs.	321	3.52	.821
Do you think that the ERP system has interactive, informative, and well-laid-out trainings?	321	4.60	1.042
Does the ERP system provide regular assessments and product reviews depending on customer feedback?	321	3.19	1.125
The ERP system is essential for flagging and tracking disciplinary measures.	321	4.69	.974
The HR department has enough skilled personnel readily available to provide ERP system support.	321	3.49	1.026
Valid N (listwise)	321		
Aggregate mean		**3.98**	**0.923**

Source: Source: Author (2020)

In general, with an aggregate M=3.98 and SD=0.923, the human resource function is not entirely stable. Sometimes human resource ERP may experience a breakdown if the system is outdated.

Table 3: Procurement module

	N	Mean	Std. Deviation
Do you think that the ERP system has processing modes that are realistic and accurate?	321	3.66	.872
Does the ERP system have consistent, up-to-date measuring/tracking of stock?	321	4.13	.909
Does the ERP system have real-time processing of supplier's and vendor's requests?	321	3.48	.835
Does the ERP system provide B2B marketplaces for procurement (Internet-based procurement)?	321	4.58	1.023
Do you think that the ERP system procurement module provides accurate definitions of material requirements to suppliers and vendors?	321	3.20	1.098
Does the ERP system procurement module lead to the effective management of the supply chain?	321	3.66	.980
Does the ERP system automatically correct errors in purchases or sales?	321	3.49	1.026
The ERP system generates weekly/ daily turnover reports that are accurate and easy to understand	321	3.70	.994
Are the ERP procurement systems primarily objective towards quality?	321	4.31	1.051
Do you agree that the ERP systems procurement goals are primarily associated with minimizing technical and financial risks?	321	4.76	1.047
Are the ERP systems procurement goals primarily associated with the system's integrity and protection against competition?	321	3.18	1.007
Valid N (listwise)	321		
Aggregate mean		**3.83**	**0.985**

Source: Author (2020)

The respondents are not sure that the ERP procurement practice is well established, with an aggregate M=3.83 and SD=0.985. ERP cannot protect over competition. Additionally, ERP procurement goals can be influenced by economic, social, and political crises within the system.

Table 4: Financial module

	N	Mean	Std. Deviation
Do you think that the ERP system has up-to-date, real-time processing of employee payslips and financial information?	321	3.41	.537
Does the ERP systems finance module keep track of employees' payments as reimbursements for missed leave uptake?	321	4.23	.920
Does the ERP systems finance module keep track of payments made to employees as reimbursements for faulty insurance cards?	321	3.82	.889
Does the ERP system help in the reduction of the amount of time taken and frequency of preparation of financial statements (monthly, quarterly and annual statements)?	321	4.24	.935
Does the ERP system has accurate processing of overtime compensation for employees?	321	3.31	.903
Do you find the processing of employee payslips fair and very accurate?	321	3.58	.700
Are the ERP system finance goals primarily associated with quality, integrity, and maintenance of staff confidentiality?	321	3.57	.747
Are the ERP system finance goals primarily associated with the minimization of both technical and financial risks?	321	4.46	.688
Valid N (listwise)	321		
Aggregate mean		**3.83**	**0.790**

Source: Author (2020)

An aggregate M=3.83 and SD=0.790 reveals that the ERP finance module is not fully established. A good Accounting Information System (AIS) allows for historical and forecasting of accounting information incorporating accounting, management, and financial analysis. Furthermore, reliable information from an ERP system helps the management establish and formulate a working budget. Poor adoption of ERP finance can be attributed toa lack of proper training of the staff and a lack of system documentation for a better understanding of the ERP system.

Table 5: Customer Service module

	N	Mean	Std. Deviation
Is the ERP system module for handling customer complaints up to date and realistic?	321	4.97	.836
Does the ERP system correctly capture customer feedback?	321	3.96	.965
Does the ERP system rate customer service calls fairly?	321	3.45	1.067
Does the ERP system allow for customers to be well compensated in terms of bonuses or other incentives?	321	4.65	.993
Does the ERP system has an unbiased method for the selection of customers to receive bonuses/incentives?	321	4.55	.992
Does the ERP system provide periodic customer reports accurately captured and processed in the system in real-time?	321	3.88	1.020
Do you agree that the ERP System's Customer Service module is vital in tracking customer complaints while still maintaining customer confidentiality?	321	3.14	.961
Do you agree that the ERP System's Customer Service goals are primarily associated with protection over competition?	321	3.86	1.028
Valid N (listwise)	321		
Aggregate mean		**4.05**	**0.983**

Source: Author (2020)

Lastly, an M=3.86 and an SD=1.028 show that most participants neither agree nor disagree that the ERP System's Customer Service goals are primarily associated with protection over competition. However, the aggregate M=4.05 and SD=0.983 indicate that the ERP customer service module is well adopted. Customer service is one of the key business focus.

