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Drivers of Digital Billing Systems and Performance of Kenya Power Company in Kisumu County

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Abstract

Purpose: This study focused on the drivers of digital billing and performance of Kenya Power and Lighting Company Limited. The study was guided by four specific objectives namely; to assess the effect of timeliness, ease of use, billing accuracy and billing costs on Performance of Kenya Power and Lighting Company Limited.

Methodology: This study adopted a descriptive survey research design. The study was carried out in Kenya Power and Lighting Company Limited in Kisumu. The target population for the study comprised of all the 2060 customers of Kenya Power and Lighting Company Limited in the County of Kisumu. Stratified sampling was adopted to select customers with respect of the mode of use. Sample of the study was 335 customers as determined by Yamane ‘s 1967 formula. Primary data was sourced using a semi structured questionnaire that was subjected to validity and reliability test for determination of its strength for the study. Data collected was coded for input in SPSS version 24 software that assisted on analysis of descriptive statistics for determination of; frequencies, percentages, means and standard deviation. Inferential statistics comprised of Multiple Regression and Correlations of the study. Data was presented in form of tables.

Findings: The results of the study indicated that the digital billing drivers had a significant influence on performance of Kenya Power and Lighting Company Limited, Kisumu County, Kenya. In terms of impact Ease of Use was ranked first, followed by Billing Costs, Billing Accuracy and Timeliness.

Unique Contribution to Theory, Policy and Practice: The study recommends for Kenya Power and Lighting Company Limited to apply good digital systems as they enhance the performance of the company. Further studies are encouraged on the same variables of the study in other organizations having the pre-paid system.

Keywords: *Billing Accuracy, Billing Costs, Timeliness, Performance, Digital Billing System*.

Background of the study

The dynamic nature of global business environment which results from technological advancements, economic restructuring, labour movements, and public demands for better products and services have forced organizations to reconsider their business strategies in order to achieve a sustained competitive advantage (Miyogo, Ondieki, & Nashappi, 2013). It is through this competitive advantage that the organizations are able to maintain growth and profitability. Organizations are open systems that are influenced by the external environment and should use available resources of people, structures, and processes aligned with the right business strategy to yield gains in performance, efficiency and productivity (Almossawi, 2012).

Throughout the world, shifts in population demographics, technological changes, fluctuating economies and other dynamic forces have transformed organizational operations bringing new challenges and opportunities to the forefront. Among the responses to these shifting forces is an increased emphasis on entrepreneurship by governments, organizations and the public (GEM Global Report, 2012). Prepaid billing adoption has been acknowledged as a key determinant for a firm's growth and profitability. It has been related to high firm growth (Brown, Davidson & Wiklund, 2008), superior performance, and longevity (Soininen, 2013). Prepaid billing adoption offers numerous benefits to organizations. They can check bills, pay bills and ultimately reduce transaction costs and establish greater control over their bills (Frank, Kessler & Fink, 2010).

Prepaid billing technology has been embraced by both developed Western countries and developing ones. In the U.K. which has a long tradition of offering prepaid metering as an option to any customer, have up to 15-20 percent of its customers signed up (Chartwell, 2003). Northern Ireland Electricity, which has a new, customer-friendly prepayment system, has increased prepayment enrolment to 25 percent (Energy watch, 2005). At Arizona's Salt River Project, more than 50,000 customers (about 6 percent) are prepaid meters (Chartwell, 2008) In Ontario, Woodstock Hydro reports participation by 25 percent of residential customers.

In Kenya, one company that has adopted innovation strategies such as automation of payment and bill enquiry is the Kenya Power and Lighting Company (KPLC). Electricity users all over Kenya can electronically pay their bills using mobile banking apps, through Mpesa and Airtel money Pay Bill services (Wasua & Wanyoike, 2015).KPLC has enabled its customers countrywide to get updates on their bills status, power supply interruptions and general communications through the following channels; SMS alerts, USSD services, Email alerts and Social media interactions Twitter, Facebook, Telegram, Instagram and Snapchat, this improved service delivery (Kiarie, 2014).

