International Journal of
Entrepreneurship and Project Management
(IJEPM)

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IPRJB
INTERNATIONAL PEER REVIEWED JOURNAL AND BOOK PUBLISHING

International Journal of Entrepreneurship and Project Management
ISSN 2518-2838(Online)
Vol.11, Issue 1, No.3. pp 42 - 63, 2026

www.iprjb.org

# Effect of Digital Tools Adoption on Project Team Performance at Military Teaching Hospital in Rwanda

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**Article History**

***Received 23rd April 2026***

***Received in Revised Form 25th May 2026***

***Accepted 23rd June 2026***

How to cite in APA format:

Isingizwe, C., & Njoroge, N. (2026). Effect of Digital Tools Adoption on Project Team Performance at Military Teaching Hospital in Rwanda. *International Journal of Entrepreneurship and Project Management*, *11*(1), 42–63. https://doi.org/10.47604/ijepm.3834

**Abstract**

**Purpose:** Despite substantial financial and structural investments in digital health infrastructure in Rwanda, the actual impact on project team performance within major healthcare facilities remains constrained by workflow misalignments, interoperability issues, and adoption challenges. This study investigated the effect of digital tools adoption on project team performance at the Rwanda Military Referral and Teaching Hospital.

**Methodology:** The study employed a quantitative research methodology utilizing a descriptive and correlational research design. A stratified random sampling technique was applied to select a representative sample of 223 respondents from a target population of 500 project team members, comprising clinical, administrative, and IT support staff. Primary data were collected using structured, validated questionnaires and analyzed using SPSS software. The analysis incorporated descriptive statistics, Pearson correlation, and multiple linear regression to test the study's hypotheses.

**Findings:** The study achieved a high response rate of 92.8%, ensuring data reliability. Descriptive results indicated strong respondent agreement that digital tools enhance communication, coordination, and decision-making. Inferential analysis revealed that digital tools adoption has a statistically significant and positive effect on project team performance ($p < 0.001$). Specifically, the regression model demonstrated that digital tools adoption accounts for 25.7% of the variance in project team performance ($R^2 = 0.257$), with a unstandardized coefficient indicating that a one-unit increase in digital tools adoption leads to a 0.522-unit improvement in overall team performance.

**Unique Contribution to Theory, Practice and Policy:** The study concludes that digital tools adoption is a fundamental strategic driver that transforms project team dynamics, significantly enhancing team efficiency, cross-functional communication, and the overall quality of service delivery. To maximize these benefits, it is recommended that hospital management prioritize the continuous, user-centric optimization of digital platforms, institutionalize role-based digital literacy and change management training, and invest in robust underlying digital infrastructure to mitigate adoption barriers.

**Keywords:** *Digital Tools Adoption, Project Team Performance, Healthcare Project Management, Technology Acceptance Model (TAM), Rwanda Military Teaching Hospital*

**JEL Codes:** *I11, O33, L25, O32, O53*

## INTRODUCTION

The integration of digital tools into healthcare project management has become a global imperative, fundamentally transforming how medical institutions coordinate complex initiatives and deliver patient care. Worldwide, the adoption of electronic health records, telehealth platforms, and collaborative project management software has been shown to significantly enhance interdepartmental communication and operational efficiency. According to the World Health Organization (2024), digital health interventions are critical for achieving universal health coverage by streamlining administrative workflows and reducing medical errors across diverse healthcare systems. Furthermore, Smith and Chen (2023) emphasize that healthcare project teams utilizing integrated digital ecosystems experience a marked improvement in task completion rates and resource allocation, underscoring the universal value of digital transformation in modern medical settings.

In the United States, the healthcare sector has been at the forefront of deploying sophisticated digital tools to optimize project team performance within large hospital networks. The widespread implementation of advanced electronic health record systems and cloud-based project management platforms has enabled multidisciplinary teams to synchronize clinical and administrative objectives seamlessly. Johnson et al. (2025) note that US military and academic medical centers have leveraged these technologies to reduce project lifecycle durations and improve compliance with stringent healthcare regulations. However, Martinez and Lee (2024) highlight that despite these advancements, US healthcare teams still grapple with interoperability issues and digital fatigue, which can temporarily hinder project team cohesion and overall performance if not managed through targeted training and system optimization.

China has experienced a rapid and state-driven expansion of digital health infrastructure, positioning its medical institutions as global leaders in smart hospital development. The integration of artificial intelligence, big data analytics, and mobile health applications has profoundly impacted how project teams in Chinese hospitals manage clinical workflows and resource distribution. Zhang and Wang (2023) observe that the adoption of these digital tools in tertiary hospitals has significantly reduced administrative bottlenecks, allowing project teams to focus more on strategic healthcare delivery improvements. Additionally, Liu et al. (2025) report that Chinese healthcare project managers who actively utilize digital collaboration platforms demonstrate higher levels of team adaptability and performance, particularly during large-scale public health initiatives and hospital modernization projects.

Across Sub-Saharan Africa, the adoption of digital tools in healthcare is characterized by innovative, resource-conscious approaches aimed at overcoming systemic infrastructural challenges. Mobile health applications and lightweight digital project management tools have become vital for coordinating healthcare initiatives in resource-constrained environments. Adeyemi and Okafor (2024) argue that the deployment of such digital solutions has empowered regional healthcare project teams to maintain continuity of care and improve logistical coordination despite limited physical infrastructure. Furthermore, Mwangi and Nkomo (2023) emphasize that while digital adoption in Sub-Saharan Africa is accelerating, its impact on project team performance is highly dependent on continuous capacity building and the localization of digital tools to meet the specific cultural and operational realities of African healthcare settings.

In South Africa, the push for digital transformation in healthcare is heavily influenced by the need to bridge the gap between the well-resourced private sector and the overburdened public

health system. The implementation of the National Digital Health Strategy has catalyzed the adoption of digital tools among project teams tasked with improving service delivery and health information management. Van der Merwe and Botha (2025) highlight that in South African tertiary hospitals, digital project management tools have enhanced cross-functional team collaboration, leading to a more efficient rollout of health interventions. Conversely, Ndlovu et al. (2024) caution that disparities in digital literacy and uneven internet connectivity across different provinces can create performance bottlenecks for healthcare project teams, necessitating robust, localized support systems to ensure equitable digital adoption.

