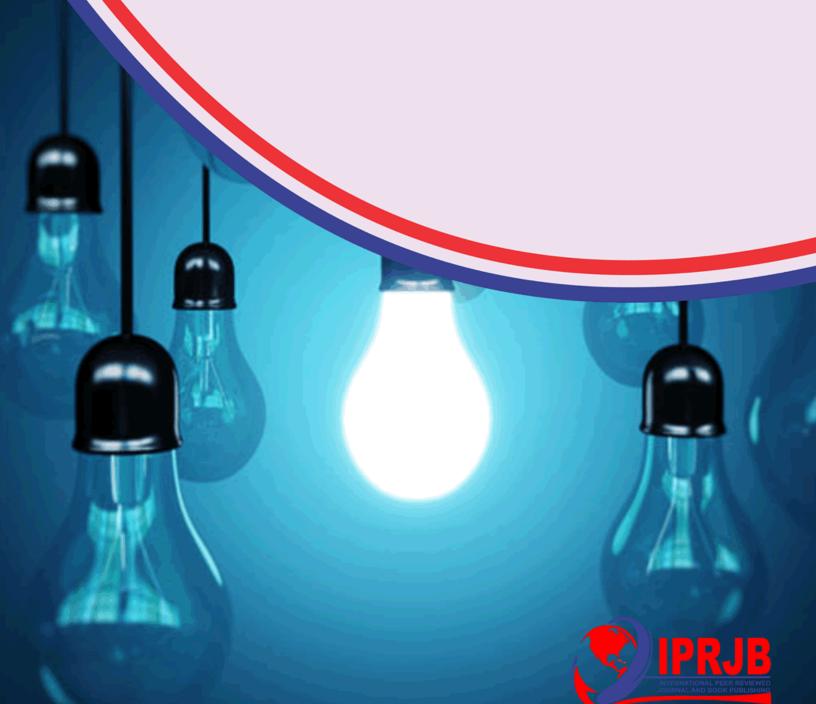
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INFLUENCE OF PROJECT MANAGEMENT INFORMATION SYSTEM ON PROJECT PERFORMANCE IN COMMERCIAL BANKS IN NAIROBI, KENYA

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### INFLUENCE OF PROJECT MANAGEMENT INFORMATION SYSTEM ON PROJECT PERFORMANCE IN COMMERCIAL BANKS IN NAIROBI, KENYA

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## Dr. Maurice Pedo, Ph.D. Jomo Kenyatta Uuniversity of Agriculture & Technology ABSTRACT

**Purpose:** Therefore, the study sought to establish influence of project management information system on project performance in commercial banks in Nairobi, Kenya.

**Methodology:** The target population for the study was the 42 commercial banks in Kenya. The study employed a descriptive survey design and was census of the 42 commercial banks head offices in Nairobi, Kenya. Data was collected by use of a structured questionnaire. The data was cleaned, coded and analyzed using a Statistical software (SPSS). The findings were presented in form of tables, charts and graphs. Descriptive statistics were deduced from the data. From this, inferential statistics were presented and associations drawn. Regression analysis was interpreted and appropriate conclusions made.

*Findings:* The findings from regression analysis showed that expertise of the project team, enduser involvement, project risk management and project monitoring and evaluation positively and significantly influence project performance in Kenyan Commercial banks.

Unique contribution to theory, practice and policy: The study was guided by the lenses of Stakeholder Management theory, Technology Acceptance Model (TAM) and the Theory of Disruptive Innovation from which the study operationalized the variables of PMIS Implementation and project performance. Banks should conduct training to all team members before commencement and during project execution. Moreover banks should involve customers in testing of projects before launching and should consider the feedback from customers.

Keywords: influence, project management information system on project performance in commercial banks in Nairobi, Kenya



#### 1.0 INTRODUCTION

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Digital Economy has gained substantial importance within the global economy as a driver of innovation and competitiveness. As part of the global village, this new ecosystem presents a unique opportunity for our economic growth. As digital technologies become the cornerstone of our daily activities, governments, businesses and individuals must adapt to this new reality. Going digital is no longer simply part of how we conduct our day to day activities but the bedrock of our economic growth (GoK, 2019; World Bank, 2016). The banking industry in the world has witnessed tremendous growth (Mwangi, 2018). The tremendous growth witnessed has been as a result of innovations in technology. This has seen increase in assets, deposits, products and profitability (Cytonn, 2018). The growth has presented banks with unique platform for enhancing efficiency and innovativeness to better address the emerging markets (CBK, 2017). With this growth, the advent of technology has meant that banks need to adopt digitization in most of their processes to increase efficiency and even launch services and products that do not necessarily require customers to visit the banking halls. It is important for organizations to adequately manage their projects so as to achieve their performance objectives. It is also noted that project management remains a problematic course since most of the projects are either not completed on time, within scope or exceed their budget (Raymond et al., 2008).

While traditional banks are still not widely adopted by the population, Africa is increasingly relying on digital and mobile offers. The very low number of branches, at 5 per 100,000 inhabitants in Africa compared to 13 per 100,000 inhabitants in emerging Asian countries, explains the explosion of the digital banking phenomenon. The volume of transactions increased from by 13% per year on the continent between 2014 & 2016 due to availability, reliability and security of channels which has made Africa the second fastest growing market in the world for electronic payments after Asia –Pacific. Moreover, about 40% of Africans now prefer to use digital channels for banking channels (Mckinsey,2019). According to Mckinsey (2019), BMCE bank in Morocco in 2016 launched Morocco's first online banking platform "BMCE DIRECT" and 2 years later, the bank launched its digital think tank and mobile payment solution DabaPay as part its digital transformation program.

According to KBA (2014), the banking industry is today operating under high levels of uncertainty and implementation of IT projects is susceptible to all sorts of external influences including unpredictable business environment, cut throat competition, ever growing regulatory requirements, changing constraints and fluctuating resource flows. This clearly shows that if such projects are applied and due steps are not taken to manage them effectively and efficiently, chances of sub-optimal project implementation become rife (KBA, 2014).

