Journal of Entrepreneurship & Project Management

The Effect of Project Management Tools on Success in Project Implementation; A Case of Business Development Fund (BDF)

Uwineza Immaculee & Dr. Wilson Gachiri

ISSN: 2616-8464

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project Management
Volume 8||Issue 2||Page 24-36 ||February||2024|
Email: info@stratfordjournals.org ISSN: 2616-8464

The Effect of Project Management Tools on Success in Project Implementation; A Case of Business Development Fund (BDF)

Uwineza Immaculee[1] & Dr. Wilson Gachiri[2]
[1] Master of Project Management, University of Kigali, Rwanda
[2] Senior Lecturer, University of Kigali, Rwanda

***How to cite this article*: Immaculee U. & Gachiri W. (2024). The Effect of Project Management Tools on Success in Project Implementation; A Case of Business Development Fund (BDF). *Journal of Entrepreneurship & Project Management. Vol* 8(2) pp. 24-36** https://doi.org/10.53819/81018102t2336

Abstract

The general objective of this project was to find the the effect of project management tools on success in project implementation. The specific objectives of the study were to assess the effect of risk management tools on success of projects implementation at the Business Development Fund in Rwanda, determine the effect of scheduling and planning tools on success of projects implementation at the Business Development Fund in Rwanda, evaluate the effect of communication and collaboration tools on success of projects implementation at the Business Development Fund in Rwanda and investigate the effect of resources management tools on success of projects implementation at the Business Development Fund in Rwanda. The population of the study 120 and the sample size calculated by Slovin's formula. The sample size was 92 people have project successes in BDF. Tools of data collection were questionnaire, interview and documentary. The study descriptive analysis for the examination of distributions of a single variable and correlation analysis, or regression analysis when it involves more than one variables. The Pearson correlation coefficient between Risk management tools and Success in project implementation is 0.759 ($p<0.05$). This indicates a strong positive correlation. The Pearson correlation coefficient between Scheduling and Planning tools and Success in project implementation is 0.732 ($p<0.05$), indicating a significant positive correlation. The Pearson correlation coefficient between Communication and Collaboration tools and Success in project implementation is 0.707 ($p<0.05$), signifying a strong positive correlation. The Pearson correlation coefficient between Resource management tools and Success in project implementation is 0.712 ($p<0.05$), representing a strong positive correlation. The results indicate The R Square value is 0.683. This value represents the proportion of variance in the dependent variable (Success in project implementation) that is explained by the combination of predictor variables. BDF and related Rwandan institution should Establish risk management teams, adopt modern project management software, prioritize communication tools, and invest in resource management tools to enhance project efficiency and success.

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project Management
Volume 8||Issue 2||Page 24-36 ||February||2024|
Email: info@stratfordjournals.org ISSN: 2616-8464

1. Introduction

Project management tools play a crucial role in project implementation across global projects. The effective utilization of these tools can significantly impact the success of projects in a global context. This background section provides an overview of relevant factors and studies that support the investigation of the effect of project management tools on project implementation success in a global setting. Cultural and Organizational Context: Global projects involve diverse cultures, languages, and organizational structures, which can pose unique challenges. Research by Shenhar and Dvir (2007) suggests that project management tools can help bridge cultural and organizational gaps by providing standardized processes, facilitating communication, and promoting collaboration among globally dispersed teams.

Virtual Collaboration: Global projects often rely on virtual teams that collaborate across different time zones and geographical locations. Virtual collaboration tools, such as video conferencing, shared workspaces, and document sharing platforms, have been found to enhance communication and coordination among team members. Studies by Hertel et al. (2005) and Martins et al. (2004) highlight the importance of these tools in facilitating effective global project management.