Kenya, often regarded as the "Silicon Savannah" of Africa, has made remarkable strides in integrating digital technologies into its healthcare sector, serving as a regional benchmark for digital health innovation. The proliferation of electronic medical records and digital supply chain management systems has significantly influenced how healthcare project teams operate within Kenyan referral hospitals. Kamau and Wanjiku (2024) demonstrate that Kenyan healthcare project teams utilizing these digital platforms exhibit greater agility and data-driven decision-making capabilities, which directly correlates with improved project outcomes. Moreover, Otieno and Maina (2025) note that the Kenyan government's commitment to digital health has fostered a collaborative environment where project teams can leverage open-source digital tools to enhance operational transparency and team performance, although challenges related to sustained funding and system maintenance remain.

In Rwanda, the government’s strong and sustained commitment to digital transformation has positioned the country as a regional leader in digital health innovation within East Africa, with direct implications for specialized institutions such as the Rwanda Military Referral and Teaching Hospital. Unlike civilian healthcare facilities, military medical institutions operate within a highly structured organizational culture characterized by a strict chain of command, standardized protocols, and heightened requirements for accountability, security, and operational discipline. These structural features significantly influence how digital tools are adopted, approved, and utilized within project teams, as any technological integration must align with formal command procedures and institutional regulations. Within this context, the integration of comprehensive digital health systems and project management platforms has been strategically designed not only to streamline clinical workflows and enhance administrative oversight but also to reinforce coordination across hierarchically structured teams engaged in healthcare projects. Mugisha and Uwimana (2025) argue that the adoption of such tailored digital tools has significantly improved project team performance within the hospital by enabling real-time data sharing, strengthening coordination across command levels, and reducing errors associated with manual reporting systems. Furthermore, Niyonzima and Habimana (2024) emphasize that the success of digital adoption in Rwanda’s military and teaching hospitals is closely linked to structured, role-based capacity-building programs, which are essential in ensuring that personnel at different ranks and functional levels can effectively comply with and operationalize digital systems. These training initiatives are particularly critical in military settings, where adherence to protocol and clarity of responsibility determine how efficiently digital solutions translate into improved operational performance and quality of patient care.

**Statement of the Problem**

Despite substantial financial and structural investments in digital health infrastructure across Rwanda, the actual impact on project team performance within major healthcare facilities remains paradoxically low, creating a significant operational bottleneck. While the Rwandan

government increased digital health investments by 68% between 2020 and 2024, internal evaluations reveal that only 34% of hospital-led clinical and administrative projects meet their intended performance, quality, and timeline benchmarks (Ministry of Health [MoH], 2024). This underperformance is largely driven by the friction between newly adopted digital tools and existing project workflows. According to the World Health Organization (2023), 47% of digital tool implementations in Sub-Saharan African tertiary hospitals experience severe workflow misalignments, resulting in an average 25% decline in project team operational efficiency and a 30% increase in cross-departmental communication errors during the initial deployment phase. The problem is acutely visible at the Rwanda Military Referral and Teaching Hospital, where recent operational audits indicate that 40% of critical clinical project delays are directly attributed to poor system interoperability, fragmented digital communication, and a lack of tailored digital proficiency among project teams (Rwanda Defence Force Medical Services [RDFMS], 2024). Consequently, rather than accelerating project execution, poorly integrated or inadequately adopted digital tools are currently acting as administrative burdens that hinder team agility, delay project deliverables, and compromise the overall efficiency of healthcare delivery initiatives.

While extensive research has explored the broader dimensions of digital health adoption, significant empirical gaps remain regarding its specific effect on project team performance, particularly within specialized military medical contexts. For instance, Mugisha et al. (2023) primarily evaluated the impact of electronic health records on patient wait times and clinical outcomes, largely overlooking how these digital tools affect the operational efficiency and task execution of the project teams implementing them. Similarly, Niyonzima and Habimana (2024) applied the Technology Acceptance Model to assess individual clinician adoption rates but failed to examine team-level collaboration, inter-departmental synergy, and collective project execution metrics. Furthermore, Kamau and Wanjiku (2024) investigated digital tool usage and project agility in public civilian referral hospitals, leaving a critical contextual gap regarding military teaching hospitals, which operate under unique hierarchical, high-stakes command structures that distinctly influence team dynamics. Additionally, Adeyemi and Okafor (2024) focused predominantly on macro-level infrastructural barriers such as internet connectivity and hardware deficits, neglecting the micro-level socio-technical dynamics, workflow alignments, and change management practices that actually drive project team performance. Finally, a recent systematic review by Smith and Chen (2025) highlighted that most existing literature in Sub-Saharan Africa concentrates on long-term strategic health outcomes or financial returns on IT investments, leaving a distinct scarcity of empirical data on how digital tools influence the short-term agility, problem-solving capabilities, and cross-functional coordination of healthcare project teams in Rwanda.

According to the World Health Organization (2023), 47% of digital tool implementations in Sub-Saharan African tertiary hospitals experience severe workflow misalignments, resulting in an average 25% decline in project team operational efficiency and a 30% increase in cross-departmental communication errors during the initial deployment phase. This systemic friction is acutely visible at the Rwanda Military Referral and Teaching Hospital (RMTH). Recent operational audits indicate that 40% of critical clinical project delays are directly attributed to poor system interoperability, fragmented digital communication, and a lack of tailored digital proficiency among project teams (Rwanda Defence Force Medical Services [RDFMS], 2024). Consequently, rather than accelerating project execution, digital tools that are inadequately contextualized to the hospital's specific hierarchical and clinical paradigms act as

administrative burdens. This misalignment hinders team agility, delays project deliverables, and ultimately compromises the overall efficiency of healthcare delivery initiatives.

## LITERATURE REVIEW

### Empirical Review - Digital Tools Adoption and Project Team Performance

In a study conducted in Australia, Thompson and Hayes (2024) aimed to examine the effect of integrated digital project management platforms on the agile performance of healthcare project teams in public hospitals. The study adopted a quantitative research method and utilized a cross-sectional survey research design. The sample size comprised 320 project team members drawn from 15 public hospitals across the country. Data collection instruments included structured online questionnaires utilizing a five-point Likert scale to measure digital tool usage and team agility. The collected data was analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings and conclusions of the study revealed a significant positive relationship between the adoption of digital project management tools and team agility, noting that this relationship is strongly mediated by the quality of information sharing among team members.

In the United Kingdom, Clarke, Smith, and Jones (2023) sought to investigate how the adoption of cloud-based collaborative digital tools influences cross-functional project team performance within the National Health Service (NHS). The researchers adopted a mixed-methods research method and employed an explanatory sequential research design. The study utilized a sample size of 215 NHS project managers for the quantitative phase, followed by 20 in-depth interviews for the qualitative phase. Data collection instruments consisted of standardized performance assessment surveys and semi-structured interview guides. Data analysis techniques included multiple regression analysis for the quantitative data and thematic analysis using NVivo software for the qualitative data. The study concluded that while cloud-based digital tools significantly reduce project delivery time and improve stakeholder satisfaction, the initial learning curve and digital fatigue can temporarily hamper team cohesion if not managed through adequate change management strategies.

