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Assessment of Project Alignment Factors on the Performance of the Cheque Truncation System of Selected Commercial Banks in Rwanda

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Abstract
In its pursuit of the Vision 2020 targets, Rwanda has adopted a pathway under the Financial Sector Development Program where the banking sector is to develop innovative ideas that will strike an appropriate balance in financial stability and to quicken financial. Cheques being the most widely used business medium instrument makes the development of cheques processing systems a fundamentally relevant innovation for all banks. Cheque Truncation Systems have therefore been developed to replace the physical clearing system where banks would meet to manually exchange cheques for reconciliation purposes that were time consuming. The study examined the alignment factors on performance of the Cheque Truncation System. The study adopted descriptive research design. The study findings revealed that strategic alignment had a positive influence which was statistically significant (β = 0.479, p<0.05) while infrastructural alignment and performance of the Cheque Truncation system showed a positive and significant effect (β = 0.284; p<0.05). The study concluded that there was a strong positive link between predictor variables and performance of the Cheque Truncation System of Selected Commercial Banks in Rwanda. Commercials banks therefore, should ensure that their internal projects prioritize that alignment factors in order to have successful projects and this will greatly improve in deliveries in terms of Costs reductions, quality and timing of this projects.
Keywords: *Strategic Alignment, Infrastructural Alignment and Performance*

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I. Introduction

Globally, the world has seen a rapid rise in technological advances especially in the banking sector. At the forefront has been the evolution of Electronic banking since the mid-1990s with the adoption of internet. Significant over the counter services could now be served on a rapid service platform for financial exchanges and transactions all of which eased the burden of banks and clients on the aspects of security, rapidity and efficiency. With the E- Banking platforms, banks get better opportunities to tap into the wider client bases while their clients receive value in the form of savings in time and money (Sreedevi, 2013). In developing countries, cheques continue to be major payment sources especially for medium and high value transactions. However as values become larger then clearing of cheques between banks was tedious and time consuming due to the manual sorting, review and acceptance of the various banks cheques within the clearinghouses. Demands for new technologies to ease the congestions and time with significant changes in banking requirements are slowly forcing clearing operations within banks to change from traditional paper cheque clearing to electronic data and Image exchanges. This ensures for quicker clearing operations and resultant accelerated deposits and returns (Calisir & Gumussoy, 2008). Nowadays banks have made a compulsion for the use of cheque truncation systems to enable faster and easier cheque deposits.

Project performance ensures that enterprises business on profitability, minimize the consequences of risky and uncertain events in terms of achieving the projects objectives and seizes the chances of the risky events from arising (Kululanga and Kuotcha, 2010).The criteria for project performance will be based on Cost, Time and Quality which are basic elements of any project success (Mohammed, 2002). To ensure effectiveness and conformity of quality performance, the specification of quality requirements should be clearly stated in design and contract documents. According to Chan *et al.,* (2004) a project is a performance if it delivers what it's set to do, on schedule and within the agreed budget. For this study, Project performance measurement will be defined in terms of Cost, Time, and Quality output of services.

When it comes to the success of ICT based projects, this is an area of concern for many organizations around the world. At the beginning, papers of project success focused on the classical thinking where it was measured by its ability to achieve the scope, time and cost criteria for the project. This is typically referred to as the 'Iron Triangle" or the triple constraint criteria (Sirisomboonsuk *et al.,* 2018). Furthermore, projects need to

be evaluated primarily on factors related to time, scope and cost. However, there also other projects where performance is better evaluated by other criteria (Chipulu *et al.,* 2014). As focus shifts from product creation to value creation this creates a need to include a full range of value delivered by the project in the project performance evaluation and not only focus on outputs and outcomes but also benefits forecasted (Ul Musawir *et al.,* 2017). Additional criteria needs to be introduced to provide a more realistic and balanced indication of success (Sirisombonsuk *et al.,* 2017). The outcome is more complex than just a binary outcome of success or failure, creating a need to conceptualize project success as a multi-dimensional construct (Ul Musawir *et al.,* 2017).

The ultimate importance of project performance is achieved through the projects failure to keep within its cost budget, failure to keep within its time stipulated for approvals, design, occupancy and failure to meet the required technical standards for quality, functionality, fitness for purpose, safety and environmental protection (Flanagan and Norman, 2003). Project performance ensures that enterprises business on profitability, minimize the consequences of risky and uncertain events in terms of achieving the projects objectives and seizes the chances of the risky events from arising (Kululanga and Kuotcha, 2010). To ensure effectiveness and conformity of quality performance, the specification of quality requirements should be clearly stated in design and contract documents. According to Chan *et al.,* (2004) a project is a performance if it delivers what it's set to do, on schedule and within the agreed budget. Because of the explosive growth in the number of banking transactions, existing systems have become more cumbersome and unsafe. Therefore, Cheque Truncation System is now an important integration for banks rather than a choice. Cheque Truncation worldwide may be seen to be one of the most vital activities involved in the replacement of legacy systems in banks. It continues to account for a sizeable chunk of IT- based investment in the banking and financial services industry. Global investments in the Cheque Truncation systems investments was about 8 percent in 2005 and has steadily risen to over 20 percent as of 2017.