Table 6: Safaricom PLC Performance

	N	Mean	Std. Deviation
Does the ERP system significantly contribute to high employee satisfaction?	321	4.74	.987
Does the ERP system have a positive impact on overall customer satisfaction?	321	4.31	1.051
Has the ERP system contributed to higher customer service ratings?	321	4.77	1.055
Is the ERP system efficient in the handling of customer queries and feedback?	321	3.16	1.036
Does the ERP system facilitate cohesion between different business units?	321	3.65	1.068
Is the ERP system is vital in enhancing organizational, operational efficiency?	321	3.88	.841
Does the ERP system contribute to an overall reduction of system downtime?	321	4.19	.868
The ERP system enhances operational effectiveness, for example, reduction of TAT's and System SLA's	321	3.55	1.138
The ERP system has enhanced monitoring and evaluation through the production of real-time reports.	321	4.71	1.128
Valid N (listwise)	321		
Aggregate mean		**4.11**	**1.019**

Source: Author (2020)

In conclusion, with the aggregate M=4.11 and SD=1.019. A well-programmed ERP system can generate appraisal and other reports that can help to monitor and evaluate the performance.

4.4 Correlation Analysis

The degree of relationship between the two sets of variables was established using the Pearson correlation analysis. The result of the investigationof the correlation between the ERP integration and organization performance is present in table 7.

Table 7: Correlation analysis

	HR	PR	F	CS	OP
HR	1				
PR	.684**	1			
F	.570**	.420**	1		
CS	536**	.681**	.421**	1	
OP	.622**	.736**	836**	.695**	1
**. Correlation is significant at the 0.01 level (2-tailed).					

Independent variables: Human resource, Procurement, Financial, Customer service

Dependent variable: Safaricom PLC performance
Source: Author (2020)

Pearson correlation of human resources and organizational performance was established as r=0.622 and p=0.022, revealing a solid relationship. On the other hand, the Pearson correlation for procurement and organizational performance was r=0.736 and p=0.008, indicating a strong positive relationship and a significant p-value. That means procurement is a crucial factor to aid organizational performance. The r=0.836 and P-value of 0.000 show that financial and organizational performance had a strong positive relation and significant p-value. Lastly, with r=0.695 and p=0.016, the results validate that customer service revealed a strong positive relationship with the dependent variable as indicated by a significant p-value. Therefore, this means that when improvements in customer service are made, the organizational performance increases.

4.5 Diagnostic tests

Multi-Collinearity and normality tests were carried out as diagnostic tests to check the normality of data distribution and the multicollinearity symptom.

Table 8: Multicollinearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Human Resource	.946	1.057
	Procurement	.927	1.079
	Finance	.913	1.096
	Customer service	.982	1.018

a. Dependent Variable: Safaricom PLC performance
Source: Author (2020)

The analysis revealed that all variable VIF ranges between 1 and 10, which is an acceptable margin. The human resource had a VIF value of 1.057, procurement had 1.079, finance

had 1.096, and customer service had 1.018, all of which were within the range of 1 to 10. It is abdication that there is no exact linearity exist between study variables.

Table 9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.808[a]	.654	.647	.29787
a. Predictors: (Constant), Human resource, Procurement, Finance, Customer service b. Dependent Variable: Safaricom PLC performance				

Source: Author (2020)

Table 9 presents the model summary of the analysis. R and R^2 represent the correlation coefficient and coefficient of determination between the independent and dependent variables. The R was found to be 0.808, which demonstrates a sturdy positive relationship between the study variables. From the analysisR^2= 0.654, human resource, procurement, finance, and customer service can contribute up to 65.4% of the organization's performance. Hence, the remaining 34.6% of the organization's performance is attributable to other factors not incorporated in this model.

Table 10: Analysis of variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.306	4	6.769	19.556	.000[b]
	Residual	30.112	316	.346		
	Total	50.418	320			
a. Dependent Variable: Organizational performance						
b. Predictors: (Constant), Human resource, Procurement, Financial, Customer service						

Source: Author (2020)

The ANOVA analysis finding in Table 10 demonstrates that the model was acceptable, as revealed by a p-value of 0.000 and F=19.556.

