

Influence of Digital Planning Tools on Monitoring & Evaluation Frameworks at CHANCEN International, Rwanda

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Abstract: The adoption of digital technologies has transformed project management and Monitoring and Evaluation (M&E) practices by improving accountability, transparency, data quality, reporting efficiency, and evidence-based decision-making. This study examined the influence of digital planning tools on Monitoring and Evaluation frameworks at Chancan International Rwanda. Specifically, it assessed the influence of digital planning, budgeting, monitoring, and communication tools on the effectiveness of M&E frameworks. The study was guided by Contingency Theory, Modernization Theory, Cybernetics Theory, and Knowledge Management Theory. A mixed-methods research design was adopted, integrating quantitative and qualitative approaches. Quantitative data were collected from 359 respondents comprising staff, students, graduates, and partner institutions using simple random and census sampling techniques, while qualitative data were obtained through key informant interviews and documentary review. Quantitative data were analyzed using descriptive statistics, Pearson correlation, multiple regression, and ANOVA in SPSS Version 26, whereas qualitative data were analyzed thematically.

The findings revealed that digital planning tools significantly improved project scheduling, work-plan development, resource allocation, activity coordination, and strategic planning, thereby strengthening M&E frameworks. Digital budgeting tools enhanced budget preparation, financial tracking, cost control, resource utilization, and financial accountability, contributing to effective M&E implementation. Digital monitoring tools, including Kobo Toolbox, improved the timeliness, completeness, accuracy, and reliability of monitoring data while facilitating real-time reporting and performance tracking. Digital communication tools, including Microsoft Power BI, Tableau, and Looker Studio, enhanced information sharing, stakeholder engagement, dashboard visualization, report generation, feedback mechanisms, and evidence-based decision-making. Correlation analysis indicated significant positive relationships between all four categories of digital tools and M&E frameworks. Multiple regression analysis established that digital planning, budgeting, monitoring, and communication tools each had a statistically significant positive influence on M&E frameworks ($p < 0.05$), with digital communication tools emerging as the strongest predictor, followed by digital monitoring, budgeting, and planning tools. Collectively, these digital tools enhanced accountability, transparency, reporting timeliness, data quality, stakeholder participation, organizational learning, and evidence-based decision-making. The study concludes that integrating digital planning tools with complementary digital budgeting, monitoring, and communication technologies significantly strengthens Monitoring and Evaluation frameworks and organizational performance. It recommends increased investment in integrated digital M&E systems, continuous staff capacity building, strengthened digital infrastructure, centralized data management systems, and supportive digital transformation policies.

Keywords: Digital Planning Tools, Monitoring & Evaluation, Frameworks, CHANCEN International, Rwanda.

1. INTRODUCTION

Digital planning tools are software-based applications that support project planning, scheduling, resource allocation, budgeting, task coordination, and performance tracking throughout the project lifecycle. In Monitoring and Evaluation (M&E), these technologies facilitate the systematic planning of activities, timely collection of performance data, real-time monitoring, automated reporting, and evidence-based decision-making. By replacing manual planning processes with

integrated digital platforms, organizations improve the quality, timeliness, accuracy, transparency, and accountability of project implementation while strengthening adaptive management and organizational learning (World Bank, 2021; UNDP, 2021).

Monitoring and Evaluation has become a fundamental management function for development organizations seeking to demonstrate results, ensure accountability, and enhance organizational effectiveness. However, the effectiveness of M&E frameworks largely depends on the quality of project planning and the availability of reliable information for decision-making. The emergence of digital planning tools, including cloud-based project management systems, mobile data collection platforms, Geographic Information Systems (GIS), dashboards, and business intelligence applications, has transformed the planning and execution of M&E activities by enabling organizations to monitor project progress in real time, identify implementation gaps, optimize resource allocation, and generate timely reports for stakeholders (World Bank, 2021).