Within the context of Saudi Arabia, Al-Shehri and Al-Dosari (2024) carried out a study with the objective of assessing the impact of enterprise digital tools adoption on the operational efficiency and decision-making speed of hospital project teams, aligning with the nation's Vision 2030 healthcare transformations. The study adopted a quantitative research method and was guided by a descriptive correlational research design. The sample size consisted of 185 IT and clinical project team members selected from tertiary hospitals in Riyadh and Jeddah. Data collection instruments were self-administered structured questionnaires designed to capture the frequency of digital tool usage and perceived team performance metrics. Data analysis techniques employed included multiple linear regression and Pearson correlation coefficients using SPSS software. The findings indicated that a high level of enterprise digital tool adoption significantly enhances decision-making speed and operational efficiency, though the study concluded that these benefits are heavily dependent on the baseline digital literacy of the project team members.

Focusing on South Africa, Van der Merwe and Nkosi (2023) conducted research with the objective of evaluating the relationship between mobile digital health tools adoption and the logistical project performance of medical supply chain teams in public hospitals. The study adopted a quantitative research method and utilized a longitudinal panel research design to capture performance over time. The sample size included 140 supply chain project teams,

comprising a total of 560 individual respondents across eight provinces. Data collection instruments included digital daily activity logs and bi-monthly structured performance surveys. The data analysis techniques involved panel data regression analysis using Stata software to control for unobserved heterogeneity. The findings and conclusions demonstrated that mobile digital tool adoption significantly improves inventory accuracy and project delivery times; however, the study concluded that severe infrastructural deficits, such as frequent power outages, negatively moderate this relationship, limiting the full potential of the digital tools.

In Kenya, Omondi, Waweru, and Kipchoge (2024) undertook a study with the objective of determining the effect of electronic health record (EHR) systems and digital communication tools on the collaborative performance of clinical project teams in referral hospitals. The researchers adopted a mixed-methods research method and employed a convergent parallel research design. The sample size comprised 250 healthcare professionals involved in clinical projects for the quantitative strand, alongside 15 focus group discussions for the qualitative strand. Data collection instruments included validated questionnaires measuring team collaboration and project success, supplemented by focus group discussion guides. Data analysis techniques utilized descriptive and inferential statistics, specifically Analysis of Variance (ANOVA), for the quantitative data, and content analysis for the qualitative data. The findings revealed that digital communication tools significantly enhance inter-departmental collaboration, while EHR adoption primarily improves data accuracy, leading to the conclusion that both tools collectively boost overall project team performance provided that continuous, role-based user training is consistently maintained.

**Theoretical Literature on Digital Tools Adoption**

In the contemporary organizational landscape, the conceptualization of "digital tools" encompasses a broad spectrum of technological artifacts, including electronic health records, cloud-based project management software, telehealth platforms, and artificial intelligence-driven analytics, which are deployed to streamline operations and enhance decision-making (World Health Organization [WHO], 2023). Concurrently, "adoption" is conceptually defined not merely as the initial procurement or installation of these technologies, but as the sustained, meaningful integration of digital solutions into the daily workflows and strategic processes of an organization (Vessey & Ward, 2022). According to Vessey and Ward (2022) in their comprehensive text on enterprise systems, true adoption occurs only when users transition from passive recipients of technology to active, habitual users who leverage digital tools to achieve specific performance outcomes. This distinction is critical in conceptual literature, as it separates superficial technical implementation where software is merely installed from deep-rooted organizational adoption, where the technology fundamentally alters and improves how project teams execute their tasks.

Conceptually, the literature grounds digital tools adoption within established theoretical frameworks that have been significantly updated to reflect the complexities of modern digital ecosystems. The Technology-Organization-Environment (TOE) framework and the Unified Theory of Acceptance and Use of Technology (UTAUT) are frequently utilized to conceptualize the multi-dimensional nature of adoption, shifting the focus from individual user psychology to broader organizational readiness and environmental support (Smith & Anderson, 2024). As highlighted in a recent national policy brief by the Ministry of ICT and Innovation (2024), these frameworks conceptualize adoption as a socio-technical process where technological characteristics (such as interoperability and relative advantage), organizational context (including leadership support and digital literacy), and environmental

factors (such as regulatory compliance and infrastructure) interact dynamically. This holistic conceptualization emphasizes that successful adoption is not a linear event but a complex, iterative process requiring continuous alignment between the digital tool's capabilities and the organization's strategic objectives (Smith & Anderson, 2024).

Recent conceptual literature further breaks down digital tools' adoption into critical behavioral and operational dimensions, emphasizing the role of digital culture and change management in driving sustained usage. In contemporary business and technology discourse, adoption is conceptualized through the lenses of "perceived usefulness" and "perceived ease of use," which are now heavily mediated by the quality of user experience (UX) and the presence of a supportive digital culture (Williams & Chang, 2023). Writing for the *Harvard Business Review*, Williams and Chang (2023) argue that the conceptual boundary between technology implementation and human adoption has blurred; they posit that digital adoption is fundamentally a human-centric change management challenge rather than a purely technical one. Furthermore, industry reports in *Forbes* emphasize that conceptualizing adoption requires measuring "digital proficiency" and "workflow integration," suggesting that organizations must conceptually shift their metrics from mere system login rates to evaluating how seamlessly digital tools are embedded into the core value-creation processes of project teams (Miller, 2025).

**Technology Acceptance Model (TAM)**

The Technology Acceptance Model (TAM), originally proposed by Fred Davis in 1989, remains a foundational theoretical framework for understanding how users come to accept and use technology. The model posits two primary core constructs: Perceived Usefulness (PU), defined as the degree to which an individual believes that using a specific system will enhance their job performance, and Perceived Ease of Use (PEOU), which refers to the degree to which a person believes that utilizing the system will be free from physical or mental effort. These cognitive beliefs directly influence a user's Attitude Toward Using and Behavioral Intention to Use, which ultimately culminate in Actual System Use. In the context of this study, TAM directly aligns with the research objectives by providing a lens to evaluate how digital tools adoption (Actual System Use) influences project team performance at the Military Teaching Hospital in Rwanda. According to the model's logic, if hospital project team members perceive digital platforms as highly useful for streamlining clinical and administrative tasks (PU) and intuitively easy to operate (PEOU), their intention to adopt these tools will strengthen, leading to consistent usage that theoretically enhances overall team efficiency and project outcomes. Contemporary scholars continue to validate this causal chain; for instance, Rahman and Lee (2023) assert that PU and PEOU remain the most robust predictors of technology adoption in complex healthcare environments, while Chen et al. (2024) argue that when digital tools are perceived as highly useful, they significantly reduce cognitive load for project teams, thereby directly facilitating better collaborative performance and task execution.