According to Okonga (2012), digital billing system refers to the outlay made by a consumer for using a good or service before consumption. Whaling (2000) observes that e-billing is an electronic delivery and presentation of financial statements and bills, invoices and any other related information that focuses on business to consumer billing and payment. Ogujor and Otosowie

(2010) defines prepaid billing system is a system where a service or a good is consumed after paying for it. Consequently, there are certain costs that may be avoided for billing in advance a given service or good. For instance, costs associated with bad debts. This may lead to increased levels of revenue as well as reduced some operational costs for a given organization.

KPLC is a limited liability company that transmits, distributes and retails electricity to customers throughout the country. The company manages electric metering, licensing, billing, emergency electricity service and customer relations (Makowenga, 2013). According to Kenya power (2009), the demand for electricity has grown at an annual average rate of 5.3% from 2008 to 2013 and is expected to accelerate to over 10 % yearly as a result of the implementation of the Vision 2030 projects. KPLC strategic plan 2009/10 to 2013/14 comprises of operational objectives that help the company realize its strategic plan. Supply quality improvement was one of the major objectives which impacts largely on customer satisfaction, enhanced sales and revenue and improved operational cost saving and operational performance.

In addition, with the drastic increase in non-payment of electricity bills by KPLC customers, the company opted to slowly introduce pre-paid meters as a means of trying to reduce frequency of defaulters the defaulters. However, this adoption into post-paid electricity billing has raised regular complains by the electricity consumers to KPLC management. In addition, KPLC image as been put into question by consumers of electricity. In spite of the rapid diffusion of post payment systems, the arguments in favour of or against prepaid meters have not been comprehensively examined before, and neither has their welfare impact (Casarin & Nicollier, 2009). The study therefore seeks to establish the effect of digital billing system on Performance of Kenya Power Company, Kenya.

General Objective

The aim of this study was to establish the influence of digital billing drivers on performance of Kenya Power and Lighting Company Limited, Kisumu County, Kenya.

Specific Objectives

The specific objectives of this study were: -

i. To analyse the effect of timeliness of digital billing system on Performance of Kenya Power and Lighting Company Limited, Kisumu County, Kenya
ii. To determine the effect of ease of use of digital billing system on performance of Kenya Power and Lighting Company Limited, County Government of Kisumu; Kenya
iii. To assess the effect of billing accuracy of digital billing system on performance of Kenya Power and Lighting Company Limited, County Government of Kisumu; Kenya
iv. To establish the influence billing costs of digital billing system on performance of Kenya Power and Lighting Company Limited, County Government of Kisumu; Kenya

LITERATURE REVIEW

Theoretical Literature Review

The SERVQUAL Model, developed by Zeithaml, Parasuraman, and Berry (1988), assesses service quality by measuring the gap between customer expectations and actual service experience. It identifies key dimensions Reliability, Responsiveness, Competence, Access, Courtesy, Communication, Credibility, Security, Knowing the Customer, and Tangibles which influence service perception. The model highlights five service gaps: Knowledge Gap, Standards Gap, Delivery Gap, Communication Gap, and Satisfaction Gap, which organizations must address to enhance customer satisfaction.

The Expectancy Disconfirmation Theory (EDT) explains customer satisfaction by evaluating expectations against actual performance. It establishes three relationships: (1) performance directly influences satisfaction, (2) expectations affect satisfaction by setting a baseline for judgment, and (3) disconfirmation occurs when expectations are either exceeded (positive) or unmet (negative), impacting satisfaction levels. High expectations reduce the likelihood of positive disconfirmation even with high performance, potentially leading to dissatisfaction.

The Technology Acceptance Theory (TAT), derived from the Technology Acceptance Model (TAM) by Davis (1989), examines factors influencing technology adoption. It emphasizes Perceived Usefulness (PU) how technology enhances efficiency and Perceived Ease of Use (PEOU) how effortless it is to use. These factors shape user intention to adopt technology, with external variables indirectly influencing PU and PEOU. Studies suggest that usefulness, rather than attitude, primarily drives adoption. TAM is widely used to assess organizational readiness for new technologies, such as digital billing systems, ensuring alignment with business needs.