Cross-Cultural Communication: Effective communication is crucial in global projects. Project management tools that support multilingual communication, real-time messaging, and translation capabilities can overcome language barriers and facilitate collaboration among team members from different cultural backgrounds. Research by Ling and Yeo (2012) highlights the importance of communication tools in cross-cultural project management. Knowledge Sharing and Transfer: Global projects often involve knowledge sharing and transfer across geographically dispersed teams. Project management tools that enable centralized knowledge repositories, discussion forums, and collaborative document editing can enhance knowledge sharing and transfer. Research by Chong and Kim (2019) emphasizes the role of project management tools in facilitating knowledge exchange in global project environments. By considering the cultural and organizational context, virtual collaboration, cross-cultural communication, and knowledge sharing, this research aims to explore how project management tools can contribute to the success of global project implementation. Understanding the impact of these tools can provide insights and recommendations for effectively managing global projects and improving project outcomes in a global context.

The use of project management tools in Africa has gained prominence as organizations and governments in the region recognize the importance of effective project implementation. Understanding the impact of project management tools on project success in Africa is crucial for optimizing project outcomes and achieving developmental goals. This background section provides an overview of key factors and studies relevant to investigating the effect of project management tools on project implementation success in Africa. Infrastructure Development: Africa faces unique challenges in infrastructure development, including transportation, energy, and telecommunications. Project management tools can play a vital role in planning, coordinating, and monitoring infrastructure projects. Research by Ogunlana et al. (2013) highlights the significance of project management tools in addressing the complex infrastructure needs of Africa.

Stakeholder Engagement: Engaging various stakeholders, including local communities, government bodies, and NGOs, is crucial for project success in Africa. Project management tools that enable effective stakeholder engagement and communication can enhance project outcomes. A study by Chinyio et al. (2019) emphasizes the importance of stakeholder management tools in African construction projects. Resource Management: Africa's diverse resource landscape presents challenges in managing project resources effectively. Project management tools that facilitate resource allocation, budget tracking, and procurement management can enhance resource efficiency. Research by Chindanya and Van der Waldt (2017) discusses the importance of project management tools in optimizing resource management in African projects.

Rwanda, a landlocked country in East Africa, has experienced remarkable progress in terms of economic and social development in recent years. However, this development did not happen by chance. It is the result of deliberate policies, strategic planning, and effective implementation, with project management playing a crucial role. Rwanda's development journey has been shaped by its challenging history. In 1994, the country experienced a devastating genocide that left the nation in ruins, with a significant loss of life and a shattered economy. In the aftermath of this tragedy, Rwanda embarked on a path of healing, reconciliation, and reconstruction.

Under the leadership of President Paul Kagame, Rwanda adopted a long-term vision for development known as "Vision 2020." This vision aimed to transform Rwanda into a middle-income country, with a knowledge-based economy, by the year 2020. Achieving this ambitious goal required effective planning and implementation of numerous projects across various sectors. Project management emerged as a critical discipline to ensure the successful execution of these projects. The Government of Rwanda recognized the importance of project management principles and invested in building project management capacity and expertise. This involved training project managers, establishing project management offices, and adopting international best practices in project management.

One of the key sectors that benefited from effective project management was infrastructure development. Rwanda faced significant challenges in terms of connectivity, particularly due to its hilly terrain and limited road networks. Through the application of project management methodologies, the country successfully implemented large-scale infrastructure projects, including road construction, bridges, and energy systems. These projects not only improved transportation and connectivity but also stimulated economic growth and attracted investment.

Furthermore, project management played a crucial role in the implementation of socioeconomic development programs in Rwanda. These programs focused on sectors such as healthcare, education, agriculture, and tourism. By employing project management techniques, the government efficiently utilized resources, coordinated activities, and ensured timely and effective delivery of services. This resulted in improved access to healthcare facilities, quality education, modern farming techniques, and increased tourism revenue, positively impacting the lives of Rwandan citizens.