Table 11: Regression Coefficients

Model		Unstandardized Coefficients		t	Sig.
		B	Std. Error		
1	(Constant)	3.675	.716	5.132	.000
	HR	.783	.402	1.948	.011
	F	.684	.269	2.542	.008
	PR	.596	.340	1.753	.020
	CS	.760	.478	1.590	.035

a. Dependent Variable: Safaricom PLC Performance
Source: Author (2020)

$$Y = 3.675 + 0.783X_1 + 0.684X_2 + 0.596X_3 + 0.760X_4$$

The multi-regression analysis reveals that when all predictor variables are held constant, the organization performance of Safaricom PLCstands at 3.675 units as per the model. Additionally, from the regression results analysis, human resources seemed to have a positive statistical and significant effect on organization performance with β_1=0.783, t=1.948, p=0.011, and α=0.05. A positive $\beta_1$value means that an additional unit of the human resource module increases organization performance with 0.783 units in the same direction. It is evident that a well-integrated human resource module improves human power performance and, thus, the performance of Safaricom PLC.

The analysis findings demonstrate that the financial module had a significant impact on the performance of the organization. This was proven with β_2=0.684, t=2.542, p=0.008 and α = 0.05. The positive β_2 coefficient means that an additionalfinancial module unit results in a subsequent significance in organizational performance by 0.684 units in the same direction. Additionally, from the regression analysis result, the findings indicated that the procurement module had a positive and statistically significant effect on organizational performance with β_3=0.596, t=1.753, p=0.020, and α = 0.05. The $\beta_3$value was positive, indicating that procurement had a direct effect on the performance of the organization.

The results further revealed that an additional unit of procurement module resulted in an increase in organizational performance by 0.596 units in the same direction. Finally, it was established that customer service had a significant and positive effect on the organization's performance with β_4= 0.760, t=1.590, p=0.035, and α = 0.05. Therefore, an additional unit of customer service module increases organizational performance by 0.760 units in the same direction. Organizational performance relies on various factors, including proper resource allocation and human resource management, among others.

5.1Recommendations

Firstly, a few aspects need some improvement in the HRM integration to utilize human capital at various levels. Such areas include but are not limited to: a review of performance, staffing, compensation, staff training, and succession. The study recommends outsourcing various administrative and routine duties, leaving the HR staff with enough time to focus on strategic, primary administrative tasks and overall business value. Consequently, the department would earn respect because of its contribution to the enterprise value. It's also prudent for the HR department to align itself with the objectives/goals of other departments; this would greatly help them measure their business performance accurately.

Secondly, it is recommended that Safaricom PLC supports the general effectiveness and efficiency of financial module integration (timeliness, relevance, and reliability) and organization performance on the financial module. For tremendous success, the finance department needs to incorporate a corporate support model and the basic disciplines of a learning organization and sensitization of customers and staff to achieve all the milestones of financial module integration.

Research into the integration of the procurement module revealed that the management of Safaricom PLC should make sure that the procurement department sets clear procurement guidelines and complies with the set standards. In addition, services management should address procurement issues according to the set standards to benefit the entire organization through a bottom-up approach. The Safaricom PLC procurement department could also adopt a cross-culture to continuously improve, collaborate, and actively make strategic procurement informed decisions.

Lastly, on the customer service module, the study recommends that the customer service team collect customer feedback via customer relations management in the ERP system to build long-term customer relations and improve the organization's performance. The study also recommends that the ERP customer service interface be regularly upgraded and updated to generate reports that can be used to make informed decisions by the management. This will help the department to serve customers to satisfaction.

5.2 Areas for Further Studies

The research concentrated on the impact of ERP integration and Safaricom PLC performance. The study focused on a public telecommunications company and to allow for generalization. The study suggests that related research be conducted on other telecommunication companies in Kenya. Further, a survey to performed on the impact of enterprise resource planning systems on private telecommunication companies.

References

[1] Al-Jabri, I. M. (2015). Antecedents of user satisfaction with ERP systems: mediation analyses. *Kybernetes*, *44*(1), 107-123.
[2] Chege, A. W. (2016). *The Influence of Employee Benefits on Retention at Safaricom Limited*. Unpublished MBA Project, University of Nairobi, Kenya
[3] Dao, V., Langella, I., & Carbo, J. (2011). From green to sustainability: Information Technology and an integrated sustainability framework. *The Journal of Strategic Information Systems*, *20*(1), 63-79.
[4] Galani, D., Gravas, E. & Stavropoulos, A. (2010). The impact of ERP systems on accounting processes. *World Academy of Science, Engineering and Technology*, *66*, 418–423.
[5] Kalleberg, A. L., & Moody, J. W. (2014). Human resource management and organizational performance. *American Behavioral Scientist*, *37*(7), 948-962.
[6] Mugenda, O. M. and Mugenda, A. G. (2003). Research Methods: *Quantitative and Qualitative Approaches*. Nairobi: Acts Press
[7] Zhao, Y., & Fan, Y. S. (2007). Implementation approach of ERP with mass customization. *International Journal of Computer Integrated Manufacturing*, *20*(2-3), 160-168.