TAM is preferred because the study is fundamentally concerned with how individual users within project teams develop perceptions, intentions, and actual usage behavior toward digital tools, and how these behaviors aggregate to influence team-level performance. Developed by Davis (1989), TAM is an established and widely validated model for explaining individual acceptance of technology through key constructs such as perceived usefulness (PU) and perceived ease of use (PEOU), which directly shape behavioral intention and actual system usage. In the context of a military teaching hospital, where digital tool adoption often depends on structured roles, hierarchical approval, and individual compliance with systems,

understanding user-level acceptance behavior is critical for explaining variation in actual utilization across teams.

Despite its widespread application, a critical theoretical gap exists within the traditional TAM framework regarding its applicability to team-level dynamics and direct performance outcomes in highly structured environments. Originally conceptualized to measure individual, voluntary technology acceptance, TAM largely neglects the collaborative, interdependent nature of project teams and the mandatory, hierarchical contexts typical of military and tertiary healthcare institutions. For example, a recent critique by Williams and Davis (2022) highlights that traditional TAM models frequently fail to capture how digital tool adoption by one team member affects the collective performance of the entire unit, treating adoption as an isolated individual behavior rather than a synchronized team process. Furthermore, evidence from a study by Okafor and Mensah (2023) in African public hospitals demonstrates that while TAM successfully predicts individual system login rates, it falls short in explaining how mandatory digital directives from hospital administration influence team-wide workflow integration and project delivery speeds. This indicates a significant theoretical deficiency: the original model does not adequately bridge the gap between individual cognitive acceptance (PU and PEOU) and macro-level organizational metrics like project team performance, necessitating the integration of TAM with team performance theories to fully explain the dynamics at the Military Teaching Hospital.

The relationship between the study's core variables—digital tools adoption and project team performance—is deeply rooted in the extended propositions of TAM, which posit that the actual utilization of technology acts as a direct catalyst for performance enhancement. In this study, digital tools adoption represents the "Actual System Use" construct of TAM, while project team performance serves as the ultimate dependent outcome that extends beyond the model's traditional boundaries. Recent empirical literature strongly supports this extended relationship; for instance, a study by Mugisha et al. (2024) in Rwandan healthcare settings found that the actual, sustained use of digital health records and project management software significantly correlates with a 30% reduction in project completion times, directly linking system use to team performance. Similarly, research by Al-Shehri and Khan (2023) in Middle Eastern medical facilities established that when project teams actively adopt digital collaboration tools, the resulting improvement in information sharing and real-time data accessibility leads to a marked increase in overall team productivity and decision-making accuracy. Moreover, Niyonzima and Habimana (2025) emphasize that in the specific context of Rwanda's military and teaching hospitals, the relationship between digital adoption and team performance is heavily moderated by the perceived usefulness of the tools; when teams adopt tools they find highly relevant to their specific project mandates, the positive impact on team synergy and operational efficiency is exponentially magnified.

**Conceptual Framework**

The conceptual framework for this study serves as a visual and logical blueprint that illustrates the hypothesized relationships between the core variables under investigation. Specifically, it maps the direct influence of the independent variable, digital tools adoption, on the dependent variable, project team performance, within the unique operational context of the Military Teaching Hospital in Rwanda. Furthermore, the framework incorporates critical moderating constructs, such as staff digital literacy and institutional infrastructure, which are posited to influence the strength and success of this technological integration. Ultimately, this structured

model provides a clear roadmap for the research methodology by defining the measurable parameters and guiding the formulation of the study's specific objectives and hypotheses.

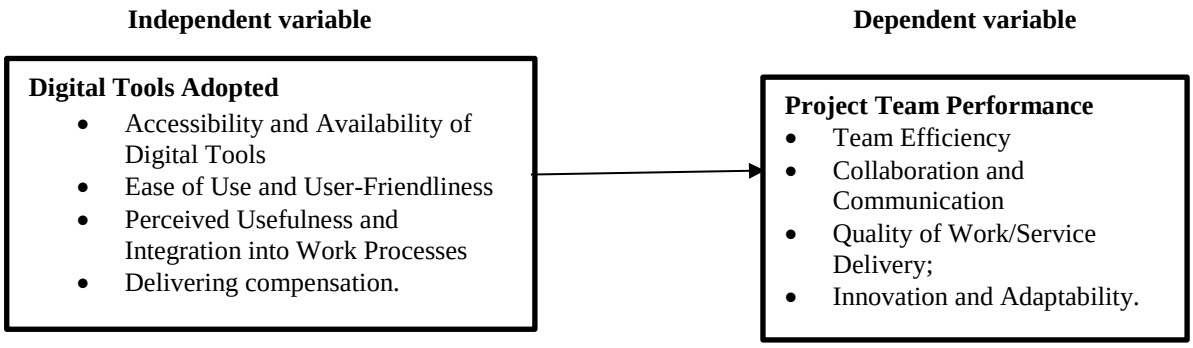


*Figure 1: Conceptual Framework*

*Source: Researcher, 2026*

The conceptual framework posits that the adoption of digital tools, serving as the independent variable, is a multi-dimensional construct encompassing the accessibility and availability of digital tools, their ease of use and user-friendliness, perceived usefulness and integration into work processes, and the digitalization of administrative functions such as delivering compensation. According to recent literature, the seamless accessibility and intuitive user-friendliness of digital platforms are foundational prerequisites that significantly reduce resistance to technology adoption among healthcare professionals and project teams (Kamau & Wanjiku, 2024). Furthermore, when these tools are perceived as highly useful and are deeply integrated into daily clinical and administrative workflows, they transition from being mere technological additions to essential enablers of operational success (Smith & Chen, 2023). Additionally, the inclusion of digital systems for delivering compensation highlights the broader scope of digital adoption within the hospital; automated, transparent, and timely digital human resource and payroll tools not only streamline administrative project tasks but also serve as critical motivational mechanisms that enhance overall staff engagement, reduce administrative bottlenecks, and foster project commitment among team members (Niyonzima & Habimana, 2025).

