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Effect of Project Management on Success of Mergers and Acquisitions of Companies in Rwanda: case of Investment Finance / Commercial Buildings Project of KCB and Rural Sector Support Project of BPR (2020-2023).

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ABSTRACT

Background: the study aimed to assess the impact of project management on the success of mergers and acquisitions in Rwandan companies, focusing on the Investment Finance/Commercial Buildings project of KCB and the Rural Sector Support Project of BPR. The specific objectives included examining the effects of project timeline management, project budget management, project human resource management, project quality planning management, and project risk assessment on the success of mergers and acquisitions. Methods: The research utilized descriptive and correlative research designs, employing a mixed approach of qualitative and quantitative methods. Data were collected from a population of 237 individuals, with a sample size of 149 selected through stratified and purposive sampling. Statistical Package for the Social Sciences (SPSS) version 23.0 was used for data processing and analysis, employing descriptive statistics, correlation, and multiple linear regression analysis. Findings: The correlation analysis revealed significant and positive relationships between the independent variables (X1, X2, X3, X4, and X5) and the dependent variable (Y - success of mergers and acquisitions). Effective timeline management (X1) demonstrated a significant positive correlation (Pearson Correlation = 0.476), emphasizing its importance for project success. Project budget management (X2) also exhibited a significant positive correlation (Pearson Correlation = 0.583), highlighting the value of budget management. Efficient human resource management (X3) showed a significant positive correlation (Pearson Correlation = 0.522), underscoring the role of human resources in project success. Effective quality planning management (X4) displayed a significant positive correlation (Pearson Correlation = 0.621), emphasizing the importance of quality planning. Thorough project risk assessment (X5) had a significant positive correlation (Pearson Correlation = 0.671), stressing the role of risk assessment in achieving success. Conclusion: all independent variables (X1, X2, X3, X4, and X5) were found to be positively and significantly correlated with the success of merger and acquisition projects. These results underscore the crucial role of project management factors, including timeline management, budget management, human resource

management, quality planning management, and risk assessment, in determining the success of mergers and acquisitions in Rwandan companies. Recommendations: Based on the findings, it is recommended that companies engaged in mergers and acquisitions in Rwanda prioritize effective project management strategies, focusing on timeline management, budget management, human resource management, quality planning management, and risk assessment. Implementing robust project management practices can enhance the likelihood of successful outcomes in the context of mergers and acquisitions. Additionally, organizations are encouraged to invest in training and development programs to build the necessary skills and competencies in project management for their personnel involved in such strategic initiatives.

1. Background of the Study

In mergers and acquisitions (M&A), businesses and their assets are combined through a variety of financial contracts, such as debt-to-equity conversions, tender offers, asset purchases, management acquisitions, mergers, or acquisitions. An acquisition occurs when one firm buys the majority or all of the shares of another company to take control of the enterprise, whereas a merger is an arrangement that joins two existing businesses into a single new entity. Both procedures are intricate and demand a great deal of forethought, coordination, understanding, communication, and management (Bredin & Söderlund, 2019). The M&A project management in the companies of Sub-Sahara of Africa are taken as the process of applying project management best practices to pre- and post-merger activities. An M&A project manager must carry out a number of intricate tasks when two businesses merge or one business buys another in order to properly consummate the deal and integrate both businesses. As M&A initiatives are frequently lengthy and entail interactions at various stages along the route, it's critical to have faith in your capacity to oversee a project from beginning to end (Clark, & Colling, 2015).

A merger or acquisition is a complex process that calls for careful planning and execution on the part of all parties involved. Successful mergers and acquisitions depend heavily on competent project management (Project Management Institute, 2018). Merger transactions are merger operations carried out through the purchase or exchange of shares (Meier & Schier, 2019). The merger as a combination of two or more existing companies through the creation of a new company. The acquired company legally disappears, and its assets are fully transferred to the acquiring company (Blanchot, 2018). Most important failure factor in mergers and acquisitions is the lack of disposition of the human factor during the process. The use of effective project management strategies is an important aspect of successfully navigating mergers and acquisitions. Project management can assist in ensuring that the integration process runs smoothly and that the merger or acquisition's goals are met (Söderlund & Bredin, 2016).

In Rwanda, the companies prioritize project management during mergers and acquisitions are more likely to achieve their goals. Dealing with cultural differences between the merging and acquired companies is a common source of friction in mergers and acquisitions. Project management is essential at this stage. Project managers are in charge of overseeing the merger or acquisition process, and they must maintain open lines of communication with all parties concerned. Management teams, employees, customers, and suppliers are all parties that benefit from effective project management-facilitated communication. It is crucial that all parties involved in the process are made aware of the potential dangers and the measures being taken to lessen them through clear and consistent communication. One of the greatest benefits of project management is that it guarantees that all mergers and acquisitions are completed on time and within budget (Chebbo, 2022).