Empirical Literature Review

Several studies on the global scene have been carried out in reference to prepaid billing in most of the service provision organizations, for example in electricity and water provision companies. Most scholars among them; (Tirop and Ng'ang'a, 2018: Moki, 2015: Ottumwa, 2014: Dadzie, 2012) had studies on prepaid electricity billing systems that leaned on quantitative benefits performance with less acknowledgement on qualitative yields putting in consideration it is a service sector. However, few researches have been done in Kenya to show the relevance of such prepaid system in other service sectors a part from the concentration on electricity service sector and few studies on water sector. In the study by Moki (2015) on relationship between prepaid billing system and working capital management it was evident, majority of global and local literature have concentrated on the qualitative aspects of prepaid billing systems, zeroing on opinions and perceptions of the prepaid users and acceptability of the prepaid system, hence; quantitative aspects of prepaid billing system have not been adequately explored as expressed in empirical study above. Coverage of the studies in the entire Kenya was not representative enough for the country; performance which is key for the organizations has not been underscored as a very

important dependent variable in most companies apart from consideration of revenue, profit and transition capabilities being dependent variables.

Conceptual Framework

According to Orodho (2009) a conceptual framework is a model of presentation where a researcher represents the relationship between variables in the study and shows the relationship diagrammatically in Figure below.