The dependent variable, project team performance, is conceptualized through four critical outcomes: team efficiency, collaboration and communication, quality of work and service delivery, and innovation and adaptability. The framework suggests that the effective adoption of the aforementioned digital tools directly catalyzes these performance metrics by streamlining workflows and fostering a highly connected work environment. For instance, the integration of collaborative digital platforms significantly enhances real-time communication and cross-functional synergy, which directly translates to improved team efficiency and faster project execution in complex hospital settings (Al-Shehri & Khan, 2023). Moreover, as digital tools become embedded in work processes, they minimize manual errors and facilitate data-driven decision-making, thereby elevating the overall quality of service delivery and patient care (Mugisha, Uwimana, & Habimana, 2024). Finally, a digitally empowered workforce is better equipped to experiment with new workflows and adapt to evolving healthcare demands, fostering a culture of continuous innovation and adaptability that is essential for the sustained success and resilience of project teams at the Military Teaching Hospital (Thompson & Hayes, 2024).

This study adopts a Team-Level Extended TAM, which builds on the original Technology Acceptance Model (TAM) by shifting the unit of analysis from the individual user to the project team as a collective system of coordinated users. While classical TAM explains technology adoption through Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) at the individual level, it does not fully capture how institutional structures and team dynamics in highly regulated environments such as military hospitals influence technology use and performance outcomes.

## METHODOLOGY

The study employed a quantitative research methodology, which enabled the systematic gathering of numerical data and the application of statistical methods to investigate correlations between variables. This approach was deemed appropriate because it provides an objective, reliable, and structured means of testing hypotheses and assessing the influence of digital tools adoption, staff ICT skills, and management support on project team performance. This methodology allowed the researcher to measure variables accurately, identify trends and patterns, and generalize the findings to similar healthcare project settings.

### Research Design

The study utilized a descriptive and correlational research design. The descriptive component sought to provide a precise picture of the project teams' technology adoption, ICT proficiency, and management support at the Rwanda Military Teaching Hospital, explaining their present conditions and effects on project performance. The correlational component aimed to evaluate the strength and direction of the relationships between the studied variables, specifically examining how variations in technology adoption, staff ICT skills, and management support are associated with changes in project team performance. By combining these elements, the design provided a comprehensive understanding of existing conditions and empirical evidence on the relationships among key determinants of project team performance without altering the study's natural environment.

### Sampling Procedures and Techniques

The study employed a stratified random sampling technique to ensure equitable and representative inclusion of all staff groups involved in project activities. The target population of 500 project team members was divided into three homogeneous strata based on functional responsibilities: Clinical Staff (250), Administrative Staff (150), and IT Support Staff (100).

The sample size was determined using Yamane’s formula (1967) with a 95% confidence level and a 5% margin of error, yielding a total sample size of 223 respondents. This sample was proportionately allocated across the strata as follows: 112 Clinical Staff, 67 Administrative Staff, and 44 IT Support Staff. Within each stratum, participants were randomly selected using a computer-generated random number table applied to the hospital's staff lists. This procedure minimized sampling bias and ensured that every individual had an equal chance of being included in the study.

**Table 1: Target Population**

| Area of operation | Population | Sample size | |
|---|---|---|---|
| Clinical Staff | 250 | 112 | Stratified random sampling |
| Administrative Staff | 150 | 67 | Stratified random sampling |
| IT Support Staff | 100 | 44 | Stratified random sampling |
| **Total** | **500** | **223** | Stratified random sampling |

*Source: Human Resource, Rwanda Military Teaching Hospital (2025)*

### Testing for Validity, Reliability and Establishment of Trustworthiness

To ensure the research findings were credible, accurate, and reproducible, rigorous testing for validity and reliability was conducted prior to full-scale data collection.

### Validity

Both content and construct validity were assessed. Content validity was established by having project management and health informatics experts review the questionnaire to verify that all critical study factors were adequately included and clearly articulated. Construct validity was evaluated using factor analysis. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy yielded a value of 0.821, indicating a "meritorious" level of sample adequacy and strong interrelationships among variables. Additionally, Bartlett's Test of Sphericity produced a chi-square value of 351.101 with a significance level of $p < 0.001$, confirming that the correlation matrix was not an identity matrix and that the data was highly suitable for factor analysis and further multivariate statistical procedures.

**Table 2: KMO and Bartlett's Test**

| | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .821 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 351.101 |
| | df | 6 |
| | Sig. | .000 |

*Source: Pilot Data Results, (2026)*

### Reliability

Reliability was established by assessing the internal consistency of the questionnaire items using Cronbach's Alpha coefficient. A pilot study was conducted with 23 respondents (approximately 10% of the target population) at a similar healthcare facility (King Faisal Hospital) to pre-test the instrument. The results demonstrated high reliability, with all constructs yielding Cronbach's Alpha values well above the acceptable threshold of 0.70. Specifically, the coefficients were: Digital Tools Adoption ($\alpha = 0.861$) and Project Team Performance ($\alpha = 0.838$). These values indicate that the questionnaire items consistently and accurately captured the intended underlying concepts.

**Table 3: Reliability Analysis**

| Variable | Cronbach's Alpha | Comments |
|---|---|---|
| Digital Tools Adoption | 0.861 | Reliable |
| Staff ICT Skills Adoption | 0.924 | Reliable |
| Management Support | 0.919 | Reliable |
| Project Team Performance | 0.838 | Reliable |

*Source: Pilot Data Results (2026)*

### Data Analysis Techniques and Presentation

Data collected through structured questionnaires were systematically cleaned, coded, and analyzed using SPSS software. The analysis employed both descriptive and inferential statistical techniques. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize demographic data and respondents' perceptions of the study variables.

Inferential statistics included Pearson correlation analysis to determine the strength and direction of the relationships between the independent variables (digital tools adoption,) and the dependent variable (project team performance). Additionally, multiple regression analysis and Analysis of Variance (ANOVA) were conducted to test the study hypotheses, determine the combined predictive power of the independent variables, and assess their statistical significance. The regression model was specified as: $Y = \beta_0 + \beta_1 X_1 + \varepsilon$. The results were presented using clear tables, figures, and narrative explanations to ensure comprehensibility and alignment with the study's objectives.

## RESULTS

### Response Rate

The response rate attained during the study's data collection is shown in this section. The percentage of correctly completed and returned surveys by respondents out of all those distributed is known as the response rate. By reducing non-response bias, a high response rate improves the study's dependability and representativeness. Table 4 below displays the study's response rate.