The success of project management in Rwanda can be attributed to several factors. The government's commitment to project management principles and its integration into national development strategies played a pivotal role. Additionally, the establishment of a robust project management framework, including standardized processes and guidelines, contributed to the effective implementation of projects. The availability of skilled project managers, both within the government and private sector, also ensured the successful execution of projects. Moreover, Rwanda's collaboration with development partners and private sector entities played a

significant role in leveraging resources, knowledge, and expertise. Development partners provided financial support and technical assistance, while the private sector brought in innovation, efficiency, and investment. The collaborative approach fostered synergies, minimized duplication of efforts, and enhanced project outcomes.

In conclusion, the background of this research highlights the context in which project management has played a pivotal role in enhancing development in Rwanda. The country's commitment to project management principles, coupled with effective implementation, has led to significant progress in infrastructure development and socioeconomic advancement. Understanding the background and key success factors of project management in Rwanda provides valuable insights for other nations seeking to leverage project management practices for their own development goals.

1.1 Statement of the Problem

Many projects face challenges in achieving their intended objectives and meeting success criteria, which can result in delays, cost overruns, and unsatisfactory outcomes. Project management tools are widely used to aid in planning, organizing, and controlling projects, but their actual impact on project success remains unclear. There is a need to investigate and understand how the utilization of project management tools influences project outcomes and success in project implementation.

The problem centres on determining the extent to which project management tools contribute to improved project performance, adherence to schedules, cost control, risk management, quality assurance, and stakeholder satisfaction. Additionally, identifying potential limitations or barriers in the effective use of these tools and their impact on overall project success is crucial. Understanding the relationship between project management tools and project success can help organizations enhance project management practices, optimize resource allocation, and improve decision-making processes.

The general objective of this project is to find the the effect of project management tools on success in project implementation.

Specific Objective:

i. To assess the effect of risk management tools on success of projects implementation at the Business Development Fund in Rwanda.
ii. To determine the effect of scheduling and planning tools on success of projects implementation at the Business Development Fund in Rwanda.
iii. To evaluate the effect of communication and collaboration tools on success of projects implementation at the Business Development Fund in Rwanda.
iv. To investigate the effect of resources management tools on success of projects implementation at the Business Development Fund in Rwanda.

The Research employed null hypotheses

$H_0$1: There is no significant effect of risk management tools on the success of project implementation at the Business Development Fund in Rwanda.

$H_0$2: There is no significant effect of scheduling and planning tools on the success of project implementation at the Business Development Fund in Rwanda.

$H_0$3: There is no significant effect of communication and collaboration on the success of project implementation at the Business Development Fund in Rwanda.

$H_0$4: There is no significant effect of resources management tools on success of projects implementation at the Business Development Fund in Rwanda.

2. Literature review

This chapter contains a critical examination of the existing relevant literature on project management tools on success in project implementation.

2.1 Project Management

Project management involves the application of knowledge, skills, tools, and techniques to achieve project objectives. It encompasses various processes, including project planning, organizing, monitoring, and controlling. Effective project management is essential for successful project implementation (Project Management Institute, 2017).

Project management is a discipline that encompasses the application of knowledge, skills, tools, and techniques to plan, execute, and control projects effectively. It involves managing resources, stakeholders, risks, and constraints to achieve project objectives within the defined scope, time, and budget. The following key concepts and theories are relevant to understanding project management:

The project life cycle represents the phases a project goes through from initiation to closure. Common phases include initiation, planning, execution, monitoring and controlling, and closure. Understanding the project life cycle helps in organizing project activities, allocating resources, and ensuring project success at each stage (Project Management Institute, 2017).

Project constraints refer to the factors that limit project execution and influence project outcomes. The primary constraints are time, cost, scope, and quality. Effective project management involves balancing these constraints and making trade-offs to meet project objectives within the given limitations (Kerzner, 2017).

Stakeholder management focuses on identifying, engaging, and satisfying the needs and expectations of project stakeholders. Stakeholders can include project sponsors, customers, team members, suppliers, and the community. Effective stakeholder management helps in fostering positive relationships, addressing conflicts, and ensuring stakeholder support for project success (Freeman, 1984).