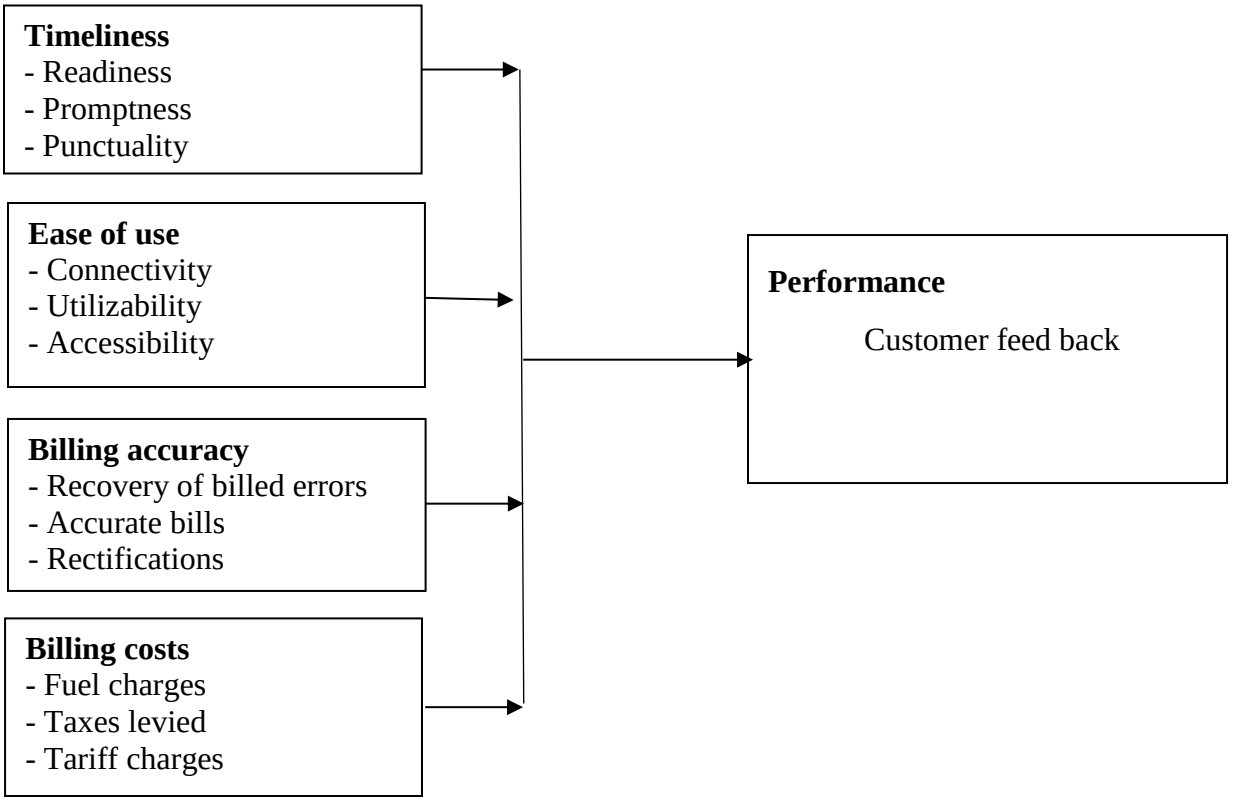

Figure 1: Conceptual Framework

RESEARCH METHODOLOGY

This study adopted a descriptive survey research design, which is widely used for collecting large amounts of quantitative data from a representative sample. According to Cooper and Schindler (2021), research design is a structured plan for data collection, measurement, and analysis. Srivastava and Rego (2011) describe it as a sequential plan to achieve research objectives. The descriptive design was chosen as it effectively explains situations. The target population comprised 2,060 prepaid meter customers of Kenya Power and Lighting Company Limited (KPLC) in Kisumu Town, County Government of Kisumu. The population distribution included 14 industrial customers, 830 commercial customers, and 1,216 individual customers. The sample size was

determined using Yamane's (1967) formula, resulting in a sample of 335 respondents. The study used a proportionate stratified random sampling technique, ensuring that each subgroup industries, commercial customers, and individuals was proportionally represented. Westfall (2018) notes that stratified sampling is ideal for heterogeneous populations, while Greener (2016) highlights its effectiveness in ensuring a fair representation. The study used semi-structured questionnaires for primary data collection. The questionnaire, designed using a Likert scale, was filled by KPLC customers in Kisumu. Questionnaires were preferred due to their cost-effectiveness and time efficiency compared to other methods. Overall, the research design ensured systematic data collection, while the sampling technique guaranteed a representative and unbiased sample for accurate findings.

RESEARCH FINDINGS AND DISCUSSIONS

Descriptive Statistics

The descriptive statistics presented in this section are summated responses on the statements measuring the study's independent variables (Timeliness, Ease of use, Billing Accuracy, Billing costs) and dependent variable (Performance) using Likert scale with values ranging from 5 to 1; that is; 5=Strongly Agree, 4=Agree, 3= Uncertain, 2=Disagree and 1= Strongly Disagree. The results are presented in the table form showing frequencies of responses as per each statement and its corresponding percentage score in brackets, means and standard deviations.

Descriptive statistics: Timeliness and Performance

These are summarized responses on whether Timeliness influence performance of Kenya Power and Lighting Company Limited. The descriptive results are presented in Table 1.

Table 1: Descriptive statistics; Timeliness

Statement	5	4	3	2	1	Mean	Std. Dev
Customer access to information on prepaid system is fast and timely	53.7%	32.7%	8.6%	4.7%	0.4%	4.1	0.92
It takes a lot of time for the prepaid meter to be reconnected once power supply is disconnected	2.4%	2%	6.3%	42.1%	47.2%	4.3	0.86
There is immediate reconnection of power upon the purchases of the token	28%	37%	20.1%	7.1%	7.9%	3.71	1.17
Pre-paid billing offers flexible tariff /service creation' and 'streamlining of customer processes	37.4%	25.2%	21.7%	7.1%	8.7%	3.65	1.16
Tokens are easily accessible whenever needed	3.1%	5.9%	23.9%	42%	25.1%	3.8	0.99

From table 1, most respondents mostly agreed (53.7%) that customers access to prepaid billing information is fast and timely, however (32.6%) as well agreed implying the performance of Kenya Power and Lighting is being recognized through the prepaid billing system and service response is fast. More so, (0.4%) strongly disagreed, (4.7%) disagreed and (8.6%) were uncertain about the statement. Whether it takes long for reconnection of meters or not, (2.4%) of the customers strongly supported the statement, (2%) supported the statement, (47.2%) strongly disagreed and (42.1%) disagreed on the information about the statement. Regarding immediate reconnection of power upon purchase of tokens, (28%) strongly agreed, (37%) agreed, 7.9% disagreed with the information of the are well trained in agent banking while 15.5% disagreed to the statement while (7.1%) strongly disagreed implying that there was good performance of Kenya Power and Lighting Company Limited since majority of customers supported that the company responds fast on reconnection once the tokens are paid. Regarding Pre-paid billing offering flexible tariff /service creation' and 'streamlining of customer processes, (37.4%) strongly agreed with the statement's information, (25.2%) agreed, while (7.1%) disagreed and (8.7%) strongly disagreed and as such implied that many supported the statement's sentiments.