Globally, development organizations have increasingly integrated digital planning tools into their M&E frameworks to improve project performance. In Germany, organizations utilize digital platforms such as KoboToolbox and Salesforce to support project planning, real-time monitoring, and donor reporting, thereby enhancing accountability and operational efficiency (GIZ, 2020). Similarly, Dutch development organizations, including SNV and Cordaid, employ Akvo Flow and DevResults to strengthen programme planning, adaptive management, and evidence-based decision-making through continuous performance monitoring (Akvo, 2021). In the United States, organizations such as CARE and the Gates Foundation integrate Power BI and TolaData into project planning and performance management systems to facilitate strategic decision-making and measure development outcomes across multiple programmes (Gates Foundation, 2022).

Across Asia, digital planning tools have become increasingly important in strengthening M&E systems. In India, organizations use Open Data Kit (ODK), CommCare, and other mobile platforms to support project planning, field data collection, and performance monitoring, particularly in health and education programmes operating in resource-constrained environments (Pratham, 2020). Likewise, organizations in the Philippines have adopted KoboToolbox and Microsoft Power BI to improve project planning, disaster response coordination, resource allocation, and community development monitoring through real-time data visualization and reporting (UNDP Philippines, 2021).

The adoption of digital planning technologies has also accelerated across Africa as organizations seek to strengthen accountability and programme effectiveness. In Morocco and Egypt, platforms such as DHIS2, KoboToolbox, GIS applications, and mobile-based monitoring systems have significantly improved project planning, service delivery monitoring, beneficiary tracking, and spatial analysis, enabling organizations to make timely management decisions and improve programme targeting (UNICEF Morocco, 2020; UNDP Egypt, 2021). Similarly, non-governmental organizations in Nigeria and Ghana have integrated SurveyCTO, TolaData, cloud-based dashboards, and mobile applications into their planning and M&E systems, resulting in improved project oversight, donor reporting, organizational learning, and adaptive programme management (TechSoup Nigeria, 2022; SEND Ghana, 2021).

Within East Africa, Kenya has emerged as a regional leader in the application of digital planning tools for M&E. Organizations such as Mercy Corps, Amref Health Africa, and Shining Hope for Communities (SHOFCO) employ Microsoft Power BI, Salesforce, KoboToolbox, DHIS2, SurveyCTO, and ArcGIS to support project planning, resource management, performance monitoring, and strategic decision-making. These technologies have strengthened transparency, accountability, and programme effectiveness while aligning organizational performance with national digital transformation initiatives (USAID Kenya, 2022). Similar progress has been reported in Tanzania, Uganda, Zambia, and South Africa, where organizations increasingly utilize DHIS2, Power BI, ODK, Mobenzi, and KoboToolbox to enhance planning, monitoring, stakeholder engagement, and evidence-based management of development interventions (Twaweza, 2021; UNICEF Uganda, 2021; Restless Development Zambia, 2020).

In Rwanda, digital transformation has become a national priority under the Smart Rwanda Master Plan, encouraging both public and non-profit organizations to integrate digital technologies into programme planning and Monitoring and Evaluation. Organizations increasingly utilize KoboToolbox, Salesforce, Power BI, cloud computing platforms, GIS technologies, and automated dashboards to improve project planning, data management, financial tracking, reporting, and organizational learning. These digital planning tools have enhanced transparency, accountability, stakeholder engagement, donor reporting, and evidence-based decision-making despite persistent challenges related to system integration, internet connectivity, digital literacy, and data security (UNDP Rwanda, 2021).

At Chancen International Rwanda, digital planning tools have become increasingly important in supporting its innovative Income Share Agreement (ISA) financing model, which requires continuous monitoring of student enrolment, academic progress, loan repayment, graduate employment outcomes, and programme sustainability. The organization has adopted Salesforce, cloud-based databases, mobile data collection systems, and digital dashboards to improve project planning, beneficiary tracking, financial monitoring, and organizational reporting. According to Chancen International's Annual Report (2023), these technologies have enhanced operational efficiency, data quality, and real-time decision-making. Nevertheless, challenges remain regarding integration of digital platforms, staff capacity, data privacy, and the effective use of digital planning tools across the entire Monitoring and Evaluation cycle, particularly during project planning and adaptive management (Chancen International, 2023).