Different studies have suggested different success factors and different reasons for successful performance of projects but some projects still fail, where failure rate as per World Bank indicates over 50% in Sub Saharan Africa (Ika *et al.,* 2012). Many ICT projects in general have high costs and overrun their schedules. Prabhakar (2008) indicated that most of the projects are either over budgeted, late or simply not good enough and still different managers claimed that those projects have performed well. McKeen & Smith (2003) highlight "the importance of aligning project performance to business alignment to achieve the 90% success rate that big organizations enjoy". However, empirical studies offer limited direction on how to achieve that alignment. It is with the above findings from different studies that allow the researcher to say that there is no agreement on what constitutes alignment and project performance. Different researchers from different countries do not share the same understanding on the Project alignment factors and project performance as critical project success factors in their case studies.

In Rwanda the project, was earmarked to be fully implemented by all commercial banks within a space of one year, of the eleven commercial banks, 8 had successfully implemented the project. The three remaining banks had issues ranging from system compatibility issues with the Cheque Truncation System requirements, delays from individual bank's core banking systems suppliers as well as communication challenges to customers to have them exchange their existing cheques for the new cheques meeting the CTS requirements. Such issues mean commercial banks can not readily exchange cheques and beneficiaries have to wait longer than the initial waiting time period of 3 days to have payment effected (T+3 days). There seemed to be a problem of understanding alignment factors in the performance of the cheque truncation system (CTS) Project in Rwanda within the commercial banking industry. This study therefore sought to investigate and analyze the project alignment factors that influence performance of the cheque truncation system in Rwanda. This means there is a significant lack of academic knowledge on the influence of alignment factors on project Performance. This study sought to bridge the gap of understanding by studying the influence of project alignment factors on performance of commercial banks in Rwanda.

II. Literature Review

2.1 Theory of Change (TOC)

Theory of change (ToC) considered many different things: an approach, a tool, a methodology etc. In most cases, it is referred to as TOC approach (Stein & Valters, 2012). Other forms in which the ToC concept is encountered include "a pathway of change" roadmap (Taplin *et al.,* 2013). It can also be defined as an ongoing process of reflection to explore change, how it happens, in what particular context, Sector and or group of people. It clearly articulates the intended activity (the 'if 'part) and the expected change it will bring about (the 'then' part). It offers a clearer picture of the intended results from an action and explains how activities and results are connected with each other and contribute to achieving results at different levels.

However, from the above definitions, there is no agreed definition of the Theory of Change but all the definitions discuss the desired change or outcome envisioned to take place. Assumptions in all definitions are present behind every ICT project development idea and what the TOC brings is allowing space to make hidden

assumptions explicit (Harries *et al.,* 2014). Theory of Change makes organizations think about planning in a different way from the traditional planning practices e.g. logic models (Taplin *et al*.,2013) where logic models list the necessary components and work towards the solidifying the focused goals and desired change (Clark and Anderson, 2004). The process starts by defining the long-term desired change and working backwards to identify what is needed to achieve. During implementation, Theory of Change makes teams think more about what needs to be changed rather than what they are doing. It also serves as a visionary tool for guiding organizations towards the aimed desired change. It is therefore suggested that developing targeted indicators of change rather than simply indicators of performance can be of help. It is through the study of this theory, its strengths and weaknesses that the research based its findings to bringing out the project alignment factors in the performance of the Cheque Truncation System (CTS) in Rwanda.

2.3 Empirical Literature

Much literature has emphasized the effect of alignment on organizational performance but with varying opinions on what constitutes the real alignment factors. Many of these researchers point to importance of strategic alignment as the key driver to performance for instance; Chan *et al.* (2006) states that Companies that appear to perform best are companies in which there is alignment between realized business strategy and realized information systems strategy". Strategic project alignment and performance according to Thompson *et.al.,* (2011) said it is a process of bringing decisions and performing activities through which its endeavored to coordinate abilities so an organization with the circumstances of the environment and the gain advantage expected. Process managers are expected to identify both internal and external factors of strategic importance that are very crucial to the business. Performance of projects can only be determined with how well the top project leads determine both internal and external environment and the interactions that shape the business environment.

Infrastructural alignment is all about efficiency. Therefore to achieve a successful alignment of infrastructure; organizations will want the best performance (quality) for as little cost as possible. The scope of infrastructural works will be on only the works required to complete the project successfully. It is therefore pertinent to say that a Successful Infrastructural alignment will depend on the successful definition of the scope of works; quality of infrastructures needed for the project, timely delivery of works.