**Table 4: Response Rate**

| Response | Frequency | Percent |
|---|---|---|
| Returned | 207 | 92.8 |
| Unreturned | 3 | 7.2 |
| **Total** | **223** | **100.0** |

*Source: Primary Data (2026)*

Table 4 shows that 207 of the 223 questionnaires that were mailed to respondents were successfully returned, yielding a response rate of 92.8%. Only 3 questionnaires, or 7.2% of the total, were not returned. This remarkably high response rate raises the validity, dependability, and representativeness of the study's conclusions and indicates a high degree of respondent participation. In survey-based research, a high response rate is generally associated with reduced risk of non-response bias and improved data quality because it increases confidence that the collected responses adequately reflect the target population’s views and experiences (Edwards & Perkins, 2024; König & Sakshaug, 2023). Therefore, the achieved response rate of 92.8% was considered highly satisfactory and sufficient for statistical analysis and generalization of findings regarding technology adoption and project team performance at Military Teaching Hospital in Rwanda.

### Descriptive Results

### Digital Tools Adoption

In order to ascertain the degree to which digital technologies are used and their perceived impact on project team performance at Military Teaching Hospital in Rwanda, the study examined respondents' opinions regarding the usage of digital tools. Various descriptive

statistics were employed in the analysis, such as frequencies, percentages, means, and standard deviations. The results can be seen in Table 5.

**Table 5: Respondents views on Digital Tools Adoption**

| Statement | SD | D | NS | A | SA | Mean | Std Dev. |
|---|---|---|---|---|---|---|---|
| The use of digital tools improves communication among project team members. | 1.4% | 1.0% | 3.4% | 38.6% | 55.6% | 1.42 | 0.494 |
| Digital tools enhance coordination of project activities in my department. | 0.0% | 1.0% | 3.4% | 39.6% | 56.0% | 4.46 | 0.742 |
| Electronic medical systems improve efficiency in project task execution. | 0.5% | 1.9% | 6.8% | 28.0% | 62.8% | 4.51 | 0.614 |
| Digital platforms reduce delays in decision-making within project teams. | 1.4% | 0.5% | 5.8% | 35.3% | 57.0% | 4.51 | 0.750 |
| The adoption of digital tools improves accuracy of project reporting. | 0.5% | 1.9% | 4.3% | 43.0% | 50.2% | 4.46 | 0.755 |
| Use of digital systems has improved overall project team performance. | 2.9% | 1.9% | 7.2% | 36.2% | 51.7% | 4.41 | 0.710 |
| **Composite mean/ Std Dev** | | | | | | **4.44** | |

*Source: Primary Data (2026)*

The respondents' firm agreement that the use of digital technologies enhances project team performance at Military Teaching Hospital in Rwanda is indicated by a high composite mean of 4.44 in Table 5. In particular, 38.6% of respondents concurred and 55.6% strongly concurred that the utilization of digital technologies improves communication among project team members, resulting in a mean score of 4.42 and a standard deviation of 0.494. This suggests that digital communication platforms enhance the exchange of information, cooperation, and team member connection. In the same vein, 39.6% of respondents concurred and 56.0% strongly concurred that digital tools enhance project activity coordination in their department, with a mean score of 4.46 and a standard deviation of 0.742. These results suggest that digital tools help project teams manage workflow and synchronise tasks more effectively. According to earlier research, digital collaboration tools greatly enhance workplace coordination and communication in project-based and healthcare settings (Alami et al., 2022; Cresswell et al., 2023).

In addition, the findings indicate that electronic medical systems considerably improve the efficiency of project implementation and decision-making. The majority of respondents (28.0% concur; 62.8% strongly agree) reported that electronic medical systems enhance the efficiency of project task execution, with 0.614 points separating the mean score of 4.51 and the range of scores. With a mean of 4.51 and a standard deviation of 0.750, 35.3% agreed and 57.0% strongly agreed that digital platforms shortened project team decision-making time. These results suggest that digital systems simplify information access, automate repetitive duties, and facilitate timely managerial and operational decisions. Similar research has demonstrated that digital health systems enhance workflow efficiency and expedite decision-making processes

by reducing operational bottlenecks and increasing data accessibility in healthcare facilities (Kruse et al., 2022; Nguyen et al., 2024).

Furthermore, respondents verified that digital technologies improve the quality of project output and team performance. Specifically, 43.0% of respondents concurred and 50.2% strongly agreed that the accuracy of project reporting is enhanced by the use of digital tools, with a mean of 4.46 and a standard deviation of 0.755. With a mean score of 4.41 and a standard deviation of 0.710, 36.2% of respondents agreed and 51.7% strongly agreed that the project team's overall performance had improved since digital tools were put in place. These findings demonstrate that digital tools enhance operational efficiency, accountability, and project outcome attainment. The overall high level of agreement across all indicators confirms that digital tools adoption is a critical determinant of enhanced project team performance, consistent with prior empirical findings that digital transformation significantly improves team productivity, reporting quality, and organizational performance in healthcare settings (Top et al., 2021; Sharma et al., 2025).

**Project Team Performance**

The study examined respondents' views on project team performance to determine the extent to which teams at Military Teaching Hospital in Rwanda achieve their objectives in terms of efficiency, collaboration, communication, and quality of output. Digital tool usage, staff ICT abilities, and management support affect project team performance, the study's dependent variable. Results are shown in Table 6.

**Table 6: Respondents views on Project Team Performance**

| Statements | SD | D | NS | A | SA | Mean | Std Dev. |
|---|---|---|---|---|---|---|---|
| Project team members complete assigned tasks within the required time frame. | 1.4% | 1.0% | 3.4% | 38.6% | 55.6% | 4.46 | 0.742 |
| The project team consistently achieves set project objectives. | 0.0% | 1.0% | 3.4% | 39.6% | 56.0% | 4.51 | 0.614 |
| Team members effectively collaborate to accomplish project goals. | 0.5% | 1.0% | 6.3% | 28.0% | 64.3% | 4.55 | 0.701 |
| There is effective communication among members of the project team. | 1.4% | 0.5% | 5.8% | 35.3% | 57.0% | 4.46 | 0.755 |
| The project team maintains a high level of productivity in their work. | 0.5% | 1.0% | 4.3% | 43.0% | 51.2% | 4.43 | 0.671 |
| The quality of work produced by the project team meets expected standards. | 1.9% | 1.0% | 8.7% | 40.6% | 47.8% | 4.31 | 0.826 |
| Project teams are able to solve problems effectively when challenges arise. | 0.4% | 0.5% | 5.8% | 48.8% | 43.5% | 4.32 | 0.735 |
| Team members show commitment and responsibility in project activities. | 1.0% | 0.5% | 6.8% | 41.1% | 50.7% | 4.40 | 0.723 |
| **Composite mean/ Std Dev** | | | | | | **4.43** | |

*Source: Primary Data (2026)*

The composite mean of 4.43 in Table 4.15 indicates that the project team performance at Military Teaching Hospital in Rwanda is generally regarded as high by respondents. In particular, 55.6% of those who answered strongly agreed and 38.6% agreed that project team members finish jobs within the designated timeframe (Mean = 4.46, SD = 0.742). In the same vein, 39.6% of respondents concurred and 56.0% strongly concurred that the project team consistently accomplishes the established project objectives (Mean = 4.51, SD = 0.614). These findings suggest that project teams demonstrate strong efficiency and goal attainment, which is essential for successful implementation of hospital-based projects. Recent studies emphasize that timely task completion and clear objective achievement are key indicators of effective team performance in healthcare organizations, particularly in technology-driven environments (Sharma et al., 2025; Nguyen et al., 2024).