In the study by Otukudor *et al*. (2015) it was further noted that timeliness in respect to timely responses and communication between customer and company in an online sphere was fundamental for the effectiveness of electronic service use by property buyers. In a study

conducted on the internet banking service quality in Johannesburg, it was noted that timeliness security, information accessibility were important tenets for an online system quality. In the same study, since online system services do not involve face to face interaction, it was emphasized that courtesy and timeliness of the flow of information between the customers and the involved companies be maintained in order to enhance the relationship between the parties and ensure effective and efficient purchase and delivery of services and hence improve on performance.

Descriptive statistics: Ease of Use and Performance

These are summarized responses on whether Ease of Use Influence Performance of Kenya Power and Lighting Company Limited. The descriptive results are presented in table 2.

Table 2: Descriptive statistics; Ease of Use

Statement	5	4	3	2	1	Mean	Std Dev
It is easy to learn how to use the pre-paid billing system.	51%	22.4%	11.6%	8.9%	6.2%	3.72	1.15
Use of pre-paid billing does not require technical skill.	56.4%	31.7%	6.6%	1.5%	3.9%	4.13	0.81
Use of pre-paid billing does not require a lot of training from experts.	51.2%	34.2%	7.7%	3.8%	3.1%	4.09	0.94
The technology of pre-paid billing is clear and easy to understand.	35.1%	53.1%	9.2%	1.5%	1.1%	4.22	0.74
The pre-paid billing system is user friendly.	50.6%	24.1%	11.5%	7.1%	6.7%	3.78	1.11

From table 2, most respondents agreed (22.4%) and strongly agreed (51%) that it was easy to learn how to use the prepaid billing system, (11.6%) of the customers were uncertain about the statement, (8.9%) disagreed and (6.2%) strongly disagreed. Regarding the statement of use of pre-paid billing not requiring the technical skill, (56.4%) strongly agreed, (31.7%) agreed, (6.6%) of the customers were uncertain on making their decision while (1.5%) disagreed and (3.9%) strongly disagreed implying that it was not complex on application of required skills on prepaid billing system. On the statement of using pre-paid billing system with support of not requiring a lot of training from experts, (51.2%) strongly agreed, (34.2%) agreed, (7.7%) of the customers were uncertain, while (3.8%) disagreed and 3.1% strongly disagreed, implying that the system never required a lot of training. On consideration of the technology of pre-paid billing being clear and easy to understand, (35.1%) strongly agreed, (53.1%) agreed, (9.2%) were uncertain and (1.5%) disagreed, implying the prepaid system was clear and easy to understand. Regarding the statement,

pre-paid billing system is user friendly, (50.6%) strongly agreed, (24.1%) agreed that prepaid billing system was friendly, (11.5%) of the customers were uncertain, (7.1%) of the customers disagreed and (6.7%) strongly disagreed. It implied that the system was friendly on application. Lastly as concerns the statement of how easy it is to learn and how to use the pre-paid billing system, (54.2%) of the customers strong agreed, (29.1%) agreed, (10.4%) were uncertain and (2.4%) disagreed, hence the majority supported the sentiments of the statement.

Among the scholars on ease of use on prepaid billing system; Sing, (2017) suggested, the factors such as perceived ease of use, expressiveness and trust affect adoption of digital wallet as a payment method. These factors are termed as facilitators and plays crucial role in adoption of digital payment solution. Usage of digital wallet among youth in the state of Punjab was found to be associated with societal influence and usefulness, controllability and security, and need for performance enhancement. Premium pricing, complexity, a lack of critical mass, and perceived risks are the barriers to adoption of digital payment systems.

Descriptive statistics: Billing Accuracy and Performance

These are summarized responses on whether Billing Accuracy Influence Performance of Kenya Power and Lighting Company Limited. The descriptive results are presented in table 3.