1.1 Statement of the Problem

Despite successful merger and acquisition integration depend on best practices for project management; the mergers and acquisitions rely heavily on the expertise of project managers who are lacking the

formation of clear goals and objectives; improper detailed project planning; non-existent of assigning an enthusiastic project team; mergers and acquisitions do not present unique communication challenge; there is also deficiency of strategy of managing risks; absent of monitoring progress reports and adjust the plan (France, Harrington & Marguire, 2021). The performance of mergers is nowadays a theme of great debates of being fairly difficult to establish the transactions that would end as predicted. There are numerous cases that made prior the merger based only on the financial data showing great chances of success, but at the end, these transactions failed to accomplish the expected results. This frequently happened because some of the non-financial factors are overlooked bargaining the entire merger process (Hromei, 2014). Previous research point to the importance of post-merger integrating processes for realizing the synergies expected from mergers. The studies have thus far concentrated more on what takes place within organizations and less on the interaction across various levels (Thomasson, 2018).

The KCB Rwanda and BPR have made a joint business by sounder deal strategies, realistic pricing, greater alignment in the organization, clearer roles and responsibilities, prioritization of most important activities, less disruption to the business, better communication with stakeholders, and decreased risk of losing customers, staff, and suppliers. Although increasing corporate growth is the main goal of mergers and acquisitions (M&A), improvements in operational effectiveness and risk management may take longer to materialize. After a merger, financial companies frequently integrate their employees and infrastructure to avoid creating redundant positions. Unfortunately, those staffing change and the integration of new technology run the danger of slowing down loan processing, lowering customer satisfaction, and even jeopardizing the status of secured assets. Therefore, this study was undertaken to assess how project management influenced the success of mergers and acquisitions based on investment finance / commercial buildings project of KCB and Rural Sector Support Project of BPR.

1.2 Objectives of the Study

The general objective was to assess how project management influence the success of mergers and acquisitions based on investment finance / commercial buildings project of KCB and Rural Sector Support Project of BPR. This study has the following specific objectives:

[1] To find out the effect of project management timeline on success of mergers and acquisitions of investment finance / commercial buildings project of KCB and Rural Sector Support Project of BPR;
[2] To identify the effect of project budget management on success of mergers and acquisitions of investment finance / commercial buildings project of KCB and Rural Sector Support Project of BPR;
[3] To determine the effect of project human resource management on success of mergers and acquisitions of investment finance / commercial buildings project of KCB and Rural Sector Support Project of BPR;
[4] To analyse the effect of project quality planning management on success of mergers and acquisitions of investment finance / commercial buildings project of KCB and Rural Sector Support Project of BPR;
[5] To establish the effect of project risk assessment on success of mergers and acquisitions of KCB Bank Rwanda and BPR.

1.3 Research Questions

The study answered the following questions:

[1] What is the effect of project management timeline on success of mergers and acquisitions of investment finance / commercial buildings project of KCB and Rural Sector Support Project of BPR?
[2] What is the effect of project budget management on success of mergers and acquisitions of KCB Bank Rwanda and BPR?
[3] What is the effect of project human resource on success of mergers and acquisitions of investment finance /

commercial buildings project of KCB and Rural Sector Support Project of BPR?

[4] What is the effect of project quality planning management on success of mergers and acquisitions of investment finance / commercial buildings project of KCB and Rural Sector Support Project of BPR?

[5] What is the effect of project risk assessment on success of mergers and acquisitions of investment finance / commercial buildings project of KCB and Rural Sector Support Project of BPR?

2. Literature Review

2.1 Conceptual Review

This section illustrates operational definitions of key concepts on related study.

Project Management

Application of abilities, resources, and methods to project activities in order to achieve a project goal is known as project management (PM). The objectives are to obtain appropriate measures of quality and to maximize return on project investment so that the project is finished on time, within budget, and within scope. Project management was fundamentally about establishing a framework to control a procedure in order to accomplish a project goal (Hazel & Jacobson, 2014). Project management is helpful in the context of mergers and acquisitions because it enables the formation of a precise plan that outlines the roles, deadlines, and obligations of all parties involved, in accordance with (Chebbo, 2022). Project management is the process of overseeing a team's activity to complete all project objectives within the established parameters. The project documentation that is prepared at the start of the development process typically include descriptions of this information. Scope, time, and budget are the main restraints (Phillips, Joseph, 2014).

Project management timeline

A project management timeline is a schedule for entire project from inception to completion. It breaks entire project into smaller tasks and milestones, with a deadline assigned to each. Defining timelines and schedules and sharing them with team members and stakeholders helps ensure the completion of tasks. A project management timeline is a detailed schedule for your project. It spells out all of the tasks involved and a deadline for each so that your entire team can see when individual steps will take place and when the whole project is wrapped up. A project management timeline is a schedule for entire project from inception to completion. It will break entire project into smaller tasks and milestones, with a deadline assigned to each. Your timeline allows you and your team to not only see when individual pieces are due, but also when the entire project was delivered. Project timelines give your team an action plan, boost accountability, and help steer around any potential roadblocks.

Project Budget

According to Bredin & Söderlund (2019), a budget demonstrates the amount of money allotted to the project. Monitor the project to ensure you follow the budget or adjust it as needed. Budgets vary but may include how much it costs to complete specific tasks, payments to vendors or employees or the costs of any materials used during the project. A project budget is the total projected costs needed to complete a project over a defined period of time. It's used to estimate what the costs of the project will be for every phase of the project.