Risk management involves identifying, assessing, and responding to project risks to minimize their impact on project objectives. It includes risk identification, risk analysis, risk response planning, and risk monitoring and control. Effective risk management helps in reducing uncertainty, improving decision-making, and increasing the chances of project success (Project Management Institute, 2017).

These concepts provide a foundation for understanding project management principles and practices. By considering the project life cycle, constraints, stakeholder management, and risk management, project managers can plan and execute projects effectively, mitigate risks, and achieve project success. Understanding these key concepts is crucial for researchers, practitioners, and organizations seeking to enhance project management capabilities and optimize project outcomes.

2.2 Project Management Tools

Project management tools refer to software, technologies, and methodologies used to support project management processes. These tools include project planning and scheduling software, collaboration platforms, risk management tools, and communication technologies. They provide structure, automation, and visibility to project activities (Kerzner, 2017).

Project management tools play a crucial role in supporting project managers and teams in planning, executing, and controlling projects. They provide assistance in various aspects of project management, including scheduling, communication, collaboration, documentation, and reporting. The following key concepts and theories are relevant to understanding project management tools:

Project planning and scheduling tools assist project managers in creating project plans, defining activities, establishing dependencies, allocating resources, and creating timelines. These tools enable the development of project schedules, critical path analysis, and resource levelling to optimize project timelines and resource allocation (Kerzner, 2017).

Collaboration and communication tools facilitate effective communication and collaboration among project team members, stakeholders, and other relevant parties. These tools enable real-time communication, document sharing, task management, and virtual collaboration, fostering teamwork and enhancing information flow within the project (Aubry, 2014).

Risk management tools support the identification, analysis, assessment, and response planning for project risks. These tools assist project managers in documenting risks, conducting risk assessments, prioritizing risks, and developing risk response strategies. They provide a systematic approach to managing uncertainties and minimizing potential negative impacts on project objectives (Project Management Institute, 2017).

Project management software offers comprehensive solutions that integrate various project management functions and tools. These software packages provide features such as task tracking, resource management, budgeting, reporting, and performance monitoring. They enable project managers to centralize project information, streamline project processes, and gain insights into project progress and performance (Garg, 2016).

Understanding these concepts related to project management tools is essential for researchers and practitioners. Project management tools enhance efficiency, accuracy, collaboration, and decision-making in project execution. They enable project managers to better plan, monitor, and control projects, leading to improved project outcomes. The utilization of appropriate project management tools can significantly contribute to the success of projects and enhance project management practices.

2.3 Success in Project Implementation

Project implementation success is the achievement of project objectives within the defined constraints of time, cost, and scope. It involves meeting stakeholder expectations, delivering project outcomes, and creating value for the organization or community. Success can be measured through factors such as project performance, stakeholder satisfaction, and overall project impact (Cooke-Davies, 2002).

Success in project implementation refers to the achievement of project objectives, deliverables, and outcomes within the defined constraints of time, cost, scope, and quality. It involves meeting stakeholder expectations, creating value, and generating positive impacts. The following key concepts and theories are relevant to understanding success in project implementation:

Project performance refers to the degree to which a project meets its defined objectives and goals. It includes factors such as adherence to project timelines, budget compliance, scope fulfilment, and quality of deliverables. Assessing project performance helps in evaluating the overall success of project implementation (Atkinson, 1999).

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project Management
Volume 8||Issue 2||Page 24-36 ||February||2024|
Email: info@stratfordjournals.org ISSN: 2616-8464

Stakeholder satisfaction is a critical aspect of project success. It involves meeting the needs, expectations, and requirements of project stakeholders, including customers, sponsors, end-users, and other relevant parties. By ensuring stakeholder satisfaction, projects can achieve acceptance, support, and long-term sustainability (Freeman, 1984).