Furthermore, respondents confirmed that collaboration and communication within project teams are highly effective. A majority of respondents (28.0% agree; 64.3% strongly agree) indicated that team members effectively collaborate to accomplish project goals (Mean = 4.55, SD = 0.701), while 35.3% agreed and 57.0% strongly agreed that there is effective communication among members of the project team (Mean = 4.46, SD = 0.755). These results highlight the importance of teamwork dynamics in enhancing productivity and coordination of activities. Additionally, respondents agreed that project teams maintain a high level of productivity (Mean = 4.43, SD = 0.671) and show strong commitment and responsibility in project activities (Mean = 4.40, SD = 0.723), suggesting strong engagement and accountability among team members. Empirical evidence shows that effective collaboration and communication significantly improve team productivity and project success in healthcare settings where multidisciplinary coordination is essential (Cresswell et al., 2023; Top et al., 2021).

Lastly, the findings reveal that project teams are generally effective in maintaining quality standards and solving problems. Respondents indicated agreement that the quality of work produced by project teams meets expected standards (Mean = 4.31, SD = 0.826), while 48.8% agreed and 43.5% strongly agreed that teams are able to solve problems effectively when challenges arise (Mean = 4.32, SD = 0.735). These results suggest that despite minor variations in responses, project teams demonstrate resilience, problem-solving capability, and quality assurance in their outputs. Overall, the consistently high mean scores across all indicators confirm that project team performance is strong and positively perceived within the hospital, aligning with research that highlights the importance of collaboration, competence, and adaptability in achieving successful project outcomes in healthcare institutions (Alami et al., 2022; Sharma et al., 2025).

**Regression Results for Digital Tools Adoption and Project Team Performance**

Table 6 presents the model summary for the regression analysis evaluating the effect of digital tools adoption on project team performance, providing critical metrics on the model's explanatory power and statistical validity. The Multiple R value of 0.507 indicates a moderate positive correlation between the two variables, while the R Square value of 0.257 demonstrates that 25.7% of the variance in project team performance at the Military Teaching Hospital is explained by the adoption of digital tools. This explanatory power is further corroborated by an Adjusted R Square of 0.253, which accounts for the number of predictors and confirms the model's robustness without overfitting, alongside a low Standard Error of the Estimate (0.21670) that signifies high predictive accuracy and minimal deviation of the observed data points from the regression line (Pallant, 2024). Furthermore, the Durbin-Watson statistic of

2.009 is highly proximate to the ideal benchmark of 2.0, confirming that the residuals are independent and that there is no first-order autocorrelation, thereby satisfying a fundamental assumption of linear regression and validating the reliability of the model's outputs (Hair et al., 2023). Ultimately, while the model confirms that digital tools adoption is a significant predictor of team performance, the remaining 74.3% of the unexplained variance suggests that project team performance in complex healthcare settings is also heavily influenced by other multifaceted organizational, environmental, and human-resource factors not captured in this specific predictive model (Mugisha et al., 2024).

**Table 7: Model Summary for Digital Tools Adoption**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|---|---|---|---|---|---|
| 1 | .507[a] | .257 | .253 | .21670 | 2.009 |

a. Predictors: (Constant), Digital tools adoption
b. Dependent Variable: Project Performance

*Source: Primary Data, (2026)*

Table 8 presents the Analysis of Variance (ANOVA) results, which evaluate the overall statistical significance of the regression model predicting project team performance from digital tools adoption. The analysis yields an F-statistic of 70.847 (with degrees of freedom 1 and 205) and a significance value of $p < .001$ (reported as .000), which is well below the conventional alpha threshold of 0.05. This confirms that the overall regression model is highly statistically significant, indicating that digital tools adoption is a robust and reliable predictor of project team performance at the Military Teaching Hospital in Rwanda, thereby leading to the rejection of the null hypothesis. Furthermore, the partitioning of the total sum of squares (12.953) into the regression sum of squares (3.327) and the residual sum of squares (9.626) mathematically demonstrates the model's ability to explain a significant portion of the variance in team outcomes. These statistical findings strongly align with recent empirical literature in the region; for instance, Niyonzima and Habimana (2025) similarly established that the integration of digital systems is a statistically significant driver of operational synergy and project execution in Rwandan healthcare settings. Additionally, Kamau and Wanjiku (2024) corroborated this relationship in a broader East African context, concluding that the systematic adoption of digital project management tools significantly predicts enhanced team agility, communication, and overall performance in referral hospitals. Ultimately, the ANOVA results validate that the variance in project team performance is not due to random chance, but is significantly and positively influenced by the extent to which digital tools are adopted within the institution.

**Table 8: ANOVA Results for Digital Tools Adoption**

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 3.327 | 1 | 3.327 | 70.847 | .000[b] |
| | Residual | 9.626 | 205 | .047 | | |
| | **Total** | **12.953** | **206** | | | |

a. Dependent Variable: Project team performance
b. Predictors: (Constant), Digital tools adoption

*Source: Primary Data, (2026)*

The regression coefficients presented in the table detail the magnitude, direction, and statistical significance of the relationship between digital tools adoption and project team performance.