Project Human resources plan

According to Crook, et al., (2011) project management uses human resources plan to define the project's staffing, identifying the current supply of employees, determining the future of the workforce, balancing between labor supply and demand, and developing plans that support the company's goals. A human resource plan is all aspects of a project management plan that relate to the individual members of a project's team. This can include identifying needed team members, assigning roles and tracking professional relationships between staff members.

Project Quality management

Quality planning is the method of deciding what's most important to the project during the planning stage, so we can make sure that everything goes according to plan.

That includes allocating resources needed to deliver the project, determining what you must take steps, and specifying requirements that need to be met (Aaron Taylor, 2022). Project quality management is the process of continually measuring the quality of all activities and taking corrective action until the team achieves the desired quality. Quality management processes help to control the cost of a project; establish standards to aim for; and determine steps to achieve standards.

Project Risk Management

According to Alolayyan, & Omari (2021), Risk management is the process of identifying, assessing and controlling threats to an organization's capital and earnings. In project management, risk is any potential event that can impact your project, positively or negatively. Project risks can affect the time and resources required to bring a project to completion. Risks can be internal (within the control of the project team) or external (outside of the project team's control.

Success of Merger and Acquisition (M&A)

The goal of mergers and acquisitions, according to Nagasravan Tamma (2021), is to restructure a company's organizational structure. That indicates that both parties are active in combining two or more business organizations in order to update their corporate structure to reflect changes in the market or in their industry. Merger refers to the joining of two existing businesses to form a new business unit or company. Successful mergers and acquisitions (M&A) are M&A transactions where the parties involved mutually agree to the terms and conditions and carry out the merger or acquisition as determined and required by the circumstances at the moment (Alolayyan, Alyahya, & Omari, 2021).

2.2. Theoretical Framework

Systems Management Theory

Unlike the classical school theorists like Max Weber, F. Tailor, and Fayol who saw organizations as closed systems, Ludwing Von Bertalanffy (1973) recognized the need for any organisation to interact with its external environment. He believed that an organization should work in an open system rather than a closed system in order to exist, much like a live body does. This is what led to the success of his work in establishing system concepts as a strategy that organizations may use to increase their efficiency and effectiveness in rapidly changing and dynamic situations. He opposed reductionism and stressed the importance of the whole while addressing organizational issues, contending that actual systems are open and interact with the outside world.

As a result, the open system challenged the traditional understanding of organizations as mechanical and changed how we think about organizational administration. It views management as a fluid process. It emphasized control, objectivity, and distance. Today, organizations are seen as an ongoing process of bringing together motivated individuals whose actions result from their application of their individual interpretations to the particular circumstances they face. For instance, in current situation, an organization which is not sensitive to its environment hardly survive. Things like technology, social and economic phenomena are not static but are always changing, hence organizations are needed to adopt in order to survive. It is also through interaction with its external environment the organization gets its inputs in term of raw material, labour and process them, and lastly emits as output to its environment for selling or capital investment. Take example of Aldgate Congress Resort Ltd., it gets its raw materials from environment and also sells its products to the same environment, and through feedback it adjusts itself in order to meet the requirement of its customers, and hence survival. Systems management theory founded by Ludwing Von Bertalanffy in 1973 to offer an alternative approach to the planning and management of organizations. The systems management theory proposes that businesses, like the human body, consists of multiple components that work harmoniously so that the larger system can function optimally. According to this theory, the current study was to evaluate how the success of an organization depends on several key elements: synergy, interdependence, and interrelations between various subsystems. Employees

are one of the most important components of a company.

Theory of Constraints

The theory of constraints (TOC) is an overall philosophy developed by Goldratt (1997) usually applied to running and improving an organization. It is a methodology for identifying the most important limiting factor that stands in the way of achieving a goal and then systematically improving that constraint until it is no longer the limiting factor. TOC means identifying constraints and managing them, resulting in: on-Time In-Full (OTIF) delivery to customers, elimination of stock-outs across the supply chain, better control over operations and far less firefighting, reduced cycle times and therefore inventories, rapid response culture, and fewer chronic conflicts between team members and exposing additional production capacity without any investment (Schragenheim & Patterson, 2009). In order to achieve the goal, Goldratt (1997) outlines a five-step process to applying the theory: identify the process' constraints, decide how best to exploit the process constraints, subordinate everything else to the above decisions, evaluate the process constraint, and remove the constraint and re-evaluate the process. The part of a system that constitutes its weakest link can be either physical or a policy. The change agent to obtain as much capability as possible from a constraining component, without undergoing expensive changes or upgrades.

2.3 Conceptual Framework

During this study, the researcher establishes the relationship between independent variable and dependent variable through conceptual framework. Thus, project management is independent variable represented by Project management timeline; Project budget management; Project human resource plan; Project quality planning management; and Project risk assessment while success of merger and acquisition represented by effective goals and objectives; creating operative project plan; system conversion/adoption; customer retention; employees retention; active management of risks ; effective monitoring of progress and adjustment of the plans and satisfactory agreement of both parties as figure 1 show conceptual framework below.