Today, due to globalization, business diversification and a growing number of different business projects, the need to support people involved in tasks related to project management is becoming increasingly important. Timely and accurate data about projects' plans, their progress and related costs, are extremely important for project managers and consequently for assuring the success of the project. In this setting, Project Management Information Systems (PMIS) are commonly viewed as an important tool for project management. PMIS are systems that provide managers with the decision-making support needed in planning, organizing, and controlling projects. One of the most consensual definitions is given by the Project Management Institute, characterizing PMIS

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as "IS consisting of tools and techniques used to gather and integrate data, and disseminate the outputs of project management processes, used to support all aspects of the project from the beginning to its closing".

Essentially, the task of Project Management Information System has been described as critical to the attainment of project goals and the implementation of project strategies, it supplies project managers with "essential information on the cost, time performance parameters of a project and on the interrelationship of these parameters" (Raymond L., 1987). In the information technology (IT) industry, Gartner Research estimates that 75% of large IT projects managed with the support of a project management information systems will succeed, while 75% of projects without such support projects will fail (Light, *et.al.*, 2005).

According to Mathenge (2018), digitization is the process of creating new business models and generating new income streams and value adding opportunities by use of digital technologies. Digitization changes the way business is done since digital technologies are integrated into every aspect of the business and everyday life. Gartner (2016), notes that digitalization provides an opportunity for businesses to advance their businesses.

Paperless digital processes enable automated and efficient processing and, therefore, competitive prices (Sumper & Merker, 2017). The time savings potential for corporate loans is particularly high for large companies, as the analysis as part of the credit process requires numerous documents. As a result, 60% of credit institutions are able to make a credit decision for small enterprises within five days. In contrast, 65% of banks are not able to make a credit decision in the medium sized business customer segment during this period, and 89% are not able to make a credit decision at all in the large enterprise segment (Schwebe, 2018; PricewaterhouseCoopers, 2017).

Although many studies have been done with regards to impact of digitization, E-banking system in Pakistan and its Impact on Customers Satisfaction: A Case Study of full-fledged Islamic Banks (Butt, 2019). The role of e-banking on operational efficiency of banks in Nigeria (Taiwo & Agwu, 2017). Nziyasemanga (2017) impact of Mobile lending on Bank Performance, Mwangi (2018) Influence of Digitization on Bank Performance; Digital Credit In Kenya: Evidence From Demandside Surveys (FSD, 2016) Digital credit audit: Creating value through inclusive finance Evaluating the conduct and practice of digital lending in Kenya (FSD, 2019). Sustainability impact of digitization in logistics (Kayikci, 2018), A Digital Credit Revolution Insights from Borrowers in Kenya and Tanzania (FSD, 2018), Digital Technology and State Capacity in Kenya (Ndung'u, 2019), Mobile Technologies and Digitized Data to Promote Access to Finance for Women in Agriculture (World Bank, 2017), Mobile Financial Services in Microfinance Institutions: The history and impact of digitization and digital data mobilization on biodiversity research (Nelson, 2019). New world: The impact of digitization on the study of slavery 2017). Review of Digital Credit Products in India, Kenya, Nigeria, Tanzania, and Uganda (Biscaye, Callaway, Greenaway, Daniel, Lunchick-Seymour, McDonald Anderson, Klawitter, & Reynolds, 2017). This shows that study on the influence of project management information systems on credit digitization in Kenyan Commercial Banks have not been done thus necessitating the current study. Thus the study sought to explore how banks can utilize PMIS in the implementation of credit digitization in Banks in Kenya. The study examined how project team expertise, project risk management, end user involvement and project monitoring and evaluation influence credit digitization of commercial banks in Kenya

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#### **Theoretical Review**

This section expounds on three theories that relate to the variables of the study. The theories include; stakeholder management theory, Theory of Disruptive Innovation and Technology Acceptance Model.

#### **Stakeholder Management Theory**

The term stakeholder has traditionally been defined as any person or a group of people who can impact or can be impacted by the attainment of the organization's objectives (Freeman 1984; Oliveira & Rabechini, 2019). Cleland (1986) and Pedrini (2019) defined project stakeholder as persons or organizations that can either be within or beyond the authority of the project manager and directly or indirectly get affected by the project's outcome, and have share or stake or an interest in project. Stakeholder theory attempt to identify the fundamental question of which group of stakeholders deserve attention.

The theory also focuses on the relationship dynamics between the stakeholders and the organization and between stakeholders. Failure to appreciate the relationship between risk management and stakeholders' management has led to countless project failures (Morris & Hough, 1993; Nguyen, Mohamed & Panuwatwanich, 2018). This theory is relevant is in this study as it shows the importance of collaborate project risk management on credit digitization.

#### **Theory of Disruptive Innovation**

A disruptive innovation theory was developed by Christensen in 1995 as an innovation that creates a new market and value network and eventually disrupts an existing market and value network, displacing established market leaders and alliances. According to Christensen (1995) and O'Reilly, and Binns (2019) a disruptor can take the form of personal computer, cellular phones, etc. Customer relationship refers to a relationship between customers and companies in this case bank, service providers, and brands. From customer perspective, the existence of a relationship refers greatly to an attitude: perception of mutual way of thinking two-way commitment (Gronroos, 2000; Sigala, 2018). Digital banking is a disruptor from the traditional branch banking. From Christensen's perspective, this is likely to affect the customer relationship based on the perception of the clients towards the technology. The research adopted this theory and argued on the line that disruption is likely to affect the customer relationship in either way depending on customer's perception towards digital banking (Corsi & Di Minin, 2014). The theory was used to inform the dependent variable which is credit digitization.