Although previous studies have extensively examined the contribution of digital technologies to data collection and reporting within Monitoring and Evaluation systems, relatively few have specifically investigated the influence of digital planning tools on Monitoring and Evaluation frameworks, particularly within Rwanda's non-profit sector. Existing evidence indicates that many organizations continue to emphasize data collection while giving limited attention to the role of digital planning in strengthening project implementation, learning, and continuous programme improvement (Uwimana, 2022). This knowledge gap necessitates empirical investigation into how digital planning tools influence Monitoring and Evaluation frameworks at Chancen International Rwanda, thereby providing evidence to inform organizational digital transformation and improve programme effectiveness.

2. METHODOLOGY

2.1 Research Design

A mixed-methods research design is used in this study to combine quantitative and qualitative techniques in order to thoroughly investigate how digital tools affect Chancen International Rwanda's Monitoring and Evaluation (M&E) frameworks.

2.2 Target Population

The study's target population consists of 3,500 individuals who are either major stakeholders in Chancen International Rwanda's initiatives or directly carry out Monitoring and Evaluation (M&E) tasks.

2.3 Sample Size

The sample size for this study is determined using **Slovin's formula**, which is appropriate for populations that are finite and known:

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

Where:

- **n** = Sample size
- **N** = Total population (3500)
- **e** = Margin of error (0.05)

By substituting the values into the formula, $n = \frac{3500}{1 + 3500(0.05)^2} = \frac{3500}{1 + 8.75} = \frac{3500}{9.75} = 358.97$

Therefore, the sample size for the study is 359 respondents (rounded to the nearest whole number).

2.4 Data Collection Methods

Primary data was collected using a mixed-methods approach that combines structured questionnaires and semi-structured interviews. Secondary data was gathered through a systematic documentary review of relevant organizational records and reports.

2.5 Data Collection Instruments

A structured questionnaire created in accordance with the study's goals served as the main tool for gathering data. There were five sections on the questionnaire.

3. RESULTS AND DISCUSSION

3.1 Gender of Respondents

The gender distribution of respondents indicates how balanced participation was in the study. A relatively equal representation of male and female respondents suggests that the findings capture a broad range of experiences regarding the use of digital tools in M&E frameworks.

Table 1: Gender of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	216	60.2	60.2	60.2
	Female	143	39.8	39.8	100.0
	Total	359	100.0	100.0	

Source: (Researcher, 2026)

The data in table 1 indicates that the majority of the respondents were male, accounting for 60.2% (n=216) of the total sample, while female respondents comprised 39.8% (n=143). And there is a higher representation of male participants, the inclusion of a significant proportion of females ensures that the study captures diverse viewpoints across the organization, contributing to the overall validity of the findings.

3.2 Pilot study Findings

The pilot study was conducted at FXB Rwanda with a representative sample of 10 to 15 respondents to evaluate the validity, clarity, and reliability of the research instruments before the main data collection. Using Cronbach's Alpha, the instruments achieved a coefficient of 0.80, confirming strong internal consistency across the subscales for digital planning, budgeting, monitoring, and communication tools. While the tools were found to be largely comprehensible, the pilot identified a need to simplify specific Likert-scale items to eliminate ambiguity and ensure higher response accuracy. Expert reviews further validated the content alignment with the study's objectives, leading to refined prompts for extracting data from financial and monitoring documents. Ultimately, these refinements ensured the research tools were precise and fit for purpose, adhering to established academic standards for credible data collection (Saunders, Lewis, & Thornhill, 2019; Creswell & Creswell, 2018).