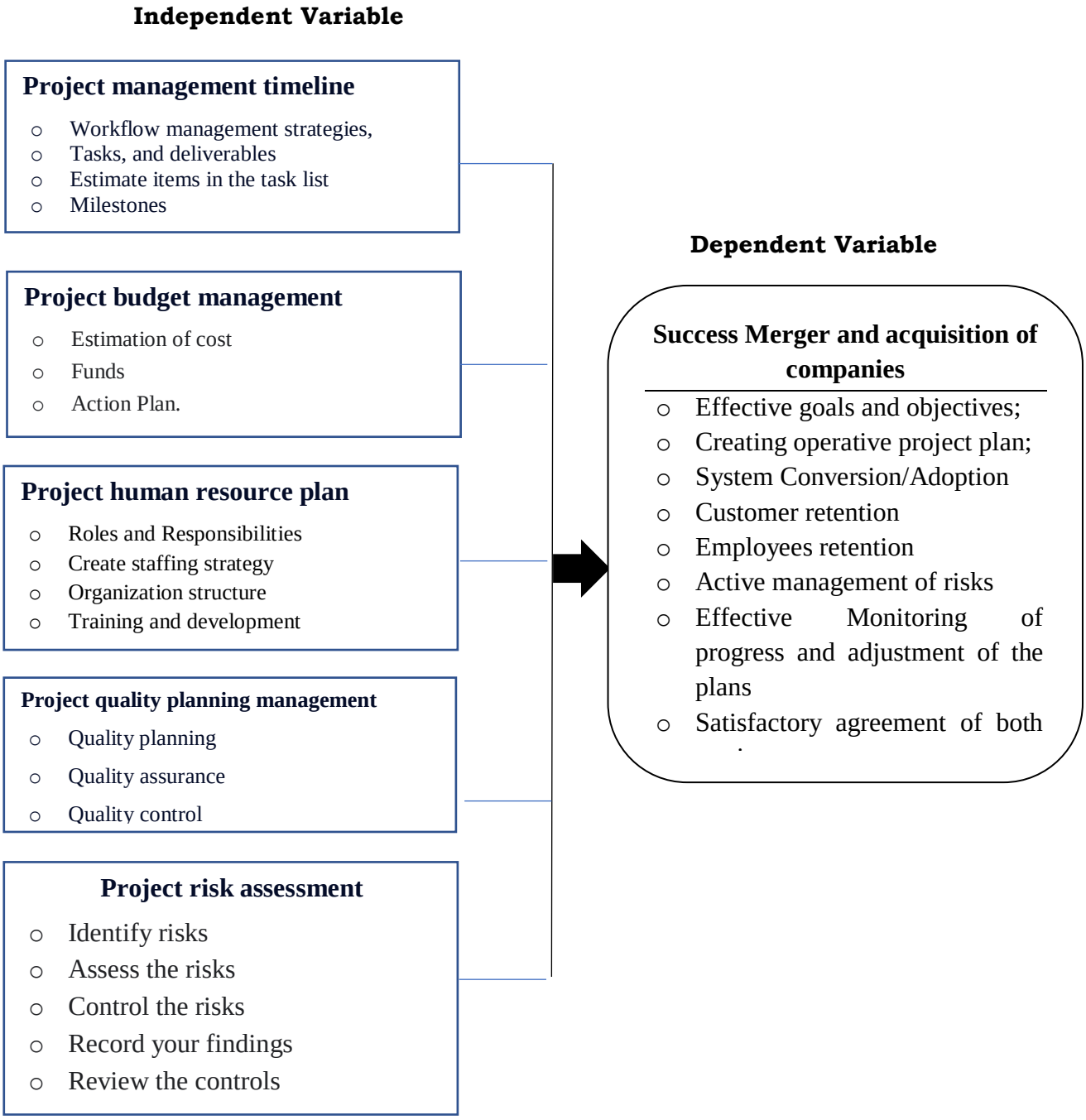

Figure 1: *Conceptual framework*
Source: *researcher conceptualization (2023)*

3. Research Methodology

3.1. Research Design

The study used descriptive and correlative research designs. Descriptive research is a study designed to depict the participants in an accurate way. Descriptive research was all about describing frequencies, percentages, mean, standard deviations for data collected from respondents. Correlative research design was used in this study to demonstrate associations or relationships between the variables. This research used a mixed approach of qualitative and quantitative approaches where it was deeply investigated and analyzed the project management and success merger and acquisition of KCB and BPR Rwanda.

3.2 Study Population and Sample Size

During this study, the population is homogenous where targeted population was 237 persons involved in the mergers and acquisitions based on investment finance / commercial buildings project of KCB and Rural Sector Support Project of BPR. A sample is as a smaller group or sub-group obtained from the accessible population. The study applies the formula of Taro Yamane that provides a simplified formula to calculate sample size. This formula is used to compute the sample size from a population. A 95% confident level and p=0.5 were assumed for the equation, where n is the sample size, N is the size of population, and e is the precision level. The sample size was calculated at 95% confidence level, an alpha level of 0.05 which is margin of error of ± 5% and 0.5 as the standard deviation which shows the variance expectation as responses. This study applied the formula of Taro Yamane as follows:

$$\frac{N}{1+N(e)^2}$$

$$n=\frac{237}{1+237*(0.05)^2}=149$$

The current study collected data in 149 respondents from mergers and acquisitions based on investment finance / commercial buildings project of KCB and Rural Sector Support Project of BPR. To select the respondents, the researcher used stratified and purposive sampling techniques. The study was into three strata and using purposive sampling technique own judgment when choosing members of population to participate in the study. The researcher used this technique because the people with the knowledge about the matter was chosen to participate in this research.