$H_0$1: *Strategic project alignment has no significant effect on performance of the Cheque Truncation system project in Rwanda*

$H_0$2: *Infrastructural project alignment has no significant effect on performance of the Cheque Truncation system project in Rwanda*

III. Methodology

The study adopted descriptive research design which is concerned with finding out what, where and how of a phenomenon. Target population for the study was eleven banks having a project manager each totaling to eleven (11) project managers. However, of these eleven banks, three of them by the time of the research had not participated in the project due to being new entrants in the market or having not completed the project builds as at 2018 bringing total to eight potential respondents. At close of data request only three respondents had successfully relayed their responses to the researcher. Five point likert scale close ended structured questionnaire were used as a data collection instrument while inferential statistics were used to draw inferences from the data. Multiple linear regression analysis was applied in the study to test the formulated hypotheses and expressed as;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Where,

Y = Performance of the Cheque Truncation system project in Rwanda
X_1 = Strategic alignment
X_2 = Infrastructural alignment
β_0 = Constant
β_1-β_2 = Coefficient of estimates
ε = Error tem

IV. Findings and Discussions

4.1 Correlation results

Statistical findings in Table 1 revealed that there was a positive and significant correlation between strategic alignment and performance of the Cheque Truncation system project in Rwanda ($r = 0.417$, $p<0.05$). More so, the correlation between infrastructural alignment and performance of the Cheque Truncation system project in Rwanda was a positive and significantly associated at ($r = 0.316$, $p<0.05$). Therefore, it can be

concluded that the strategic alignment and infrastructural alignment are positively correlated to the performance of the Cheque Truncation system project in Rwanda at 5% level of significance.

Table 1 Correlation Matrix

	Performance	Strategic alignment	Infrastructural alignment
Performance	1		
Strategic alignment	0.417*	1	
Infrastructural alignment	0.316*	0.237*	1

* Correlation significant 5% (2-tailed).

4.2 Hypothesis Testing

The statistical findings in table 2 revealed that there is presence of the association between the variables (R^2 = 0.605) implying that the combined prediction of the two predictor variables accounted for approximately 60.5% of the total variation on performance of the Cheque Truncation system project in Rwanda. The model was fit in predicting the contribution between the study variables which was statistically significant at 0.05 level of confidence (F = 17.357, p<0.05).

The first hypothesis stated that strategic alignment has no significant effect on performance of the Cheque Truncation system project in Rwanda. The study findings exhibited that strategic alignment had a positive influence which was statistically significant (β = 0.479, p<0.05) hence strategic alignment had a positive and significant effect on performance of the Cheque Truncation system project in Rwanda. This therefore implies that a unit change in strategic alignment increases performance of the Cheque Truncation system by 0.739 units.

The second hypothesis stated that infrastructural alignment has no significant effect performance of the Cheque Truncation system project in Rwanda. Results showed that there was a positive and significant effect on infrastructural alignment and performance of the Cheque Truncation system project in Rwanda (β = 0.284; p<0.05). This implies that a unit change in infrastructural alignment enhances sustainability of community projects by 0.085 units.

Table 2: Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients		
		Beta	**Std. Error**	**Beta**	**T**	**Sig.**
1	(Constant)	0.784	0.071		11.04	0.003
	Strategic alignment	0.701	0.143	0.479	4.902	0.002
	Infrastructural alignment	0.982	0.301	0.284	3.262	0.001
	Model Summary					
	R	0.778				
	R Square	0.605				
	F	17.357				
	Sig.	0.001				

* Significant at 0.5 level (2-tailed), ** Significant at 0.01 level (2-tailed)

V. Conclusion and Recommendation

The aim of this study was to assess of project alignment factors on performance of the Cheque Truncation System of Selected Commercial Banks in Rwanda. The existing literature showed that project alignment factors enhance performance of the Cheque Truncation System. Given the findings, the researcher concluded that there is a strong positive link between strategic alignment and infrastructural alignment on performance of the Cheque Truncation System of Selected Commercial Banks in Rwanda.

The first objective was to assess the role of strategic, project alignment on performance of the Cheque Truncation systems in selected commercial banks. Research analysis on the data collected concluded that Strategic alignment had a positive role on performance of the cheque truncation systems in Rwanda as regards, the cost of the project, the scoping, the quality of outputs, and delivery within expected timeframes. The second objective was to examine the influence of infrastructural project alignment on performance of the Cheque Truncation systems in selected commercial banks. Research analysis on the data collected concluded that infrastructural alignment had a positive role on performance of the cheque truncation systems

From the results obtained from the study, it was established that Alignment factors had a positive impact on the Cheque Truncation System (CTS) project in commercial banks. The study therefore recommends that infrastructural project alignment must be given balanced importance especially as regards its extensiveness that may not be fully detailed at deliverable stage and its being influenced by external parties. Commercials

banks should ensure that their internal projects prioritize that alignment factors in order to have successful projects and this will greatly improve in deliveries in terms of Costs reductions, quality and timing of this projects.

Suggestion for Further Studies

The study suggests that;

- Other factors apart from the two main variables in this study, which include Project Alignment Factors and their influence on performance of the Cheque Truncation systems in commercial banks in Rwanda. These studies will improve on the overall research into project performances and alignments for banks in Rwanda.
- Factors that affect the performance of ICT projects of other financial institutions apart from commercial banks such as Savings societies, Co-operatives and SACCOs should also be given more focus to so as to improve on the way projects perform.

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