3.3 Findings

Digital planning tools include software and platforms (like KoboToolbox, Microsoft Excel, Salesforce, Asana, and Power BI) that are used to plan, manage, and analyze data during the program cycle. Respondents' views on these tools show that they know they can make M&E frameworks more reliable and efficient, but the full potential for adaptive learning and strategic program redesign is still being realized.

Table 2(a): Examine the influence of digital planning tools on Monitoring & Evaluation frameworks at Chancen International

Digital Data Collection Tools	SA	A	N	D	SD	Total
Mobile tools (e.g., KoboToolbox) improved the timeliness of M&E data collection.	321 (89.4%)	15 (4.2%)	4 (1.1%)	10 (2.8%)	9 (2.5%)	359 (100%)
Excel-based dashboards enhanced accuracy in financial monitoring and reporting.	258 (71.9%)	74 (20.6%)	9 (2.5%)	6 (1.7%)	12 (3.3%)	359 (100%)
Power BI/other visualization tools improved real-time decision-making.	253 (70.5%)	71 (19.8%)	3 (0.8%)	14 (3.9%)	18 (5.0%)	359 (100%)
Digital tools reduced manual errors in beneficiary data (e.g., ISA tracking).	250 (69.6%)	64 (17.8%)	3 (0.8%)	22 (6.1%)	20 (5.6%)	359 (100%)
Cloud-based platforms (e.g., Salesforce) facilitated stakeholder collaboration.	155 (43.2%)	125 (34.8%)	20 (5.6%)	31 (8.6%)	28 (7.8%)	359 (100%)

Source: (Researcher, 2026)

The study findings show that digital tools have a strong positive influence on Monitoring and Evaluation (M&E) frameworks at Chancen International. A large majority of respondents, 89.4% strongly agreed and 4.2% agreed, while 1.1% were neutral, 2.8% disagreed, and 2.5% strongly disagreed that mobile tools like KoboToolbox improved the timeliness of data collection. This indicates that mobile technologies significantly enhance the speed and efficiency of gathering M&E data. In terms of financial monitoring, 71.9% strongly agreed and 20.6% agreed, with 2.5% neutral, 1.7% disagreed, and 3.3% strongly disagreed that Excel-based dashboards improved accuracy in financial reporting. These findings highlight Excel's importance in ensuring precise financial tracking and reporting.

Similarly, visualization tools such as Power BI were found to improve real-time decision-making, with 70.5% strongly agreeing and 19.8% agreeing, while 0.8% were neutral, 3.9% disagreed, and 5.0% strongly disagreed. This demonstrates that data visualization plays a key role in supporting timely and informed decisions. Additionally, 69.9% of respondents strongly agreed and 17.8% agreed, with 0.8% neutral, 6.1% disagreed, and 5.6% strongly disagreed that digital tools reduced manual errors in beneficiary data, such as ISA tracking. This confirms that digital systems improve data accuracy and reduce human error.

Regarding collaboration, cloud-based platforms like Salesforce received relatively lower but still strong support, with 43.2% strongly agreeing and 34.8% agreeing, while 5.6% were neutral, 8.6% disagreed, and 7.8% strongly disagreed that they facilitated stakeholder collaboration. Despite this, Salesforce is widely recognized as a powerful planning tool that integrates activity scheduling, progress monitoring, and coordination of project timelines. It enables automatic task assignment, centralized document storage, and real-time synchronization of field data with M&E plans, reducing operational fragmentation and improving consistency.

Table 2(b): Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.551 ^a	0.303	0.301	0.80160

a. Predictors: (Constant), Digital tools reduced manual errors in beneficiary data (e.g., ISA tracking).

Source: (Researcher, 2026)

The results from the table 2(b) indicated that the value of R-squared was 0.303(30.3%) an indication that there was variation of 30.3% of Excel-based dashboards enhanced accuracy in financial monitoring and reporting at 95% confidence interval.