3.3 Data Collection Instruments

The methods were adopted for collection of necessary and valuable data for this research are mainly drawn from primary data and secondary data. It is preferred in primary data because the respondents were free to give answers to the questions. Also, it was encouraging respondents to give open and straight to sensitive questions thus helping the researcher to acquire important information. The questionnaires were in English. The use of questionnaire involved a list of written questions given to certain category of employees. Before the employees start to answer the questions, the researcher had taken time of explaining the questionnaire in relation with project management influencing the success of mergers and acquisitions based on investment finance /commercial buildings project of KCB and Rural Sector Support Project of BPR. The scaling was composed of the following: 1=Strongly Disagree (SD), 2=Disagree (D), 3=Neutral, 4=Agree (A) and 5=Strongly Agree (SA).

3.4 Data Processing and Analysis Methods

In this study, Statistical Package for the Social Sciences (SPSS) version 23.0, and excel were used by researcher in processing and analysis, of data which inform the presentation of findings, analysis and interpretation. The presentation focused on the research questions, the kind of statistical treatment depends upon the nature of the problem, especially the specific and the nature of data gathered. The data collected were analyzed, with respect to the study objectives, using both descriptive and comparative research design. The results obtained, were presented in form of tables. Descriptive statistic method was the term given to the analysis of data that helped to describe, show or summarize data in a meaningful way. In addition to descriptive statistics, researcher used multiple linear regression model and diagnostic tests associated with the test of correlation that examined the

project management and success of merger and acquisition of investment finance / commercial buildings project of KCB and Rural Sector Support Project of BPR. Correlation; the value ranges from -1 (perfectly negative correlation), through 0 (no correlation), to +1 (perfectly positive correlation), and it indicated how closely two variables co-vary. This demonstrated by the discovery of the correlation coefficient, which dealt with the gathering and analysis of quantitative data and the application of probability theory. Statistical correlation is measured by what was called coefficient of correlation (r). It's numerical value ranges from +1.0 to -1.0. It gives us an indication of the strength of relationship. The r > 0 indicates positive relationship, r < 0 indicates negative relationship while r = 0 indicates no relationship (or that the variables are independent and not related). The r = +1.0 describes a perfect positive correlation and r = -1.0 describes a perfect negative correlation. Closer the coefficients were to +1.0 and -1.0, greater is the strength of the relationship between the variables). Multiple linear Regression analysis models were adopted to show relationships using equation econometric models as formulated: y=f(x); $Y= \beta 0+ \beta 1x1+ \beta 2x2+ \beta 3x3+ \beta 4x4+ \beta 5x5 +\varepsilon$, where x: independent variable which was project management represented by:

X1: Timeline management
X2: project budget management
X3: project human resource
X4: quality planning management
X5: project risk assessment
Y: success of merger and acquisition

$\beta 0$: is the y-intercept
$\beta 1$-$\beta 5$: are the slopes of the line
ε: is an error term

4. Findings and Discussions

The questionnaires were addressed to 149 respondents and they were given four weeks of responding; the findings indicated the participation of 100.0% which allowed us to continue the study with editing/cleaning, coding, data entry into dataset and tabulation that produced statistical tables and graphs. This was organized into three main segments encompassing an overview of the respondents, descriptive statistics and analysis, hypothesis testing (inferential statistics), a discussion of the findings, and the implications drawn from these findings.

4.1 Profile of the Respondents

This section provides valuable insights into the demographics, characteristics, and backgrounds of the individuals who participated in the study, shedding light on the diverse perspectives and experiences that inform the analysis.

Table 1. Gender of Respondents

Gender	Frequency	Percent
Male	76	51.0
Female	73	49.0
Total	149	100.0

Source: *primary data (2023)*

In Table 1, you can observe the breakdown of survey participants according to their gender in the primary data collected in 2023. The table reveals a total of 149 respondents who participated in the study. The data indicates a relatively even distribution of respondents based on gender, with 51.0% being categorized as male and 49.0% as female. This nearly equal split suggests a diverse and representative sample in terms of gender, which can be advantageous for deriving broadly applicable conclusions from the research in the investment finance / commercial buildings project of KCB and Rural Sector Support Project of BPR.