Table 3: Descriptive statistics; Billing Accuracy

Statement	5	4	3	2	1	Mean	Std.dev
Pre-paid billing system ensures that bills are raised on a monthly basis and based on accurate metre reading	50.9%	19.2%	8.5%	11%	10.4%	3.58	1.21
Through pre-paid billing system less power is consumed	55.7%	19.6%	10.7%	5.2%	8.8%	3.76	1.03
Prepayment systems has resulted in a decrease in metering, billing costs	47.6%	19.2%	15.1%	8.5%	9.6%	3.58	1.17
Prepayment meter is more accurate to the consumer because it enhances more control.	15%	45.8%	11.1%	9.6%	18.8%	3.44	1.31
Prepayment meters reduce corruption within ranks thus are more accurate bills	49.8%	35.1%	10%	1.5%	1.7%	4.13	0.85

From table 3, most respondents agreed (19.2%) and strongly agreed (50.9%) that Pre-paid billing system ensures that bills are raised on a monthly basis and based on accurate metre reading, while (8.5%) were uncertain, (11%) disagreed and (10.4%) strongly disagreed, the implication was that the system works on time hence it enhances performance. Regarding the statement of through pre-paid billing system the power consumed was less, (55.7%) strongly agreed, (19.6%) agreed, (10.7%) of the customers were uncertain, (5.2%) disagreed and lastly (8.8%) strongly disagreed. However, it implied less power was consumed when prepaid system was applied and it enhanced performance. Concerning the statement, Prepayment systems has resulted in a decrease in metering, billing costs, (47.6%) strongly agreed (19.2%) agreed, (15.1%) of the customers were uncertain and (8.5%) disagreed and (9.6%) strongly disagreed, the implication was that associated costs were minimized hence it enhanced performance. According to the statement of Prepayment meter being more accurate to the consumer because it enhances more control, (15%) of the customers strongly supported the sentiments, (45.8%) agreed (11.1%) were uncertain, (9.6%) disagreed and (18.8%) strongly disagreed. For the statement that supports reduction of corruption, (49.8%) strongly agreed, (35.1%) agreed (10%) were uncertain, (1.5%) disagreed and lastly (1.7%) strongly disagreed.

Okonga (2012) among other researchers noted that efficiency in debt collection from the consumers is an area that needs attention by the electricity sector. The question of how the electricity sectors make up for the losses as a result of unpaid electricity bills remains a puzzle. Electricity sectors in Nigeria face crippling non-payment and escalating debts. These researchers emphasize that developing economies have had to labour with huge accumulated debts from yester years, due to un-recovered tariffs and failure to collect debts from consumers.

Descriptive statistics: Billing Costs and Performance

These are summarized responses on whether Billing costs influences performance of Kenya Power and Lighting Company Limited. The descriptive results are presented in table 4.

Table 4: Descriptive statistics: Billing costs

Statement	5	4	3	2	1	Mean	Std.dev
Billing through emails is less costly	18.3%	51.1%	9%	9.7%	11.9%	3.47	1.11
Billing through text messaging is fast and cost effective	41.6%	28.1%	12.4%	4.1%	14%	3.76	1.13
Electronic bills are received in good time hence cost efficiency	52.2%	19.4%	10.8%	7.1%	10%	3.66	1.12
Customers respond to electronic bills faster than postal bills thus reducing billing costs	37.7%	17%	18.1%	13%	14%	3.32	1.27
Dispatching electronic bills in bulk is faster than postal bills thus reducing billing costs	41.2%	14.6%	11%	13%	21%	3.49	1.25

From table 4, most respondents agreed (51.1%) and strongly agreed (18.3%) that the billing through emails is less costly, more so, (9%) of the customers were uncertain and (9.7%) of respondents disagreed and (11.9%) strongly disagreed respectively on the sentiments of billing through the email. Regarding billing through text messaging being fast and cost effective, (41.6%) strongly agreed, (28.1%) of the customers agreed, (12.4%)of the customers were uncertain, (4.1%) of the customers disagreed and (14%)strongly disagreed. The implication was that texting was affordable to every customer since it was cost effective. Concerning electronic bills being received in good time for cost efficiency purpose, (52.2%) strongly agreed, (19.4%) of the customers agreed, (10.8%) of the customers were uncertain, (7.1%) disagreed and (10%) strongly disagreed. The majority supported the sentiments hence it implied improved performance for Kenya Power and Lighting Company Limited. Regarding Customers responding to electronic bills faster than postal bills that enhances reduction of billing costs, (37.7%) of the customers strongly agreed (17%) agreed, (18.1%) were uncertain, while (13%) disagreed and (14%) strongly disagreed. As concerns dispatching electronic bills in bulk being faster than postal bills and hence reducing billing costs, (41.2%) of the customers strongly agreed, (14.6%) agreed and (11%) were uncertain, (13%) of the customers disagreed while (21%)of the customers strongly disagreed.