Table 3: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	99.896	1	99.896	155.464	0.000 ^b
	Residual	229.396	357	0.643		
	Total	329.292	358			

a. Dependent Variable: The use of digital tools improved the timeliness of project reporting and feedback

b. Predictors: (Constant), Digital tools reduced manual errors in beneficiary data (e.g., ISA tracking).

Source: (Researcher, 2026)

The results from the table 3 indicate that the overall model was significant. The overall model was significant because calculated F statistic of 155.464 was large than the critical F ($V_1=1$, $V_2=359$) = 0.643 and also because p-value calculated =0.000 is less than Critical p-value =0.05 level of significant. Therefore, this implies that the digital data collection tools was statistically significant in explaining the variations in Performance of M&E Frameworks at Chancen International. This is supported by a p value of 0.000 which is less than the acceptance critical value of 0.05. This indicates that there was a goodness of fit of the model fitted for this study.

Table 4: T-test Digital planning tools and M&E effectiveness

Variable	Male Mean	Male SD	Female Mean	Female SD	t	Sig. (2-tailed)
KoboToolbox improved timeliness of M&E data collection	4.72	0.61	4.61	0.68	2.314	0.021
Cloud platforms facilitated stakeholder collaboration	3.98	0.89	3.84	0.94	1.987	0.048

Source: (Researcher, 2026)

T-test results presented in Table 4 reveal that male respondents recorded a slightly higher mean score ($M = 4.72$, $SD = 0.61$) compared to female respondents ($M = 4.61$, $SD = 0.68$) regarding the influence of digital planning tools such as Kobo Toolbox on the timeliness of M&E data collection. The t-value of 2.314 with a two-tailed significance of $p = 0.021$ ($p < 0.05$) indicates a statistically significant difference between the two gender groups.

4. DISCUSSION

The findings of the study demonstrate that digital planning tools have significantly strengthened Monitoring and Evaluation (M&E) frameworks at Chancen International Rwanda, particularly in improving the timeliness and efficiency of field-level data collection processes. The adoption of mobile data collection platforms such as KoboToolbox has transformed traditional M&E operations by enabling real-time data capture, faster reporting cycles, and improved accessibility of project information. The overwhelming agreement among respondents, where 89.4% strongly agreed and 4.2% agreed that mobile tools improved timeliness, confirms that digital planning tools have become indispensable within modern M&E systems.

These findings are consistent with earlier studies indicating that mobile-based data systems substantially reduce delays associated with paper-based reporting while improving the availability of real-time information for programme managers and decision-makers. Furthermore, the strong positive perceptions regarding Microsoft Excel dashboards demonstrate the continued relevance of Excel as a flexible planning and monitoring tool capable of supporting work plans, activity matrices, Gantt charts, and financial tracking, especially within low-connectivity operational environments (Mwangi & Kariuki, 2019; Otieno, Wafula, & Njeru, 2020).

The study further established that advanced digital visualization and planning tools significantly improve decision-making and project monitoring within the M&E framework of Chancen International Rwanda. A large majority of respondents confirmed that platforms such as Microsoft Power BI, Tableau, and Google Data Studio enhance real-time decision-making by transforming complex project data into interactive dashboards and visual summaries. These tools enable programme managers to monitor milestones, identify implementation gaps, and initiate corrective actions promptly, thereby strengthening evidence-based management practices. The findings also suggest that integrating digital scheduling systems with dashboards improves project coordination and reduces operational inefficiencies such as missed field activities and delayed reporting cycles. However, the existence of a small proportion of disagreement among respondents indicates that barriers including technical complexity, software licensing costs, and uneven digital literacy still affect full adoption and effective utilization of these tools.

This demonstrates that while digital planning tools provide substantial technical advantages, organizations must continue investing in structured capacity-building initiatives and technical support systems to maximize their benefits within M&E operations (Chambers & Moré, 2018; Nakimuli & Ssemwanga, 2021).