#### **Technology Acceptance Model (TAM)**

This is a commonly used model on adoption of innovative solutions by firms. Technology Acceptance Model as coined by Davis (1989) and Al-Emran (2018), proposes that both perceived usefulness and perceived ease of use can be used to predict the attitude towards using new technology, which in turn affects the behavioral intention to use the actual system directly. This in turn affects the way users relates to the systems and hence the firms that adopts such technologies. Davis (1989) and Tubaishat (2018) defines perceived usefulness as the degree to which a person

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believes that using a particular system would enhance his/her job performance or ease his/her work.

From Davis (1989) and Al-Emran (2018), perspective, the users of digital banking platforms are more likely to adopt and continue using the E-Systems if they believe the system brings benefits in the case of banking, flexibility, easy access to information, easy transaction completion, friendliness and prompt connection to contact person for help, reducing time spent on going to bank and increasing convenience, ease of transaction, access to information and customer care. The outcome will determine how these users relate to the bank employing digital banking. This creates an assumption that if the user feels that digital banking platforms are easy to use, confidential and hustle free, they are likely to adopt and utilize them with a lot of ease. This being a new way of interrelation, it is likely to experience a shift in the way of interaction between the customers and the bank especially on relationship.

On analysis of the predictors of technology adoptions by organizations and individuals, Jeyaraj (2006) and Tubaishat (2018), concluded that TAM is the most relevant technology adoption model in analysis of how technology adoption influences decisions. However, other researchers argue that, TAM on itself is insufficient in explaining users' decisions to adopt technology (Amin, 2007, Granić & Marangunić, 2019). Safe from the limitation of Technology Acceptance Model, this theory was used to show how end user involvement influences credit digitization in commercial banks.

#### 2.0 METHODS AND PROCEDURES

The study employed a descriptive survey design and was census of the 42 commercial banks head offices in Nairobi, Kenya. The study was guided by the lenses of Stakeholder Management theory, Technology Acceptance Model (TAM) and the Theory of Disruptive Innovation from which the study operationalized the variables of PMIS Implementation and Credit Digitization. Data was collected by use of a structured questionnaire. The data was cleaned, coded and analyzed using a Statistical software (SPSS). The findings were presented in form of tables, charts and graphs. Descriptive statistics were deduced from the data. From this, inferential statistics were presented and associations drawn. Regression analysis was interpreted and appropriate conclusions made

#### 3.0 RESULTS

#### **Descriptive Statistics**

#### **Effect of Project Team Expertise on Project Performance**

The study sought to establish the Influence of Project Team Expertise on project performance in Kenyan Commercial Banks. The respondents were asked to respond to statements on project team expertise. The responses were rated on a five point likert scale as presented in the table below.

#### **Table 1 Project Team Expertise**

Statement	Strongly				Strongly		Standard
	Disagree	Disagree	Neutral	Agree	Agree	Mean	Deviation
Members of the project							
team must have a							
preferred skill-set to be							
included in any project							
team	0.20%	0.80%	32.43%	31.83%	34.83%	4.01	0.84
Level of education is							
important when							
selecting project team							
members	0.80%	0.80%	37.63%	41.74%	29.73%	3.99	0.81
Training for any							
project is mandatory							
for one to be part of a							
project team	12.70%	0.90%	20.03%	30.93%	35.44%	3.95	0.97
The project team has							
members who have							
experience over							
working on such							
project over a long							
time	1.20%	11.20%	23.33%	33.63%	30.63%	3.91	0.89
There is always a							
project team for any							
project at the bank	0.60%	4.90%	25.13%	32.13%	37.24%	4.05	0.87
Average						3.98	0.88

The findings showed that 66.66% of the respondents agreed that members of the project team must have a preferred skill-set to be included in any project team. It was also found that 71.47% of the respondents agreed that level of education is important when selecting project team members. The findings also revealed that 66.37% of the respondents agreed that Training for any project is mandatory for one to be part of a project team. In addition 64.26% of the respondents agreed that the project team has members who have experience over working on such project over a long time. The study further revealed that 69.37% of the respondents agreed that there is always a project team for any project at the bank. The findings were in line with Arnold (2016) who argued that for successful digitization implementation, it is necessary to optimize project and program management and to build appropriate skills among employees

On a five point scale, the average mean of the responses was 3.98 which implies that majority of the respondents agreed on most of the statements; however, the answers were varied as shown by the standard deviation of 0.88

#### **Effect of End User Involvement on Project Performance**



The study sought to establish the influence of end user involvement on project performance in Kenyan Commercial Banks. The respondents were asked to respond to statements on end user involvement. The responses were rated on a five point likert scale as presented in table below.

**Table 2 End User Involvement** 

	Strongly				Strongly		Standard
	Disagree	Disagree	Neutral	Agree	Agree	Mean	Deviation
Views of customers							_
are considered							
during project							
planning of any							
project	1.20%	1.80%	32.73%	43.33%	20.93%	3.91	0.9
We involve							
customers in testing							
of projects before	0.00.	4.000	20. (21)	0.4.00=4	22 - 22 - 1		0.07
launching	0.30%	1.20%	30.63%	34.23%	33.63%	4.2	0.85
During testing we							
consider the							
feedback from	0.000/	0.200/	24.520/	24.520/	20.720/	2.02	0.96
customers	0.90%	0.30%	34.53%	34.53%	29.73%	3.92	0.86
If customers like the							
product we go ahead and launch	0.30%	0.30%	30.93%	35.14%	33.33%	4.01	0.83
	0.30%	0.30%	30.93%	33.14%	33.33%	4.01	0.63
Piloting of a project is mandatory for all							
the projects that							
involve our							
customers	1.20%	1.20%	32.43%	35.44%	29.73%	4.02	0.88
Average	1.20/0	1.20/0	32. <del>4</del> 3/0	JJ. TT/0	27.13/0	4.01	0.86
Average						4.01	0.00