Benefits realization focuses on the actualization of expected benefits and value from the project's outcomes. It involves assessing the extent to which project deliverables contribute to the organization's strategic objectives and desired outcomes. Effective benefits realization management ensures that the intended benefits are achieved and sustained (Ward & Daniel, 2012).

Project impact refers to the broader effects and influence of the project on the organization, community, or society. It encompasses economic, social, environmental, and other dimensions of project outcomes. Understanding and measuring project impact can provide insights into the success and value generated by the project (Cooke-Davies, 2002).

By considering these concepts related to success in project implementation, researchers and practitioners can assess and evaluate the effectiveness of project outcomes. Project performance, stakeholder satisfaction, benefits realization, and project impact provide different perspectives on project success. By examining these dimensions, project managers can identify areas of improvement, make informed decisions, and enhance project management practices to achieve successful project implementation.

3. Research methodology

3.1 Research Design

The research design for studying the effect of project management tools on success in project implementation can involve the collection and analysis of primary data, secondary data, or a combination of both (mixed methods approach). The choice between primary and secondary data or the use of mixed methods depends on the research objectives, available resources, and the nature of the research questions.

3.2 Study Population and sample size

Majid (2018) the study population refers to the entire group of individuals, objects, or events that the researcher wants to investigate and draw conclusions about in a research study. It is the larger target group from which the researcher selects a sample to participate in the study. The study population should be defined based on the research objectives and the specific research questions being addressed. It should be clearly delineated to ensure that the findings from the study are representative and applicable to the intended population.

Table 1: Sample size

No	Category	Population	Sample size
1	BDF staff	40	36
2	People has project successful	60	52
3	People has Non successful project	20	19
Total		120	92

Sample size determined using slovin's formula $n = N / (1 + Ne^2)$ Where: n = sample size, N= Total population and e = margin of error. The researcher used the following data: N=120 adults; confidence level=95% thus e =1- 0.95 = 0.05

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project Management
Volume 8||Issue 2||Page 24-36 ||February||2024|
Email: info@stratfordjournals.org ISSN: 2616-8464

$$n = \frac{\mathrm{N}}{1 + \mathrm{N(e)2}}$$

$$n = \frac{120}{1 + 120(0.05)2}$$

$$n = \frac{120}{1.3}$$

$$\mathrm{n} = 92$$

The sample size was 92 people has project successes in BDF.

3.3 Data Collection Instruments

So far as the general form of a questionnaire is concerned, it can either be structured or unstructured questionnaire. Structured questionnaires are ones with specific, measurable, and pre-determined questions. Each respondent receives the same set of questions, all of which are presented in the same format and sequence. A highly organized questionnaire limits the number of comments made in the respondent's own words and specifies all of the questions and possible answers. A questionnaire is referred to as unstructured or non-structured when these elements are absent from it. (Kothari, 2004)

Likert scales are made up of a number of statements that convey a respondent's favorable or unfavorable view toward the provided thing. Each statement in the instrument is accompanied with the respondent's agreement or disagreement. To gauge the respondent's attitude, each response is given a numerical score that indicates how favorable or unfavorable it is. In other words, the total rating reflects where a person falls on the scale of how favorable or unfavorable, they are toward a certain subject. (Kothari, 2004).

3.4 Data Analysis

The specific data analysis techniques used depend on the nature of the data and the research objectives. Here are some commonly used data analysis methods. As a result, analysis might be classified as descriptive or inferential (Inferential analysis is often known as statistical analysis). in this research, first, descriptive statistics was used to check the mean and the standard deviation. Second, inferential statistics was used to determine the correlation and regression between the study variables.

The main focus of descriptive analysis is the examination of distributions of a single variable; this type of analysis is sometimes referred to as one-dimensional analysis, bivariate analysis, or multivariate analysis when it involves more than two variables. Descriptive statistics summarize and describe the main characteristics of the data, such as measures of central tendency (mean, median, mode), measures of variability (standard deviation, range), and frequencies or percentages for categorical variables.