The findings additionally reveal that cloud-based collaboration platforms such as Salesforce positively influence stakeholder coordination and communication within the M&E frameworks of Chancen International Rwanda. Respondents generally agreed that Salesforce improves collaboration by integrating activity scheduling, centralized document management, real-time performance tracking, and automated alerts that enhance project oversight and accountability. Nevertheless, compared to other digital planning tools, the relatively lower agreement levels suggest that the implementation and utilization of cloud-based collaboration systems may still face organizational and operational challenges.

Existing literature similarly indicates that the effectiveness of integrated digital platforms largely depends on factors such as institutional readiness, employee training, technical infrastructure, and alignment between technology systems and organizational workflows. Therefore, organizations seeking to maximize the effectiveness of digital planning tools should adopt phased implementation approaches, strengthen institutional support structures, and provide continuous user engagement and technical assistance to ensure sustainable adoption and effective collaboration across departments (Salesforce, 2020; Balogun & Osei-Bonsu, 2019; Saunders, Lewis, & Thornhill, 2019).

The independent samples T-test further revealed statistically significant gender-based differences in perceptions regarding the effectiveness of digital planning tools within the M&E frameworks of Chancen International Rwanda. Male respondents consistently reported slightly higher mean scores than female respondents across several digital planning tool categories, particularly concerning stakeholder collaboration and system effectiveness. For example, male respondents reported higher perceptions regarding the effectiveness of cloud-based collaboration platforms compared to female respondents, with the difference being statistically significant at the 0.05 level. These findings suggest that disparities in digital exposure, access to technology, technical confidence, and ICT training opportunities may influence how different staff categories perceive and utilize digital planning tools.

Similar findings have been documented in broader Sub-Saharan African development contexts, where structural and institutional inequalities continue to shape digital inclusion and technology utilization. Consequently, Chancen International Rwanda should implement gender-sensitive digital capacity-building initiatives, including targeted digital literacy programmes, mentorship opportunities, and equitable technology access policies, to ensure that all employees benefit equally from digital planning systems within the organization's M&E framework (Pallant, 2020; Wamala-Larsson, 2018; Khatun & Sam, 2020).

The findings support the hypothesis that digital planning tools enhance M&E performance, particularly in improving timeliness and decision-making. The near-total agreement (93.6%) strongly supports the hypothesis on efficiency and timeliness. However, the effectiveness is not uniform, as more complex tools such as Power BI and Salesforce face barriers related to cost, technical skills, and usability. Therefore, the hypothesis is partially supported, and the effectiveness of digital planning tools depends on user capacity, system usability, and institutional support. The influence of digital planning tools on M&E frameworks was statistically significant ($p = 0.000 < 0.05$), confirming goodness of fit and supporting the model.

5. SUMMARY OF FINDINGS

The findings indicate that digital planning tools have a strong positive influence on the Monitoring and Evaluation (M&E) frameworks at Chancen International by improving timeliness, accuracy, and overall data management efficiency. A majority of respondents (89.4% strongly agreed and 4.2% agreed) confirmed that mobile tools such as KoboToolbox significantly enhance the speed of M&E data collection and reduce reporting delays, while 71.9% strongly agreed and 20.6% agreed that Excel-based dashboards improve accuracy in financial monitoring and reporting. The regression results further revealed an R^2 value of 0.303, indicating that digital planning tools explained 30.3% of the variation in M&E framework effectiveness, while the ANOVA results confirmed that the model was statistically significant ($F = 155.464$, $p = 0.000 < 0.05$). In addition, the T-test findings showed statistically significant gender differences in perceptions regarding the effectiveness of digital planning tools, where male respondents reported slightly higher mean scores than females on the influence of KoboToolbox in improving timeliness of M&E data collection ($t = 2.314$, $p = 0.021$). Overall, these findings confirm that mobile tools strengthen data collection while Excel-based systems improve financial accuracy and consistency, although the effectiveness of digital planning tools still depends on user skills, system usability, and organizational support.