Table 2. Age of respondents

Age	Frequency	Percent
26-35 years	49	32.9
36-45 years	36	24.2
46-55 years	46	30.9
56-65years	15	10.1
66years and above	3	2.0
Total	**149**	**100.0**

Source: *primary data (2023)*

Table 2 provides an overview of the age distribution of the respondents in the study, expressed in terms of frequency and percentages. The table reveals that the respondents' ages are quite varied, with participants falling into different age groups. This diversity in age is beneficial for the study as it can provide insights into how different age groups perceive or respond to the subject matter. The most significant age category comprises individuals between the ages of 46 and 55, making up 30.9% of the total respondents. This indicates that a notable proportion of the participants fall within this particular age range. Substantial portions are also represented by the 26-35 year and 36-45-year groups, at 32.9% and 24.2% respectively. Additionally, the 56-65-year group constitutes 10.1% of respondents, and those aged 66 and above account for 2.0%.

Table 3. Marital status of Respondents

	Frequency	Percent
Single (never married)	50	33.6
Married / living together	88	59.1
Engaged to be married	11	7.4
Total	**149**	**100.0**

Source: *Primary data (2023)*

Table 3 provides an overview of the marital status of the respondents in the study, presenting both the frequency and the percentage of respondents in each category. The most significant group is Married / living together, representing 59.1% of the total respondents. Single (never married) is the next largest category, accounting for 33.6% of respondents. The Engaged to be married category is the smallest, with 7.4% of respondents.

Table 4. Education level of respondents

Education level	Frequency	Percent
Masters level and above	21	14.1
Bachelors level	32	21.5
Secondary	68	45.6
Professional	28	18.8
Total	**149**	**100.0**

Source: Primary data (2023)

Table 4 provides an overview of the education level of the respondents in the study, presenting both the frequency and the percentage of respondents in each category. The most significant group is Secondary, representing 45.6% of the total respondents. Bachelors level is the next largest category, accounting for 21.5% of respondents. This group typically includes individuals who have completed undergraduate degrees. The professional category represents 18.8% of respondents, and the master's level and above, category accounts for 14.1%.

4.2 Inferential statistics Findings

Inferential statistics refers to that family of quantitative techniques that primarily allows us not only to test hypotheses in a study but also to estimate values in a population from which a sample has been derived and on which data have been generated. Measures of inferential statistics are t-test, z-test, linear regression, etc.

Table 5: Correlations Coefficient Results

		X1: Timeline management	X2: project budget management	X3: project human resource	X4: quality planning management	X5: project risk assessment	Y: success of merger and acquisition
X1: Timeline management	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	149					
X2: project budget management	Pearson Correlation	.441**	1				
	Sig. (2-tailed)	.000					
	N	149	149				
X3: project human resource	Pearson Correlation	.370**	.486**	1			
	Sig. (2-tailed)	.000	.000				
	N	149	149	149			
X4: quality planning management	Pearson Correlation	.414**	.532**	.872**	1		
	Sig. (2-tailed)	.000	.000	.000			
	N	149	149	149	149		
X5: project risk assessment	Pearson Correlation	.499**	.693**	.784**	.758**	1	
	Sig. (2-tailed)	.000	.000	.000	.000		
	N	149	149	149	149	149	
Y: success of merger and acquisition	Pearson Correlation	**.476****	**.583****	**.522****	**.621****	**.671****	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	149	149	149	149	149	149

***. Correlation is significant at the 0.01 level (2-tailed).*

Based on the correlation coefficients provided in Table 5; we interpret the relationships between the independent variables (X1, X2, X3, X4, and X5) and the dependent variable (Y, success of merger and acquisition). Here are the key findings revealed that X1, which represents timeline management, has a statistically significant positive correlation with Y (success of merger and acquisition) at the 0.01 level (two-tailed). The Pearson Correlation is 0.476. This suggests that effective timeline management is positively associated with a higher success rate in merger and acquisition projects. X2, project budget management, also has a statistically significant positive correlation with Y at the 0.01 level (two-tailed). The Pearson Correlation is 0.583. This indicates that effective management of project budgets is positively related to the success of merger and acquisition projects. X3, representing project human resource management, has a statistically significant positive correlation with Y at the 0.01 level (two-tailed). The Pearson Correlation is 0.522. This implies that efficient management of human resources is positively linked to the success of merger and acquisition projects. X4, quality planning management, also exhibits a statistically significant positive correlation with Y at the 0.01 level (two-tailed). The Pearson Correlation is 0.621. This suggests that effective quality planning management is positively associated with the success of merger and acquisition projects. X5, project risk assessment, has a statistically significant positive correlation with Y at the 0.01 level (two-tailed). The Pearson Correlation is 0.671. This indicates that thorough project risk assessment is positively related to the success of merger and acquisition projects. In summary, the findings from the

correlation analysis suggest that all of the independent variables (X1, X2, X3, X4, and X5) are positively and significantly correlated with the success of merger and acquisition projects. This means that effective management of timeline, project budget, human resources, quality planning, and risk assessment are all associated with a higher likelihood of success in merger and acquisition endeavors. It's essential for businesses to pay attention to and optimize these factors to improve their chances of successful mergers and acquisitions.