Kioko (2013) suggested, for every day bills are unpaid, businesses must find a way to cover payroll, employee benefits and other operational expenses. By reducing the collection period, i.e.

number of days it takes from the end of the billing or accounting period and invoices sent to clients and the date the payment is received- businesses can decrease the average collection period and reduce their dependence on additional sources of funds Consequently, there are certain costs that may be avoided for billing a given service or good in advance.

Descriptive statistics: Performance

These are summarized responses on performance of Kenya Power and Lighting Company Limited, County Government of Kisumu; Kenya. The descriptive results are presented in table 5.

Table 5: Descriptive statistics: Performance

Statement	5	4	3	2	1	Mean	Std.dev
Customers' complaints have reduced since introduction of pre-paid billing system	30.2%	21.8%	15.3%	14.2%	18.5%	3.17	1.344
The number of customers visiting our offices has reduced drastically since adoption of pre-paid billing system	31.6%	25.5%	20%	13.5%	9.5%	2.98	1.222
Since the introduction of pre-paid billing system, there are more compliments	21.8%	17.5%	18.5%	28.7%	13.5%	2.95	1.37
The number of disconnections has reduced since adoption of pre-paid billing system	20%	17.5%	22.2%	27.3%	13.1%	2.96	1.333
Through the adoption of pre-paid billing system bills are currently paid faster than before	21%	17.2%	17.6%	33%	11.2%	2.96	1.34

From table 5, most respondents agreed (21.8%) and strongly agreed (30.2%) that customers' complaints had reduced since introduction of pre-paid billing system, more so, (15.3%) of the customers were uncertain and (14.2%) of respondents disagreed and (18.5%) strongly disagreed respectively on the sentiments of customers' complaints have reduced since introduction of pre-paid billing system. Regarding, the number of customers visiting offices had reduced drastically since adoption of pre-paid billing system, (31.6%) strongly agreed, (25.5%) of the customers

agreed, (20%) of the customers were uncertain, (13.5%) of the customers disagreed and (9.5%) strongly disagreed. The implication was that customers were satisfied with the company's performance. Since the introduction of pre-paid billing system, there are more compliments, (20%) strongly agreed, (17.5%) of the customers agreed, (22.2%) of the customers were uncertain, (27.3%) disagreed and (13.1%) strongly disagreed. The balancing was fair among the customers who supported the sentiments and those who disliked the sentiments, hence it implied there is improved performance for Kenya Power and Lighting Company Limited. Regarding through the adoption of pre-paid billing system bills are currently paid faster than before, (21%) of the customers strongly agreed (17.2%) agreed, (17.6%) were uncertain, while (33%) disagreed and (11.2%) strongly disagreed.

On the average, the use of the prepaid meter has contributed immensely to the utility providers by reducing the financial and administrative cost and lapses which in other hand would bring the cost of selling electricity to the consumers to its barest minimum, hence there is comfort ability derived on both the utility provider and the consumer of the utility (Ariel & Luciana, 2008).

Multiple regression analysis

Multiple regression analysis was computed to assess the multivariate influence of the study's independent variables (Timeliness, Ease of Use, Billing Accuracy and Billing Costs) on the dependent variable (performance of Kenya Power and Lighting Company Limited. The multiple regression results are shown in table 6.