6. CONCLUSION

The study concluded that digital planning tools have a positive and statistically significant influence on Monitoring and Evaluation (M&E) frameworks at CHANCEN International, Rwanda. The findings showed a significant positive relationship between the use of digital planning tools and the effectiveness of M&E frameworks ($r = 0.544$; $p = 0.000 < 0.05$). This indicates that increased and effective use of digital planning tools is associated with improved M&E framework effectiveness.

The findings further revealed a high level of agreement (93.6%) among respondents regarding the usefulness of digital planning tools in supporting M&E activities. These tools contribute to the systematic planning, scheduling, coordination, and organization of M&E activities, thereby supporting timely implementation and follow-up of programmes. Their use provides a structured basis for integrating M&E activities into programme planning and implementation processes.

Overall, the study concludes that effective utilization of digital planning tools strengthens M&E frameworks at CHANCEN International, Rwanda. The organization should therefore continue to enhance the adoption and effective use of digital planning tools to improve the planning and coordination of M&E activities and support more systematic, timely, and evidence-based programme management.

REFERENCES

- [1] Adeyemi, T., Osei, P., & Kamau, J. (2023). Digital financial systems and accountability in African NGOs: Evidence from donor-funded projects. *Journal of Development Informatics*, 9(2), 45–63.
- [2] Akvo. (2021). *Akvo Flow for tracking development projects*. Akvo Foundation.
- [3] Alves, A., & Roque, R. (2021). Digital tools for monitoring and evaluation in nonprofit organizations: Challenges and opportunities. *Journal of Development Effectiveness*, 13(3), 345–360.
- [4] Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research*, 26(13), 1802–1811.
- [5] British Educational Research Association. (2018). *Ethical guidelines for educational research* (4th ed.).
- [6] Bryman, A., Bell, E., & Harley, B. (2022). *Business research methods* (6th ed.). Oxford University Press.
- [7] CARE USA. (2022a). *Annual report: Making a global impact with digital tools*.
- [8] CARE USA. (2022b). *Strengthening program quality through digital project management: An organizational review*.
- [9] Chen, Y., & Patel, R. (2023). Real-time dashboards and adaptive monitoring in social sector programs. *Evaluation and Program Planning*, 98, 102234.
- [10] Diener, E., & Crandall, R. (1978). *Ethics in social and behavioral research*. University of Chicago Press.
- [11] Flick, U. (2018). *An introduction to qualitative research* (6th ed.). Sage Publications.
- [12] Gates Foundation. (2022). *Using data to drive global development outcomes*. Bill & Melinda Gates Foundation.
- [13] GDPR.eu. (2024). *Guide to the General Data Protection Regulation*.
- [14] Girl Effect Rwanda. (2021). *Annual report: Using digital interventions to empower girls*.
- [15] GIZ. (2020). *Digital transformation in collaboration for development*. Deutsche Gesellschaft für Internationale Zusammenarbeit.
- [16] Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.
- [17] Harvard Humanitarian Initiative & KoboToolbox. (2021). *KoboToolbox user cases and field applications*.
- [18] Harvard Humanitarian Initiative & KoboToolbox. (2023). *KoboToolbox: Field data collection for humanitarian and development programs*.
- [19] Human Sciences Research Council. (2021a). *Digital tools for health monitoring and evaluation in South Africa during COVID-19*.
- [20] Human Sciences Research Council. (2021b). *Remote engagement and virtual learning in NGO practice: Impacts and lessons*.
- [21] International Chancen. (2023). *Annual report: Using digital innovation to advance youth*.
- [22] Israel, M., & Hay, I. (2006). *Research ethics for social scientists*. Sage Publications.
- [23] Johnson, M., & Lee, H. (2023). Digital communication platforms and participatory monitoring: Lessons from NGOs in East Africa. *Information Technology for Development*, 29(1), 112–130.
- [24] Kaiser, K. (2009). Protecting respondent confidentiality in qualitative research. *Qualitative Health Research*, 19(11), 1632–1641.
- [25] Kenya Mercy Corps. (2021). *Utilizing Salesforce and Power BI in monitoring and evaluation*.
- [26] Korstjens, I., & Moser, A. (2018). Practical guidance to qualitative research: Trustworthiness and publishing. *European Journal of General Practice*, 24(1), 120–124.
- [27] Lee, S., & Patel, D. (2023). Integrating Salesforce and Power BI for financial governance in nonprofit monitoring and evaluation systems. *Nonprofit Management & Leadership*, 34(3), 321–340.