The findings showed that 64.26% of the respondents agreed that views of customers are considered during project planning of any project. The study also found that majority of the respondents 67.86% agreed that they involve customers in testing of projects before launching. The findings also revealed that 64.26% of the respondents agreed that during testing they consider the feedback from customers. In addition, 67.47% of the respondents agreed if customers like the product, they go ahead and launch. The study further revealed that 65.17% of the respondents agreed that piloting of a project is mandatory for all the projects that involve their customers. On a five point scale, the average mean of the responses was 4.01 which implies that majority of the respondents agreed on most of the statements; however, the answers were varied as shown by the standard deviation of 0.86. The result were in line with Bailey, Diniz and Sholler (2016) on multiplex appropriation in complex systems implementation suggested that in cases where large numbers of users in many settings with diverse needs, such that it is practically impossible to tailor systems to meet user requirements, system implementation may be most successful when users are motivated to use system elements in ways that allows the system to work for those in social need



#### Effect of Project Risks Management on Project Performance

The study sought to examine the effect of project risks management on project performance in Kenyan Commercial Banks. The respondents were asked to respond to statements on project risks management. The responses were rated on a five point likert scale as presented in the table below.

**Table 3 Project Risks Management** 

	strongly				strongl		Std
Statement	disagree	disagree	neutral	agree	y agree	Mean	Dev
Before embarking on a							
project we identify							
risks likely to be							
encountered	1.50%	10.30%	15.53%	40.74%	31.94%	4.06	0.88
We have a risk							
assessment procedure							
in all of the projects	0.30%	10.30%	12.43%	45.83%	31.13%	4	0.83
We plan for possible							
measures to mitigate							
against any risk in a							
project	1.00%	6.50%	10.04%	40.93%	31.53%	3.92	0.86
Throughout the project							
cycle we continually							
assess possible risks	2.00%	10.60%	21.33%	32.43%	33.63%	3.99	0.83
We assess risks at the							
end of the project							
design	15.01%	0.60%	22.24%	33.03%	29.13%	3.91	0.83
Average						3.98	0.85

From the findings, 72.68% of the respondents agreed that before embarking on a project they identify risks likely to be encountered. The results also revealed that 76.96% of the respondents agreed that they have a risk assessment procedure in all of the projects. The findings also revealed 72.46% indicated that they plan for possible measures to mitigate against any risk in a project. Furthermore, 66.12% of the respondents agreed that throughout the project cycle they continually assess possible risks. The results also indicated that 72.76% of the respondents agreed that they assess risks at the end of the project design. On a five point scale, the average mean of the responses was 3.98 which implies that majority of the respondents agreed on most of the statements; however, the answers were varied as shown by the standard deviation of 0.85. The result were in line with Carvalho (2013) whose study revealed that implementing risk assessment and planning had a positive impacted on the project success.



#### Effect of Project Monitoring and Evaluation on Project Performance

The study sought to determine the effect of monitoring and evaluation on project performance in Kenyan Commercial Banks. The respondents were asked to respond to statements on monitoring and evaluation. The responses were rated on a five point likert scale as presented in the table below.

**Table 4 Project Monitoring and Evaluation** 

	Strongly				Strongl		St
	Disagree	Disagree	Neutral	Agree	y Agree	Mean	Dev.
There is a project							
M&E team for every							
project	2.40%	3.00%	16.13%	31.64%	46.23%	4	0.95
M&E is done							
frequently for all the							
projects undertaken by							
the bank	2.90%	0.60%	20.13%	30.73%	46.63%	3.98	0.87
The Bank has							
adequate budget for							
M&E	4.20%	2.70%	20.23%	39.53%	32.33%	4.01	1.03
There is a clear system							
for M&E in all the							
projects the bank							
undertakes	1.20%	11.00%	20.53%	31.03%	36.23%	3.96	0.93
M&E reports are used							
for decision making in							
the course of the							
projects lifecycle	7.00%	1.80%	6.73%	30.33%	50.14%	4.02	0.85
Average						3.9	0.9

From the findings, 77.87% of the respondents agreed that there is a project M&E team for every project in their banks. The findings also showed that 77.36% of the respondents agreed that M&E is done frequently for all the projects undertaken by their banks. The results also showed that that 71.86% agreed that their banks have adequate budget for M&E. The results also revealed that 67.26% of the respondents agreed that there is a clear system for M&E in all the projects their bank undertakes. Further, it was found that 80.47% of the respondents agreed that M&E reports are used for decision making in the course of the projects lifecycle. The result were in line with Iwu (2016), who found out that monitoring and evaluation complement each other. On a five point scale, the average mean of the responses was 3.9 which implies that majority of the respondents agreed on most of the statements; however, the answers were varied as shown by the standard deviation of 0.9.

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#### **Project Performance**

The respondents were asked to indicate their opinion on credit digitization in their banks. The responses are shown in table 5 below.

**Table 5 Project Performance** 

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std Dev
Projects are completed on time							
because of team expertise	10%	1.2%%	13.93%	29.13%	45.73%	3.96	0.85
With involvement of							
stakeholders, projects are	5.50/	<i>C</i> 0/	11 220/	27.020/	40.020/	4.01	0.01
completed on time	5.5%	6%	11.32%	37.83%	40.03%	4.01	0.81
With expert opinion during project implementation, projects							
are completed within the							
stipulated time	10%	9.2%	17.14%	23.83%	39.83%	3.98	0.84
Project risk management has							
help to ensure successful							
completion of projects	4.1%	6.7%	7.63%	46.63%	36.23%	4.02	0.82
Monitoring and evaluation has							
improved project efficiency	3.2%	1.1%	18.03%	38.44%	40.33%	4.02	0.8
Average						3.9	0.8

The results showed that majority of the respondents (74.86%) agreed that Projects are completed on time because of team expertise. It was also found that 77.86% of the respondents agreed that with involvement of stakeholders, projects are completed on time. Majority of the respondents (63.66%) also agreed that with expert opinion during project implementation, projects are completed within the stipulated time. The findings also revealed that 82.86% of the respondents also agreed that project risk management has help to ensure successful completion of projects. In addition, 78.77% of the respondents agreed that Monitoring and evaluation has improved project efficiency. The result were in line with Gartner (2016), who notes that project management information systems provides an opportunity for businesses to advance their businesses. On a five point scale, the average mean of the responses was 3.99 which implies that majority of the respondents agreed on most of the statements; however, the answers were varied as shown by the standard deviation of 0.83.