Table 6: Multiple regression results

Model	R	R^2	Adj. R^2	Std. Error		
a	0.557	0.31	0.288	0.51312		
Model a		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
	Regression	30.425	4	7.606	28.920	0.001
	Residual	71.102	271	0.263		
	Total	101.527	275			
Model a		**Un-standard. Coefficients**		**Standard. Coefficients**	**t**	**Sig.**
		Beta	**Std. Error**	**Beta**		
	(Constant)	1.367	0.277		4.935	0.001
	Timeliness	0.078	0.043	0.093	1.814	0.001
	Ease of Use	0.277	0.047	0.346	5.894	0.001
	Billing Accuracy	0.153	0.059	0.155	2.593	0.016
	Billing Costs	0.193	0.062	0.173	3.112	0.002

a. Dependent Variable: Performance

b. Predictors: (Constant), Timeliness, Ease of Use, Billing Accuracy, Billing Costs,

Multiple regression analysis in table 6 shows the multiple regression results of the combined influence of the study's independent variables (Timeliness, Ease of Use, Billing Accuracy and Billing Costs). The model's R squared (R^2) is 0.31 which shows that the study explains 31% of variation in the performance of Kenya Power and Lighting Company Limited, while other factors not in the conceptualized study model accounts for 69 %, hence, it is a good study model.

Furthermore, Analysis of Variance (ANOVA) shows the mean squares and F statistics significant (F = 28.920; significant at $p<.001$), thus confirming the fitness of the model and also implies that the study's independent variables (Timeliness, Ease of Use, Billing Accuracy and Billing Costs) have significant variations in their contributions to Performance of Kenya Power and Lighting Company Limited.

Finally, the values of unstandardized regression coefficients with standard errors in parenthesis in table 6 indicate that all the study's independent variables (Timeliness; $\beta = 0.078$ (0.043) at $p<0.05$, Ease of Use; $\beta = 0.277$ (0.047) at $p<0.05$; Billing Accuracy; $\beta = 0.0.153$ (0.059) at $p<0.05$, Billing Costs; $\beta = 0.193$ (0.062) at $p<0.05$, significantly influenced Performance of Kenya Power and Lighting Company Limited (the dependent variable).

In this regard, the study's final multiple regression equation is;

(v) $Y= 1.367 +0.078X_1+0.277X_2+ 0.153X_3 + 0.193X_4$

Where;

y= Performance of Kenya Power and Lighting Company Limited

X_1= Timeliness

X_2= Ease of Use

X_3= Billing Accuracy

X_4= Billing Costs

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Findings of the study establishes relationship between pre-payment practices being the independent variables and performance of Kenya Power and Lighting Company Limited being dependent variable. Firstly, there is a significant relationship between Timeliness and Performance of Kenya Power and Lighting Company Limited. This finding indicates that Timeliness is key on performance since activities would be handled with time as a major measure for success of an organization.

Secondly, ease of use has a significant relationship with the performance of Kenya Power and Lighting Company Limited. This indicates how flexible the processes and components of the system could be easily applied by the customers and more so enhance the performance of Kenya Power and Lighting Company Limited.

Thirdly, billing accuracy has a significant influence on performance of Kenya Power and Lighting Company Limited. This finding indicates accuracy is key and relevant on pre-paid system whereby without accuracy on data the whole system fails hence the performance of the organization would also be affected.

Fourthly, billing costs has a significant influence on performance of Kenya Power and Lighting Company Limited. Cost drivers are the major causes of failure in most organizations if not handled well. Inefficiency a rises in organizations because of escalation in costs that ultimately levied on customers hence affecting performance of an organization.

Recommendations

Findings of the study indicate adoption of pre-paid metering system seems to be very useful and hence has desired effects despite associated costs in the entire process. The following recommendations should therefore be considered;

First, the study recommends that organizations running pre-paid systems should indulge on Timeliness activity as key for improvement of performance in organizations. Timeliness means all the activities of the organization would run as scheduled.

Secondly, the study recommends that ease of use should be given a priority when associated with performance, ease of use signifies how the process and components are used by the customers as well as the organization itself.

Thirdly, the study recommends that billing accuracy as a process should be initiated by organizations. Without accuracy in the entire process the organization's performance would be jeopardized.

Lastly, the study recommends for proper initiation of billing costs processes, costs normally cause organizations to perform poorly. Proper processes of how initiations could be done on billing costs should be understood by the customers.

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