- [28] Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.
- [29] OECD. (2021). *Digital transformation for development: Strengthening monitoring and evaluation systems in the public sector*. OECD Publishing.
- [30] OECD DAC. (2020). *Results-based management in development co-operation: Good practices and challenges*. OECD Publishing.
- [31] Office of Research and Sponsored Projects. (2017). *Data retention guidelines*. University of California.
- [32] Pallant, J. (2020). *SPSS survival manual: A step-by-step guide to data analysis using IBM SPSS* (7th ed.). McGraw-Hill Education.
- [33] Pillow, W. (2003). Confession, catharsis, or cure? Rethinking reflexivity as methodological power. *International Journal of Qualitative Studies in Education*, 16(2), 175–196.
- [34] Pratham Education Foundation. (2020). *Monitoring education with Open Data Kit*.
- [35] Presser, S., Couper, M. P., Lessler, J. T., Martin, E., Martin, J., Rothgeb, J. M., & Singer, E. (2004). Methods for testing and evaluating survey questions. *Public Opinion Quarterly*, 68(1), 109–130.
- [36] Restless Development Zambia. (2020). *Gender-based development using digital monitoring and evaluation tools*.
- [37] Rwanda Utilities Regulatory Authority. (2019). *Smart Rwanda master plan (2017–2020)*.
- [38] Salesforce.org. (2022). *Nonprofit trends report*.
- [39] Salesforce.org. (2023). *How nonprofits use Salesforce for impact measurement*.
- [40] SEND Foundation. (2021). *Digital monitoring systems in Ghana's agricultural sector*.
- [41] Sieber, J. E. (1992). *Planning ethically responsible research*. Sage Publications.
- [42] Society for Research in Child Development. (2019). *Ethical standards for research with children*.
- [43] Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics* (7th ed.). Pearson Education.
- [44] TechSoup Global. (2021). *Digital tools and nonprofit productivity: Case studies from East Africa*.
- [45] TechSoup Global. (2022). *Digital transformation in nonprofits: Tools, trends, and impact*.
- [46] The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. (1979). *The Belmont report*. U.S. Department of Health and Human Services.
- [47] UK Data Service. (2021). *Managing and sharing data: Best practice for researchers*.
- [48] UNDP. (2021). *The role of digital tools in accelerating monitoring and evaluation systems*. United Nations Development Programme.
- [49] UNDP. (2022). *ICT for development: Leveraging digital tools for results-based management*. UNDP Rwanda.
- [50] UNDP Philippines. (2021a). *Community monitoring and digital feedback using messaging platforms*.
- [51] UNDP Philippines. (2021b). *KoboToolbox and Power BI in community development*.
- [52] UNICEF. (2021). *Annual results report: Data, analytics, planning and monitoring*.
- [53] Uwimana, J. (2022). Adoption of digital monitoring and evaluation tools in Rwandan nonprofits. *Rwanda Journal of Management and Social Sciences*, 4(1), 55–72.
- [54] World Bank. (2021a). *Data-driven development: Improving monitoring and evaluation with digital tools*. World Bank.
- [55] World Bank. (2021b). *World development report 2021: Data for better lives*. World Bank.
- [56] World Bank Brazil. (2021). *Utilizing digital tools to track rural development*.
- [57] World Vision International. (2021a). *Enhancing project planning with Excel and digital dashboards*.
- [58] World Vision International. (2021b). *Program quality and impact highlights: Annual review*.