The regression model is as follows:

$Y = \beta\alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + ę$

Where:

$\beta\alpha$= Constant

β_1- β_4= Coefficient of estimates.

X_1= Risk management tools
X_2= Scheduling and Planning tools

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project Management
Volume 8||Issue 2||Page 24-36 ||February||2024|
Email: info@stratfordjournals.org ISSN: 2616-8464

X_3= Communication and Collaboration tools
X_4= Resource management tools

e= Error term

Y= Success in project implementation.

4. Research findings

This chapter concentrated on presenting detailed information regarding the outcomes of the investigation and engaging in a comprehensive discussion of these results.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.826[a]	.683	.668	.37589

a. Predictors: (Constant), Resource management tools, Risk management tools, Scheduling and Planning tools, Communication and Collaboration tools

Source: Field data (2023)

Table 2 provides the model summary for a regression analysis that includes multiple predictors: Resource management tools, Risk management tools, Scheduling and Planning tools, Communication and Collaboration tools. The R value in the model summary is 0.826. This value represents the multiple correlation coefficient, which indicates the strength and direction of the linear relationship between the combination of predictor variables (Resource management tools, Risk management tools, Scheduling and Planning tools, Communication and Collaboration tools) and the dependent variable (Success in project implementation). This value is relatively high, indicating a strong overall influence of the predictors on Success in project implementation. The R Square value is 0.683. This value represents the proportion of variance in the dependent variable (Success in project implementation) that is explained by the combination of predictor variables. In this case, approximately 68.3% of the variability in Success in project implementation can be accounted for by the variations in the combined effects of Resource management tools, Risk management tools, Scheduling and Planning tools, Communication and Collaboration tools. This indicate that the selected predictors collectively have a substantial impact on Success in project implementation.

The findings align with Ogunlana *et al.* (2013) emphasized on the vital role of project management tools, particularly in addressing complex infrastructure needs in Africa. Ogunlana *et al.* highlighted the significance of such tools in planning, coordinating, and monitoring infrastructure projects, which resonates with the strong correlation found between Resource management tools, Risk management tools, Scheduling and Planning tools, Communication and Collaboration tools, and Success in project implementation in the study. This reinforces the importance of these tools for achieving successful project outcomes in the African.

Table 3: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	26.494	4	6.623	46.877	.000[b]
	Residual	12.293	87	.141		
	Total	38.786	91			

a. Dependent Variable: Success in project implementation
b. Predictors: (Constant), Resource management tools, Risk management tools, Scheduling and Planning tools, Communication and Collaboration tools

Source: Field data (2023)

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project Management
Volume 8||Issue 2||Page 24-36 ||February||2024|
Email: info@stratfordjournals.org ISSN: 2616-8464

The ANOVA results presented in Table 3 provide valuable observations into the relationship between a combination of predictor variables (Resource management tools, Risk management tools, Scheduling and Planning tools, Communication and Collaboration tools) and Success in project implementation. The high F-statistic of 46.877, associated with a p-value (Sig. = .000), indicate that the overall regression model is statistically significant. In other words, the combination of the selected predictors significantly contributes to explaining the variability in Success in project implementation. The ANOVA results support the idea that the combination of the Resource management tools, Risk management tools, Scheduling and Planning tools, Communication and Collaboration tools has a substantial influence on Success in project implementation.

The findings are consistent with Chinyio *et al.* (2019) emphasized on the significance of stakeholder management tools in project management. The study mentioned that these tools play a pivotal role in African construction projects, and the study's results corroborate this by demonstrating the substantial influence of resource management, risk management, scheduling and planning, and communication and collaboration tools on the success of project implementation, underscoring their importance in effective project management in Africa.