#### **Inferential Statistics**

Inferential analysis was conducted to generate correlation results, model of fitness and analysis of the variance and regression coefficients.

#### **Correlation Analysis**

Correlation analysis was done in order to determine the relationship between the independent and dependent variables. Results were presented in table 6

**Table 6 Correlation Analysis** 

Variable		Digitiza tion	Team expertise	End user involve	Risk managem ent	Monitoring and Evaluation
Project	Pearson					
Performance	Correlation	1.000				
	Sig. (2-tailed) Pearson	)				
Team expertise	Correlation Sig. (2-	0.621**	1.000			
	tailed)	0.01				
End user	Pearson					
involve	Correlation	0.680**	0.144**	1.000		
	Sig. (2-					
	tailed)	0.003	0.05			
Risk	Pearson					
management	Correlation	0.730**	0.846	0.861	1.000	
-	Sig. (2-					
	tailed)	0.001	0.060	0.700		
Monitoring and	Pearson					
Evaluation	Correlation	0.841**	0.562	0.258	0.144	1.000
	Sig. (2-					
	tailed)	0.000	0.125	0.204	0.104	
** Correlation is	significant at the	he 0.01 lev	el (2-tailed)	_		

The findings indicated that project team expertise and project performance are positively and significantly related (r=0.621, p=0.01). These results were in agreement with Barbalho, De Toledo and Da Silva (2019) who found that project transitions were driven by internal stakeholders, especially project managers and their teams. It was further established that end user involvement and project performance were positively and significantly related (r=0.680, p=0.003). This finding agreed with that of Schmidt, Drews and Schirmer (2016) digitization from an end-user's perspective enhances bank performance. The results also revealed that project risk management and project performance are positively and significantly related (r=0.730, p=0.001). This finding supports that of Mathenge (2018) who established a strong positive linear relationship between Project risks management and implementation of digitization projects in commercial banks. In

<sup>\*</sup> Correlation is significant at the 0.05 level (2-tailed).

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addition, it was found that Monitoring and Evaluation and project performance are positively and performance significantly related (r=0.841, p=0.000). This finding is in line with that of Mongare, Camanda and James (2017) whose results indicated that project monitoring and evaluation has the strongest positive influence on the implementation of IT projects.

#### **Regression Analysis**

The results in table 8 presented the fitness of model of regression model used in explaining the study phenomena.

**Table 7: Model Fitness** 

Indicator	Coefficient
R	0.828
R Square	0.683
Adjusted R Square	0.6744
Std. Error of the Estimate	0.0986

#### Source: Survey Data (2021)

Project team expertise, stakeholder involvement, project risk management and monitoring and evaluation were found to be satisfactory variables in explaining project performance in commercial banks. This was supported by coefficient of determination also known as the R square of 68.3%. This meant that Project team expertise, stakeholder involvement, project risk management and monitoring and evaluation explain 68.3% of the variations in the dependent variable which was project performance. The results further meant that the model applied to link the relationship of the variables was satisfactory.

The p-value indicates the level of relation of the independent variable to the dependent variable. If the significance number found is less than the critical value also known as the probability value (p) which is statistically set at 0.05, then the conclusion would be that the model is significant in explaining the relationship; else the model would be regarded as non-significant. Table 8 provided the results on the analysis of the variance (ANOVA).

**Table 8: Analysis of Variance** 

	Sum of Squares	df	Mean Square	F	Sig.
Regression	7.503	4	1.876	104.23	0.000
Residual	0.541	33	0.018		
Total	8.044	37			

#### Source: Survey Data (2021)

The results indicated that the overall model was statistically significant. Further, the results implied that the independent variables are good predictors of project performance in commercial banks.

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This was supported by an F statistic of 104.23 and the reported p value (0.000) which was less than the conventional probability of 0.05significance level.

**Table 9: Regression Coefficients** 

	В	Std. Error	t	Sig.
(Constant)	0.321	0.119	2.705882	0.000
Project team expertise	0.372	0.093	4.795699	0.001
End user involvement	0.446	0.087	5.121954	0.040
Project risk management	0.393	0.055	7.136364	0.000
Monitoring and evaluation	0.416	0.042	9.909524	0.003

Regression of coefficients results in table 4.10 revealed that Project team expertise and project performance are positively and significant related ( $\beta$ =0.372, p=0.001). This implies that a unit improvement in Project team expertise leads to an improvement in project performance by 0.372 units. The results also showed that stakeholder involvement and project performance are positively and significant related ( $\beta$ =0.446, p=0.040). This shows that an increase in stakeholder involvement leads to an improvement in project performance by 0.446 units. The results also showed that project risk management and project performance are positively and significant related ( $\beta$ =0.393, p=0.000) implying that a unit improvement in project risk management leads to an improvement in performance by 0.393 units. The results also showed that monitoring and evaluation and project performance are positively and significant related ( $\beta$ =0.416, p=0.003). This implies that that an increase in monitoring and evaluation leads to an improvement in project performance by 0.416 units.

Thus, the optimal model for the study is;

Project performance = 0.321 + 0.372 Project team expertise + 0.446 stakeholder involvement + 0.393 project risk management + 0.416 monitoring and evaluation.