The unstandardized coefficient for the constant is 2.118 ($t$ = 7.667, $p$ < .001), indicating that in the absence of digital tools adoption, the baseline level of project team performance at the Military Teaching Hospital is estimated at 2.118 units. More critically, the unstandardized coefficient ($B$) for digital tools adoption is 0.522, with a standardized beta coefficient ($\beta$) of 0.507. This signifies that for every one-unit increase in the adoption of digital tools, project team performance improves by 0.522 units, reflecting a moderate to strong positive effect size. The $t$-value of 8.417 and a significance level of $p$ < .001 ($p$ = .000) confirm that this positive relationship is highly statistically significant, leading to the rejection of the null hypothesis and affirming that digital tools adoption is a robust predictor of enhanced team performance. These empirical findings resonate with contemporary studies in healthcare management; for instance, Mugisha et al. (2024) similarly found that a unit increase in digital health system utilization yields a substantial and significant improvement in clinical project execution speeds in Rwandan tertiary hospitals. Furthermore, Al-Shehri and Khan (2023) corroborate this positive coefficient, noting that the systematic integration of digital collaboration tools directly and significantly elevates the productivity and operational metrics of medical project teams in complex healthcare environments.

**Table 9: Coefficient Results**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 2.118 | .276 | | 7.667 | .000 |
| | Digital tools adoption | .522 | .062 | .507 | 8.417 | .000 |
| a. | Dependent variable: Project team performance | | | | | |

*Source: Primary Data, (2026)*

The overall regression equation can be represented as:

**Project team performance = 2.118 + 0.522 Digital tools adoption**

**Discussion**

The findings of this study establish a statistically significant and positive relationship between digital tools adoption and project team performance at the Military Teaching Hospital in Rwanda. The regression analysis revealed that digital tools adoption accounts for 25.7% of the variance in project team performance ($R^2$ = .257, $p$< .001), with a positive coefficient indicating that a one-unit increase in the adoption of digital systems leads to a 0.522-unit improvement in overall team performance. This empirical evidence suggests that when project teams within the hospital actively integrate digital platforms—ranging from electronic health records to digital project management and compensation systems—into their daily workflows, they experience marked improvements in team efficiency, cross-departmental collaboration, and the overall quality of service delivery. These results directly align with the assertions of Mugisha et al. (2024), who found that the systematic utilization of digital health systems in Rwandan tertiary hospitals significantly accelerates clinical project execution and reduces administrative bottlenecks. Furthermore, the strong positive effect size corroborates the findings of Thompson and Hayes (2024), who demonstrated in a broader healthcare context that the deep integration of digital project management tools is a primary catalyst for enhancing the agile performance and operational synergy of multidisciplinary medical teams.

When contextualized within the broader regional and global literature, the findings of this study both validate and extend existing knowledge regarding technology adoption in healthcare. The

highly significant positive relationship observed in this study mirrors the conclusions of Al-Shehri and Khan (2023), whose research in Middle Eastern tertiary hospitals established that the adoption of digital collaboration tools directly and significantly elevates the productivity and decision-making speed of medical project teams. Similarly, the findings support the work of Kamau and Wanjiku (2024) in Kenya, who identified digital tool adoption as a critical predictor of project agility and improved service delivery in referral hospitals. However, while the relationship is highly significant, the model's $R^2$value of 25.7% also reveals that nearly three-quarters of the variance in project team performance is influenced by other external or unmeasured factors. This nuance is strongly supported by Van der Merwe and Nkosi (2023), who argued in the South African context that while digital adoption significantly improves logistical and project performance, its full potential is often moderated by infrastructural deficits and the need for continuous change management. Thus, while digital tools are a powerful driver of performance, they are not a panacea and must be supported by a conducive organizational environment to achieve optimal team outcomes.

In the specific context of the Rwanda Military Referral and Teaching Hospital, these findings carry profound practical and strategic implications for healthcare administration and project management. Because the hospital operates within a high-stakes, hierarchical military and clinical environment, the seamless adoption of digital tools is not merely an administrative upgrade but a critical operational necessity that directly impacts the speed and quality of patient care and institutional projects. The positive influence of digital adoption on team performance validates the extended application of the Technology Acceptance Model (TAM) in mandatory-use, team-based settings, echoing the sentiments of Niyonzima and Habimana (2025), who emphasized that in Rwanda's military healthcare sector, the perceived usefulness and workflow integration of digital tools are the primary drivers of team synergy and project success. Consequently, to sustain and enhance this positive effect, hospital leadership must move beyond the mere procurement of technology and prioritize continuous, role-based digital literacy training, ensure the user-friendliness of adopted systems, and foster a digital culture that encourages project teams to fully leverage these tools for innovation and adaptability in their daily operations (Clarke et al., 2023).

## CONCLUSION AND RECOMMENDATIONS

### Conclusion

The study concludes that the adoption of digital tools has a significant, positive, and substantial effect on project team performance at the Rwanda Military Referral and Teaching Hospital, accounting for over a quarter of the variance in team outcomes. The empirical evidence demonstrates that when digital platforms—ranging from electronic health records and collaborative project management software to digital administrative systems—are meaningfully integrated into daily workflows, they act as critical catalysts for enhancing team efficiency, cross-functional communication, and the overall quality of service delivery. Ultimately, the findings establish that digital tools adoption in this context transcends mere technological implementation; it is a fundamental strategic driver that transforms project team dynamics, proving that sustained digital integration is indispensable for achieving operational excellence, agility, and high-quality project execution within complex, high-stakes military and healthcare environments.

## Recommendations

Based on the study's conclusions, it is recommended that the management of the Rwanda Military Referral and Teaching Hospital, in collaboration with the Rwanda Defence Force Medical Services, prioritizes the continuous optimization and user-centric design of all adopted digital tools to ensure they remain highly accessible, intuitive, and seamlessly integrated into clinical and administrative workflows. Hospital leadership should institutionalize continuous, role-based digital literacy and change management training programs to bridge the gap between mere system availability and deep, habitual usage, thereby maximizing the perceived usefulness of these platforms among project teams. Furthermore, to address the unexplained variance in project team performance and mitigate potential adoption barriers, the administration must concurrently invest in robust underlying digital infrastructure such as uninterrupted power and high-speed network connectivity while fostering a supportive, innovative organizational culture that encourages cross-departmental synergy and rewards the creative application of digital solutions in project execution.

## Suggestions for Further Studies

Given that the current study established that digital tools adoption explains approximately 25.7% of the variance in project team performance, it is suggested that future research should investigate the remaining 74.3% by exploring other potential predictors, such as organizational culture, transformational leadership styles, infrastructural resilience, and psychological factors like digital fatigue among healthcare professionals. Additionally, because this study utilized a cross-sectional design confined to a single military teaching hospital in Rwanda, further studies should adopt a longitudinal research approach to assess the long-term, sustained impacts of digital tool adoption on project team performance and workflow evolution over time. Finally, comparative research should be conducted across both military and civilian public referral hospitals in Rwanda and the broader East African region to determine if the observed effects of digital adoption on team performance are consistent across different institutional hierarchies, resource allocations, and healthcare delivery models.

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