Table 6: Correlations Coefficient between variables

			Project Management	Y: success of merger and acquisition
Spearman's rho	Project Management	Correlation Coefficient	1.000	.667**
		Sig. (2-tailed)	.	.000
		N	149	149
	Y: success of merger and acquisition	Correlation Coefficient	.667**	1.000
		Sig. (2-tailed)	.000	.
		N	149	149

**. Correlation is significant at the 0.01 level (2-tailed).

Based on the correlation coefficients provided in Table 6, it appears that there is a significant relationship between the project management and the dependent variable, Y: success of merger and acquisition." The key findings revealed that the project management, has a strong and statistically significant positive correlation with Y is success of merger and acquisition. The Spearman's rho correlation coefficient is 0.667, and this correlation is significant at the 0.01 level (two-tailed). This suggests that the quality and effectiveness of project management are positively associated with the success of merger and acquisition of investment finance / commercial buildings project of KCB and Rural Sector Support Project of BPR.

Multiple Linear Regression analysis results

Table 7: Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.735[a]	.541	.524	3.93522	1.209

a. Predictors: (Constant), X5: project risk assessment, X1: Timeline management, X2: project budget management, X4: quality planning management, X3: project human resource
b. Dependent Variable: Y: success of merger and acquisition

Based on the Model Summary provided in Table 7, we interpret the relationship between the independent variables (X1, X2, X3, X4, and X5) and the dependent variable (Y: success of merger and acquisition) using a regression model. Here are the key findings indicated that the model appears to be a multiple regression model with five predictor variables (X1: Timeline management, X2: project budget management, X3: project human resource, X4: quality planning management, X5: project risk assessment) and a constant term. The dependent variable is Y: success of merger and acquisition. The R-squared value (R^2) for the model is 0.541. This means that approximately 54.1% of the variance in the success of merger and acquisition (Y) is explained by the combination of the independent variables in the model. R-squared is a measure of how well the model fits the data, and a higher R-squared indicates a better fit. The adjusted R-squared value is 0.524. This is a modified version of R-squared that adjusts for the number of predictors in the model. It's slightly lower than the R-squared value but is still a good indicator of the model's goodness of fit. The standard error of the estimate is 3.93522. It

represents the average difference between the predicted values and the actual values of Y. A lower standard error indicates a better fit of the model. The Durbin-Watson statistic is 1.209. This statistic is used to detect the presence of autocorrelation in the model residuals. A value close to 2 suggests that there is little autocorrelation. In this case, a value slightly below 2 indicates some degree of positive autocorrelation. In summary, the regression model that includes the independent variables X1, X2, X3, X4, and X5 appears to be a good fit for explaining the success of merger and acquisition (Y). The model accounts for about 54.1% of the variance in Y, which is a substantial portion.

Table 8 ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2605.061	5	521.012	33.644	.000[b]
	Residual	2214.493	143	15.486		
	Total	4819.554	148			

a. Dependent Variable: Y: success of merger and acquisition

b. Predictors: (Constant), X5: project risk assessment, X1: Timeline management, X2: project budget management, X4: quality planning management, X3: project human resource

Based on the ANOVA (Analysis of Variance) table provides insights into the overall significance of the regression model: the model being evaluated is a multiple linear regression model with five predictor variables (X1: Timeline management, X2: project budget management, X3: project human resource, X4: quality planning management, X5: project risk assessment) and a constant term. The dependent variable is Y: success of merger and acquisition. The Regression section of the ANOVA table provides information about the variance explained by the regression model. The sum of squares for the regression model is 2605.061, indicating the total variation in Y that is explained by the independent variables. The model has 5 degrees of freedom (df) associated with the number of predictor variables. The mean square (521.012) is calculated by dividing the sum of squares by the degrees of freedom. The Residual section of the ANOVA table provides information about the unexplained variance or error term. The sum of squares for the residuals is 2214.493, which represents the unexplained variation in Y. The residual section has 143 degrees of freedom associated with the number of data points minus the number of predictor variables. The mean square for the residuals is 15.486. The Total section provides the total variation in the dependent variable (Y) without regard to the predictor variables. The total sum of squares is 4819.554, and it has 148 degrees of freedom. The F-statistic (F) is a ratio of the mean square for the regression to the mean square for the residuals. It measures the overall significance of the regression model. In this case, the F-statistic is 33.644, and it is highly significant with a p-value (Sig.) of 0.000 (indicating less than 0.01). This means that the regression model is statistically significant. In summary, the ANOVA table provides evidence that the regression model, which includes the independent variables X1, X2, X3, X4, and X5, is statistically significant in explaining the variation in the success of merger and acquisition (Y). The F-statistic is highly significant, suggesting that at least one of the independent variables has a significant impact on the dependent variable. The model explains a substantial amount of the variance in Y, as evidenced by the large F-statistic and low p-value.