#### DISCUSSIONS, CONCLUSIONS AND RECOMMENDATION

#### **Discussions**

This section provides a summary of the findings from the analysis. This was done in line with the objectives of the study. The first objective of the study was to establish the influence of project team expertise on project performance in Kenyan Commercial Banks. The findings showed that there was a significant relationship between the project team expertise and project performance in Kenyan Commercial Banks

The second objective of the study was to establish the influence of end user involvement on project performance in Kenyan Commercial Banks. The findings showed that there is significant relationship between end user involvement and project performance in Kenyan commercial banks

The third objective of the study was to examine the influence of project risks management on project performance in Kenyan Commercial Banks. The findings showed that there is a positive

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and significant relationship between project risks management and project performance in Kenyan Commercial Banks

The fourth objective of the study was to determine the influence of monitoring and evaluation on project performance in Kenyan Commercial Banks. The findings showed that there is significant relationship between monitoring and evaluation and project performance

Based on the study findings, it was recommended that banks should conduct training to all team members before commencement and during project execution. It was also recommended that banks should involve customers in testing of projects before launching and should consider the feedback from customers. Additionally, it was recommended that making pilot projects involving bank customers should be enhanced to ensure success of the project performance process. It was also recommended that banks should have a project M&E team for every project and that M&E should be done frequently for all the projects undertaken by the banks. Finally, it was recommended that banks should have a clear system for M&E in all the projects they undertake.

It was also recommended that organizations should have a an ultimate goal of creating a pool of qualified and skilled staff that is available while needed to digitize processes within short timelines. The organization should also ensure that the team has the necessary skills vital to build the required technology components in a modular way so that they can be used over and over again across processes, capitalize on economies of scale

#### **Conclusions**

Based on the findings above the study concluded that Project team expertise, end user involvement, project risk management and monitoring and evaluation positively and significantly affect the project performance in Kenyan commercial banks.

The study also concluded that having skilled project team members leads to improved project performance. It was also concluded that the level of education is important when selecting project team members as it enhances project performance. Moreover, it was concluded that training banks project member's leads to increase in the number of loans processed through the digital platform.

#### Recommendations

Based on the study findings, it was recommended that banks should conduct training to all team members before commencement and during project execution. It was also recommended that banks should involve customers in testing of projects before launching and should consider the feedback from customers. Additionally, it was recommended that making pilot projects involving bank customers should be enhanced to ensure success of the project performance process. It was also recommended that banks should have a project M&E team for every project and that M&E should be done frequently for all the projects undertaken by the banks. Finally, it was recommended that banks should have a clear system for M&E in all the projects they undertake.



#### REFERENCES

- Abelein, U. & Paech, B. (2015). Understanding the influence of user participation and involvement on system success—A systematic mapping study. *Empirical Software Engineering*. 2015, 20(1):28-81.
- Acosta, F. & Commerce, E. M. (2012). Assessment of Factors Influencing Decision to Outsource Information and Communication Technology by Commercial Banks in Kenya. *DLSU Business & Economics Review*, 22(1).
- Akgün, A.E. Lynn, G.S, Keskin, H., &Dogan, D., (2014). Team learning in IT implementation projects: Antecedents and consequences. *International Journal of Information Management*, 34(1), 37-47
- Al-Emran, M., (2018). Technology Acceptance Model in M-learning context: A systematic review. *Computers & Education*, *125*, 389-412.
- Ancora, L. (2016). Digital disruption: impacts on organizational strategy and structure: ING bank case study.
- Arnold, D., & Jeffery, P. (2016). 5 The digital disruption of banking and payment services. *Research Handbook on Digital Transformations*, 103.
- Arthur, L. (2013). Big data marketing: engage your customers more effectively and drive value. *John Wiley & Sons*.
- Beringer, C., Jonas, D., & Kock. A, (2013). Behavior of internal stakeholders in project portfolio management and its impact on success. *International Journal of Project Management*.31, 830–846
- Bloomfield, T. (2016). Digital disruption in the registry services industry. *Governance Directions*, 68(4), 222.
- Broeders, H., & Khanna, S. (2015). Strategic choices for banks in the digital age.
- Burke R., 2013, *Project Management: Planning and Control Techniques*, Fifth ed., Wiley, West Sussex.
- Central Bank of Kenya. (2019). Bank Supervision Annual Report. Nairobi, Kenya. Retrieved from <a href="https://www.centralbank.go.ke/uploads/banking\_sector\_annual\_reports/197965474\_BS">https://www.centralbank.go.ke/uploads/banking\_sector\_annual\_reports/197965474\_BS</a> DANNUALREPORT2019% 20.pdf on 29/12/2020
- Charan & Colvin, (1999). Critical Success Factors in Effective Project Implementation Project Management Handbook, 2nd Ed
- Chen, J., & Lam, K. (2014). How to prepare for Asia's digital-banking boom. *McKinsey and Company*
- Christensen, C. (1997). *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail.* Cambridge, MA: Harvard Business School Press.
- Christensen, C. (2006). 'The ongoing process of building a theory of disruption'. *Journal of Product Innovation Management*, **23**, 39–55.
- Christensen, C., Raynor, M. and McDonald, R. (2015). 'What is disruptive innovation?'. *Harvard Business Review*, December, 44-53.