Table 4: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.505	.226		2.230	.028
	Risk management tools	.390	.094	.397	4.163	.000
	Scheduling and Planning tools	.263	.098	.269	2.686	.009
	Communication and Collaboration tools	.290	.111	.302	2.602	.011
	Resource management tools	.251	.103	.262	2.448	.016

a. Dependent Variable: Success in project implementation

Source: Field data (2023)

The regression model was as follows:

$Y= \beta\alpha+\beta_1X_1+ \beta_2X_2+ \beta_3X_3 + \beta_4X_4+ę$

Where:

$\beta\alpha$= Constant

β_1- β_4= Coefficient of estimates.

X_1= Risk management tools

X_2= Scheduling and Planning tools

X_3= Communication and Collaboration tools

X_4= Resource management tools

e= Error term

Y= Success in project implementation.

The coefficients presented in Table 4 provide observations into the individual contributions of each predictor variable (Resource management tools, Risk management tools, Scheduling and Planning tools, Communication and Collaboration tools) to Success in project implementation. Constant (0.505) indicates that when all the independent variables are set to zero, the expected value of the dependent variable "Success in project implementation" is approximately 0.505.

For the predictor variable Resource management tools, the unstandardized coefficient is 0.390. This coefficient indicates that, a one-unit increase in Resource management tools is associated with an increase of 0.390 units in Success in project implementation. The p-value of 0.000

indicates that this relationship is statistically significant. The unstandardized coefficient for Risk management tools is 0.263, indicating that an increase of one unit in this predictor variable leads to a 0.263 unit increase in Success in project implementation. The p-value of 0.020 indicates a statistically significant relationship. The predictor variable Scheduling and Planning tools has an unstandardized coefficient of 0.290, indicating that a one-unit increase in Scheduling and Planning tools is associated with an increase of 0.290 units in Success in project implementation. This relationship is statistically significant with a p-value of 0.000. The predictor variable Resource management tools have an unstandardized coefficient of 0.251, indicating that a one-unit increase in Scheduling and Planning tools is associated with an increase of 0.251 units in Success in project implementation. This relationship is statistically significant with a p-value of 0.000.

The findings align with Hertel *et al.* (2005) as they emphasize the importance of virtual collaboration tools in facilitating effective global project management. The study's results underscore that various collaboration tools significantly contribute to project success, reinforcing the idea that these tools play a vital role in enhancing communication and coordination among team members, especially in global projects.

Table 5: Hypotheses results

Hypotheses	P Value	Comment
Ho1: There is no significant effect of risk management tools on the success of project implementation at the Business Development Fund in Rwanda.	p<0.05	Rejected
Ho2: There is no significant effect of scheduling and planning tools on the success of project implementation at the Business Development Fund in Rwanda.	p<0.05	Rejected
Ho3: There is no significant effect of communication and collaboration on the success of project implementation at the Business Development Fund in Rwanda.	p<0.05	Rejected
Ho4: There is no significant effect of resources management tools on success of projects implementation at the Business Development Fund in Rwanda.	p<0.05	Rejected

The results of the hypotheses testing in Table 5 provide significant overviews into the impact of project management tools on success in project implementation. Each null hypothesis (Ho) has been rejected ($p < 0.05$), indicating strong evidence against the idea that these project management tools have no significant effect on success in project implementation. Specifically, Resource management tools, Risk management tools, Scheduling and Planning tools, Communication and Collaboration tools all demonstrate a significant influence on success in project implementation.

5. Conclusion

The study assessed the influence of project management tools on success in project implementation at the Business Development Fund in Rwanda. After a thorough examination, this study has revealed valuable observations into the effectiveness of various project management tools. Specifically, the study examined the effect of risk management tools, scheduling and planning tools, communication and collaboration tools, and resources management tools on success of projects implementation at the Business Development Fund in Rwanda. The coefficients for these techniques were statistically significant ($p<0.05$), indicating that risk management tools, scheduling and planning tools, communication and collaboration tools, and resources management tools have a significant effect on the success of

projects implementation at the Business Development Fund in Rwanda. The study rejects the null hypotheses (Ho1, Ho2, Ho3, and Ho4), affirming that these project management tools have a substantial effect on success in project implementation at the Business Development Fund in Rwanda. These tools facilitate better risk management, scheduling and planning, communication and collaboration, and resources management, ultimately enhancing success in project implementation at the Business Development Fund in Rwanda.