Table 9: Regression Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.186	1.925		3.214	.002
	X1: Timeline management	.207	.100	.137	2.064	.041
	X2: project budget management	.287	.141	.164	2.029	.044
	X3: project human resource	-.569	.244	-.299	-2.333	.021
	X4: quality planning management	.816	.222	.445	3.669	.000
	X5: project risk assessment	.512	.153	.387	3.352	.001

a. Dependent Variable: Y: success of merger and acquisition

Based on the Regression Coefficients table (Table 9), we interpret the findings related to the relationship between the independent variables (X1, X2, X3, X4, X5) and the dependent variable (Y: success of merger and acquisition) in a multiple linear regression model: The constant (intercept) in the model is 6.186. This is the estimated value of Y when all independent variables (X1, X2, X3, X4, X5) are zero. In practical terms, it represents the baseline level of success of merger and acquisition when all predictor variables are zero. The coefficient for X1 (Timeline management) is 0.207. This means that for every one-unit increase in X1, Y (success of merger and acquisition) is expected to increase by 0.207 units. The standardized coefficient (Beta) is 0.137, indicating that X1 has a positive impact on Y. It is statistically significant with a p-value of 0.041. The coefficient for X2 (Project budget management) is 0.287. For every one-unit increase in X2, Y is expected to increase by 0.287 units. The standardized coefficient (Beta) is 0.164, suggesting that X2 has a positive impact on Y. This variable is statistically significant with a p-value of 0.044. The coefficient for X3 (Project human resource) is -0.569. A one-unit increase in X3 is associated with a decrease of 0.569 units in Y. The standardized coefficient (Beta) is -0.299, indicating a negative impact of X3 on Y. This variable is statistically significant with a p-value of 0.021. The coefficient for X4 (Quality planning management) is 0.816. A one-unit increase in X4 is linked to an increase of 0.816 units in Y. The standardized coefficient (Beta) is 0.445, suggesting a strong positive impact of X4 on Y. This variable is highly statistically significant with a p-value of 0.000. The coefficient for X5 (Project risk assessment) is 0.512. A one-unit increase in X5 results in an increase of 0.512 units in Y. The standardized coefficient (Beta) is 0.387, indicating a positive impact of X5 on Y. This variable is statistically significant with a p-value of 0.001. In summary, the regression coefficients provide insight into the strength and direction of the relationships between the independent variables and the success of merger and acquisition (Y). X4 (Quality planning management) has the most substantial positive impact on Y, followed by X5 (Project risk assessment) and X2 (Project budget management). X1 (Timeline management) also has a positive impact, while X3 (Project human resource) has a negative impact on Y. These findings help organizations understand which factors are most influential in achieving success in merger and acquisition projects and guide their strategies accordingly。

5. Conclusion and Recommendations

Conclusion

The correlation analysis presented significant and positive relationships between the independent variables (X1, X2, X3, X4, and X5) and the dependent variable (Y, success of merger and acquisition). Specifically, the findings indicate that Effective timeline management (X1) is significantly positively correlated with the success of merger and acquisition projects, emphasizing the importance of managing project timelines for success (Pearson

Correlation = 0.476). Project budget management (X2) also exhibits a significant positive correlation with the success of merger and acquisition projects, underlining the value of budget management in achieving success (Pearson Correlation = 0.583). Efficient human resource management (X3) is significantly positively linked to the success of merger and acquisition projects, underscoring the role of human resources in project success (Pearson Correlation = 0.522). Effective quality planning management (X4) is significantly positively associated with the success of merger and acquisition projects, highlighting the importance of quality planning for success (Pearson Correlation = 0.621). Thorough project risk assessment (X5) is significantly positively related to the success of merger and acquisition projects, emphasizing the role of risk assessment in achieving success (Pearson Correlation = 0.671). In summary conclusion, the findings indicate that all of the independent variables (X1, X2, X3, X4, and X5) are positively and significantly correlated with the success of merger and acquisition projects. This suggests that effective management of timeline, project budget, human resources, quality planning, and risk assessment are crucial factors associated with a higher likelihood of success in merger and acquisition endeavors. Businesses should prioritize and optimize these aspects to enhance their chances of successful mergers and acquisitions.

Recommendations

Based on the strong positive correlations found between the independent variables (X1, X2, X3, X4, and X5) and the success of merger and acquisition projects, here are seven recommendations for businesses looking to improve their M&A outcomes:

- Prioritize effective timeline management: emphasize the importance of timeline management in M&A projects. Establish clear milestones and deadlines, monitor progress, and implement strategies to keep the project on track. Consider using project management tools to streamline this process.
- Enhance project budget management: Invest in robust budgeting and financial control systems to ensure efficient allocation and tracking of resources. Regularly review and adjust budgets as necessary to minimize financial risks during M&A transactions.
- Optimize human resource management: recognize the crucial role of human resources in M&A success. Ensure that teams are adequately staffed, equipped, and motivated. Promote a collaborative culture that fosters effective teamwork and clear communication.
- Strengthen quality planning management: Give quality planning the attention it deserves by implementing quality assurance and control processes. Maintain high standards for the delivery of goods and services to safeguard the integrity of the merger or acquisition.
- Thoroughly assess project risks: Prioritize risk assessment by thoroughly identifying, evaluating, and managing potential risks associated with M&A projects. Develop comprehensive risk mitigation and response strategies to minimize adverse impacts.
- Continuous monitoring and reporting: establish robust monitoring and reporting mechanisms for each of these key variables (timeline, budget, human resources, quality, and risk). Regularly assess progress and make data-driven decisions to adapt to changing circumstances.
- Invest in employee training: Provide training and professional development opportunities for your employees, particularly in areas related to timeline management, budgeting, quality control, and risk assessment. Well-trained staff are better equipped to contribute to M&A success.

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