- Cleland, D. I. (1986). Project Stakeholder Management. *Project Management Journal*, 17(4), 36-44
- Cleland, D.I. & Ireland, L.R. (2007). Project management: strategic design and implementation. *Project Manager's Handbook* 5th ed. New York: McGraw-Hill
- Cooper, D. R., & Schindler, P. S. (2008). Business Research Methods. London: McGraw Hill
- Corbet, S., & Gurdgiev, C. (2017). Financial Digital Disruptors and Cyber-Security Risks: Paired and Systemic.
- Corsi, S., & Di Minin, A. (2014). Disruptive innovation... in reverse: Adding a geographical dimension to disruptive innovation theory. *Creativity and Innovation Management*, 23(1), 76-90.
- Creswell, J. W.,& Creswell, J.D. (2013). Research design: Qualitative, quantitative, and mixed methods approaches. Sage publications.
- Crisan C. S., & Borza A. (2014). Strategic entrepreneurship, Managerial Challenges of the Contemporary Society, Ed. Risoprint, 170-174
- De Vaus, D. (2013). Surveys in social research. Routledge.
- DeYoung, R., & Rice, T. (2004). Noninterest income and financial performance at US commercial banks. *Financial Review*, 39(1), 101-127.
- Diamond, D. W. (1984). Financial intermediation and delegated monitoring. *The Review of Economic Studies*, 51(3), 393-414.
- Downes, L. (2009). The laws of disruption: Harnessing the new forces that govern life and business in the digital age. Basic Books.
- Downes, L., & Mui, C. (2000). *Unleashing the killer app: Digital strategies for market dominance*. Harvard Business Press.
- Eastburn, R. W., & Boland, R. J. (2015). Inside banks' information and control systems: Post-decision surprise and corporate disruption. *Information and Organization*, 25(3), 160-190.
- Eichhorn, B. & Tukel, O. (2018) Business user impact on information system projects, International Journal of Managing Projects in Business, 11(2) 289-316
- Elizabeth,K.(2020,June 28). <a href="https://www.businessdailyafrica.com/bd/data-hub/banks-eye-fresh-digital-plan-for-service-delivery-in-post-coronavirus-era-2294204">https://www.businessdailyafrica.com/bd/data-hub/banks-eye-fresh-digital-plan-for-service-delivery-in-post-coronavirus-era-2294204</a> retrieved on 13-01-2021
- Eriksson, J., Glad, W., & Johansson, M. (2015). User involvement in Swedish residential building projects: a stakeholder perspective. *Journal of Housing and the Built Environment*, 30(2), 313–329
- Eskerod, P., Jepsen, A. L., & Dalcher, D. (Ed.) (2013). *Project Stakeholder Management*. (Fundamentals of Project Management). Farnham, Surrey: Gower Publishing
- Fageha, M. K., & Aibinu, A. A. (2013). Managing Project Scope Definition to Improve Stakeholders' Participation and Enhance Project Outcome. *Procedia-Social and Behavioral Sciences*, 74, 345-355.

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- Fayaz, A.& Kamal, Yasir & Amin, Saif& Khan, Samandar. (2017). Critical Success Factors in Information Technology Projects. *Management Science Letters*. 7. 73-80.
- Gasangwa,S.M , Mulyungi, P & Ndabaga, E (2017). Influence of Monitoring and Evaluation Strategy on The Implementation Of Government Projects. A Case Study of Vision 2020 Umurenge Projects (Vup); Rwanda. *European Journal of Business and Management*,9(30,)
- Goldratt, E.M. & Cox, J. (1992) The Goal: A Process of Ongoing Improvement. North River Press, North Barrington.
- Granić, A., & Marangunić, N. (2019). Technology acceptance model in educational context: A systematic literature review. *British Journal of Educational Technology*, 50(5), 2572-2593.
- Gurgu E., & Savu C. S. (2015) Global Risk Management- A Necessity in a World of Vulnerabilities and of EcoEconomy and Eco-Bio-Economy Needed by Eco-Sano-Genesis, *Journal of Economic Development, Environment and People* JEDEPquarterly, Online Journal,
- Hartono, B., Sulistyo, S. R., Praftiwi, P. P., & Hasmoro, D. (2014). Project risk: Theoretical concepts and stakeholders' perspectives. *International Journal of Project Management*, 32(3), 400-411.
- Ilyas, M. A. B., Hassan, M. K., & Ilyas, M. U. (2013). PMIS: boon or bane? Paper presented at PMI® Global Congress 2013—EMEA, Istanbul, Turkey. Newtown Square, PA: Project Management Institute.
- Imtiaz, A. Mudhary, A. Mirhashemi, T. & Roslina I.(2013). Critical success factors of information technology projects. *International journal of social, behavioral, educational, economic, business and industrial engineering* 7(12), 3 -5.
- Iwu, M. U. (2016). Monitoring and Evaluation as Tools for Achieving Success in the Performance of Government Intervention Projects (A Regional Survey) (Doctoral dissertation).
- Juliane, S. & Alexander, K. (2013) Influence portfolio risk management influences IT project portfolio success in IT enterprises in UK. *International Journal of Project Management*, 26, 73-79.
- Jun, G. Qiuzhen, R. & Qingguo, E. (2010) Effects of project risk planning on IT project performance focusing on a case of China vendor firms. *Project Management Journal*, 31,(1),32-43.
- Kaiser,M.G.,& Ahlemann,f.(2010).Measuring Project Management Information Systems success:Towards a conceptual model and survey instrument.Retrieved on 31/12/2020 from http://aisel.aisnet.org/ecis2010/20/
- Kayikci, Y. (2018). Sustainability impact of digitization in logistics. Procedia manufacturing, 21, 782-789.
- Kombo, D.K. & Tromp D.L.A (2006). Proposal and thesis writing: *An introduction*. Nairobi: Paulines Publications Africa.