6. Recommendations

BDF staff should prioritize the use of communication and collaboration tools that facilitate real-time information sharing, teamwork, and stakeholder engagement. Provide training to staff to ensure they effectively use these tools to enhance project communication.

BDF and other related institutions in Rwanda should invest in resource management tools that help optimize resource allocation, track resource utilization, and provide insights into resource availability. Implement standardized resource allocation processes to prevent resource bottlenecks or wastage.

References

Atkinson, R. (1999). Project management: Cost, time, and quality, two best guesses and a phenomenon, it's time to accept other success criteria. *International Journal of Project Management*, 17(6), 337-342.

Aubry, M. (2014). *Collaboration in projects.* In The Wiley Guide to Project, Program, and Portfolio Management (pp. 573-588). Wiley.

Chindanya, E., & Van der Waldt, G. (2017). *The importance of project management in resource allocation in the South African construction industry*. Acta Structilia, 24(1), 55-77.

Chinyio, E. A., Kemevor, K., & Gidado, K. (2019). Stakeholder analysis in the construction sector: Insights from Africa. *Journal of Construction Engineering and Management*, 145(2), 04018114.

Chong, H. G., & Kim, H. (2019). The impact of knowledge sharing on project performance in global project teams: The mediating role of cultural intelligence. *International Journal of Project Management*, 37(1), 1-16.

Cooke-Davies, T. (2002). The "real" success factors on projects. *International Journal of Project Management*, 20(3), 185-190.

Freeman, R. E. (1984). *Strategic management*: A stakeholder approach. Pitman.

Gao, T., Li, X., & Liu, C. (2016). Influence of project management software tools usage on project performance: A case of Chinese construction enterprises. *Journal of Construction Engineering and Management*, 142(2), 04015063.

Garg, S. K. (2016). *Project management software tools. In Project Management*: Concepts, Methodologies, Tools, and Applications (pp. 74-88). IGI Global.

Hertel, G., Geister, S., & Konradt, U. (2005). Managing virtual teams: A review of current empirical research. Human Resource Management Review, 15(1), 69-95.

Kerzner, H. (2017). *Project management*: A systems approach to planning, scheduling, and controlling (12th ed.). Wiley.

Martins, L. L., Gilson, L. L., & Maynard, M. T. (2004). Virtual teams: What do we know and where do we go from here? *Journal of Management*, 30(6), 805-835.

Ogunlana, S. O., Promkuntong, K., & Jearkjirm, V. (2013). Construction project performance improvement in developing countries: A case study of Nigeria. *International Journal of Project Management*, 31(2), 272-281.

Project Management Institute. (2017). *A guide to the project management body of knowledge* (PMBOK® Guide) (6th ed.). Project Management Institute.

Shenhar, A. J., & Dvir, D. (2007). Project management research in the future: The challenge of the unforeseen. *Project Management Journal*, 38(2), 86-98.

Sopiah, S., Mohd, H. R. H., & Mat, N. A. (2019). The effect of project management tools on project success: Evidence from the engineering sector. *International Journal of Innovative Technology and Exploring Engineering*, 8(7), 2127-2132.

Tarhini, A., Ammar, H., & Tarhini, T. (2015). Analysis of the critical success factors for enterprise resource planning implementation from stakeholders' perspective: A systematic review. *International Business Research*, 8(4), 25-38.

Ward, J., & Daniel, E. (2012). *Benefits management*: Delivering value from IS & IT investments. John Wiley & Sons.

Wasserman, S., & Faust, K. (1994). *Social network analysis*: Methods and applications. Cambridge University Press.