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- Kreitstshtein, A. (2017). Digital transformation and its effects on the competency framework: a case study of digital banking.
- Leonardi, P.M., Bailey, D.E., Diniz, E.H. & Sholler, D., (2016) Multiplex Appropriation in Complex Systems Implementation: The Case Of Brazil's Correspondent Banking System. *MIS Quarterly*, 40(2), 461-473.
- Markovitch,S., & Paul Willmott,P. (2014) Accelerating the digitization of business processes Retrieved on 05/10/2020 from <a href="https://www.mckinsey.com/business-functions/digitalmckinsey/our-insights/accelerating-the-digitization-of-business-processes">https://www.mckinsey.com/business-functions/digitalmckinsey/our-insights/accelerating-the-digitization-of-business-processes</a>
- Mishra, A & Mishra, D (2013) Applications of Stakeholder Theory in Information Systems and Technology *Inzinerine Ekonomika-Engineering Economics*, 24(3), 254-266.
- Mugenda, O. M. & Mugenda, A. G. (2008). *Research Methods*: Qualitative and Quantitative Approaches. Nairobi: Acts Press
- Musau, H. (2015). Factors influencing implementation of core banking system projects by commercial banks in Kenya: the case of NIC bank Kenya limited
- Nelson, G., & Ellis, S. (2019). The history and impact of digitization and digital data mobilization on biodiversity research. Philosophical Transactions of the Royal Society B, 374(1763), 20170391.
- Nguyen, T. S., Mohamed, S., & Panuwatwanich, K. (2018). Stakeholder Management in Complex Project: Review of Contemporary Literature. *Journal of Engineering, Project & Production Management*, 8(2).
- Nwakanma, I & Chukwunanu N, Baldwin, Asiegbu, Baldwin & Chibueze, A & ,Ogbonna & Chukwuemezie N, Peter-Paul & Tech, B. (2013). Factors Affecting Successful Implementation of Information Technology Projects: Experts' Perception. *European Scientific Journal*. 99,1857-7881.
- Nyandika, O. F & Ngugi, K. (2014). Influence of Stakeholders' Participation on Performance of Road Projects At Kenya National Highways Authority. European Journal of Business Management, 1 (11), 384-404.
- O'Brien, J. A. (2008). *Introduction to Information Systems* (12 ed.): Tata McGraw Publishing Company Limited.
- O'Reilly, C., & Binns, A. J. (2019). The three stages of disruptive innovation: idea generation, incubation, and scaling. *California Management Review*, 61(3), 49-71.
- Ogwueleka, A. (2013). The Critical Success Factors Influencing Project Performance in Nigeria. *International Journal of Management Science and Engineering Management*. 6. 343-349.
- Oliveira, G. F., & Rabechini Jr, R. (2019). Stakeholder management influence on trust in a project: A quantitative study. *International Journal of Project Management*, *37*(1), 131-144.
- Ouma, M O. (2016). Factors determining project implementation of health projects in Gedo region, Somalia.



- Pedrini, M., (2019). Stakeholder management: a systematic literature review. *Corporate Governance: The International Journal of Business in Society*.
- PMI (2013). Pulse of the Profession In-Depth Report: e Impact of PMOs on Strategy Implementation
- Punch, K. F. (2003). Survey Research: The Basics. London: Sage Publications Ltd.
- Redlarski, K. (2013 June 24-25) The impact of end-user participation in IT projects on product usability. Paper presented at MIDI 2013 Conference, 24-25.06.2013, Warsaw, Poland.
- Rockwood, K. (2017). Talent Deficit: Fintech Needs Help—And Fast; Here's How Banking Giants And Startups Alike Can Build Teams On The Fly. *PM Network*, *31*(7), 48–53.
- Roghanian, E., & Mojibian, F. (2015). Using fuzzy FMEA and fuzzy logic in project risk management. *Iranian Journal of Management Studies*.
- Roque, R., & de Carvalho, Y. (2013) Impact of project risk management, assessment of risks on project performance in Brazillian Vendor companies. International Journal of Project Management, 21(2),97-105.
- Rusert, B. (2017). New world: The impact of digitization on the study of slavery. American Literary History, 29(2), 267-286.
- Salanță I., & Popa, M. (2014). An Empirical Investigation into the Outsourcing Logistics Contract, Proceedings of the 8th International Management Conference "Management Challenges for Sustainable Development", Bucharest, Romania, 350-357.
- Senthilnathan, S. (2019). Usefulness of correlation analysis. *Available at SSRN 3416918*.
- Shaughnessy, J., Ciancetta, M., & Canada, D. (2003). *Middle school students'thinking about variability in repeated trials: A cross -task comparison. In N. Pateman, B.* Honolulu: University of of Hawaii.
- Sigala, M. (2018). Implementing social customer relationship management. *International Journal of Contemporary Hospitality Management*.
- Singh K.D & Nyandemo, S.M.(2004) Aspect of Project, Planning, Monitoring, Evaluation and Implementation. BishenSighn Publishers India
- Spaulding, D. T. (2014). Program evaluation in practice: core concepts and examples for discussion and analysis. Second edition. San Francisco: Jossey-Bass.
- Strauß,M., Gottenberg, G.,Kude, O., & Heggtveit, O. (2018).What Do Corporate Banking Customers Really want? Retrieved on September 30,2020 from https://e-research.siam.edu/wp-content/uploads/2019/06/IMBA-1019-IS-Targets-of-Digitization-in-the-Credit-Process-of-Corporate-Banking.
- Sun, Z. (2013, March). User Involvement in System Development Process. In I Proceedings of the 2nd International Conference on Computer Science and Electronics Engineering (ICCSEE 2013) Paris: Atlantid Press.



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- Thamhain, H. (2013). Managing Risks in Complex Projects. *Project Management Journal*, 44 (2).20-35.
- Tubaishat, A. (2018). Perceived usefulness and perceived ease of use of electronic health records among nurses: application of technology acceptance model. *Informatics for Health and Social Care*, 43(4), 379-389.
- Umulisa, A., Mbabazize, M. & Shukla, J. (2015). Effects of Project Resource Planning Practices on Project Performance of Agaseke Project in Kigali, Rwanda. *International Journal of Business and Management Review*, 3(5), 29-51.
- Yeremenko, I & Rudskaya, E. (2016) Banking Business Innovations: Conceptual Foundations of Modern Economy Development. *International Journal of Economics and Financial Issues*, 6(S8), 361-369
- Young, W., & Leveson, N. G. (2014). An Integrated Approach to Safety and Security Based on Systems Theory. Communications of the ACM, 57(2), 31-35.
- Yu, D., & Hang, C. C. (2010). A reflective review of disruptive innovation theory. *International Journal of Management Reviews*, 12(4), 435-452.
- Zambare, P., & Dhawale, A. (2017). Project Management Information System In Construction Industry. *International Journal Of Engineering Sciences & Research Technology*, 6(7), 54-60.
- Zwikael, O., Pathak, R. D., Singh, G., & Ahmed, S. (2014). The moderating effect of risk on the relationship between planning and success. *International Journal of Project Management*, 32(3), 435-441