

Unveiling Agile Integration Dynamics within Nigerian Information Technology Projects

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Abstract

In the rapidly evolving Information Technology (IT) sector, the adoption of agile project management methodologies has become imperative for navigating complexities and ensuring efficient project delivery. This empirical investigation characterizes the integration of Agile paradigms within the Nigerian IT project landscape based on survey data from 77 IT project managers. The study describes a substantial embrace of Agile, with 79.2% of surveyed entities actively implementing these practices. Key findings indicate Scrum as the preeminent framework, underpinned by practices such as daily stand-ups and iterative sprint planning. The reported impetus for this methodological shift is attributed to accelerated software delivery cycles, amplified team productivity, and an inherent capacity for adaptation to dynamic project requirements. Perceived project success within these agile frameworks is associated with the generation of tangible business value and elevated stakeholder satisfaction, as reported by respondents. This research yields descriptive insights into the reported application and perceived strategic dividends of Agile in an emerging economy, based on the surveyed organizations, thereby providing evidence of its influence on contemporary project execution as perceived by participating project managers.

Keywords

- Agile Project Management • Scrum • IT Projects • Nigeria • Software Delivery • Team Productivity • Business Value

1. Introduction

The information technology sector in Nigeria has grown at a remarkable pace over the past decade. Increased internet penetration, a young and digitally savvy population, and a booming fintech ecosystem have pushed organizations to deliver software faster and more reliably than ever before. Yet traditional project management methods, with their rigid sequential phases and fixed requirements, struggle to keep up with the pace of change [1]. Projects that once took years are now expected to deliver value in weeks or even days. In this environment, the ability to adapt, iterate, and respond to shifting customer needs is not a luxury; it is a survival skill [2].

Agile project management has emerged as a counterweight to the heavyweight, plan-driven approaches of the past. Born from the software development community, agile methods emphasize small, cross-functional teams, short feedback loops, and continuous delivery of working software. Over the last two decades, agile practices have moved far beyond their software origins and are now applied in manufacturing, marketing, and even government. The core principles collaboration over contract negotiation, responding to change over following a plan have proven valuable wherever uncertainty is high [3, 4].

The Nigerian IT industry, however, presents a unique set of conditions. Infrastructure gaps, skill shortages in emerging technologies, limited government policy support, and cybersecurity threats all add layers of complexity that are not always captured in the agile literature from Europe or North America [1, 5]. At the same time, the large market size and the rapid adoption of digital services provide a strong incentive to get project delivery right [6]. Understanding how agile methods are actually being used in this context, and whether they deliver the promised benefits, is therefore of both academic and practical importance [7, 8].

This paper reports on a survey of 77 IT project managers working in Nigeria. The survey was designed to measure the rate of agile adoption, the specific methods and practices being used, the reasons organizations choose agile, and how they measure project success [9]. The results paint a picture of widespread adoption: nearly 80 percent of respondents reported using agile methods, with Scrum as the dominant framework [10]. Daily stand-ups, sprint planning, and product road mapping are the most frequently cited practices. The main drivers for adopting agile are faster software delivery, increased team productivity, and the ability to manage changing priorities. Notably, success is measured less by traditional criteria like budget and schedule adherence and more by business value delivered and customer satisfaction [11].

2. Related Work

The literature on agile project management is extensive, but studies from developing economies remain relatively scarce. Understanding the global context helps frame the Nigerian experience.

2.1 Foundations and Global Trends

The foundational Agile Manifesto articulated four values and twelve principles that have guided the movement since 2001 [3]. Seminal work by Highsmith positioned agile as a response to the limitations of waterfall methods in rapidly changing environments [4]. Dybå and Dingsøyr conducted a systematic review of empirical studies on agile software development, concluding that agile practices generally improve customer satisfaction and reduce defects, but that context strongly influences outcomes [2]. The State of Agile reports produced annually by VersionOne (now Digital.ai) document global adoption trends, noting that in 2021, 86 percent of software development teams reported using agile methods, a substantial increase from previous years [10]. Scrum is consistently identified as the most widely used framework, followed by Kanban and Scrumban.

Recent scholarship has sought to refine the definition of agile project management itself. Dong and colleagues conducted a systematic literature review and developed a new definition that emphasizes the integration of iterative development, cross-functional collaboration, and adaptive planning as core elements [12]. This definitional clarity is important for distinguishing agile from other project management approaches. Behrens and co-authors similarly examined how agile project management is conceptualized in the literature, noting a broad spectrum of interpretations and practices that sometimes diverge from the original manifesto principles [13]. Koch and colleagues provided a preliminary meta-analysis of the affective, behavioural, and cognitive outcomes of agile project management, finding that agile practices generally lead to positive team-level outcomes, though the effects vary across contexts [14].

2.2 Organizational and Cultural Factors in Agile Adoption

The successful adoption of agile methodologies depends significantly on organizational culture, leadership support, and team dynamics. Studies have shown that agile transformations often fail when organizations attempt to implement practices without addressing underlying cultural barriers [5]. Organizational resistance to change, inadequate training, and misalignment between agile principles and existing governance structures are frequently cited as impediments to effective adoption [6]. Conversely, organizations that foster a culture of psychological safety, cross-functional collaboration, and continuous learning tend to realize greater benefits from agile implementation [7]. The role of leadership in championing agile values and providing resources for training and coaching has been identified as a critical success factor [8].

Marnada and colleagues conducted a systematic literature review on agile project management challenges in handling scope and change, highlighting the tension between the need for flexibility and the organizational requirement for predictability [15]. This tension is particularly pronounced in environments where governance structures are not designed to accommodate iterative development. Ciric Lalic and co-authors compared traditional and agile project management approaches, concluding that agile methods tend to yield higher success rates in projects characterized by high uncertainty and evolving customer requirements [16]. Kuster and colleagues provided a comprehensive project management handbook that situates agile within the broader landscape of traditional and hybrid approaches, offering guidance for practitioners navigating the transition between methodologies [17].

2.3 Agile Adoption in Developing Economies

Research on agile adoption in developing economies has grown in recent years, revealing distinct patterns and challenges. Cost constraints, limited access to training, and insufficient team support are commonly reported barriers [7]. However, the flexibility and adaptability of agile methods make them particularly suitable for contexts where project requirements evolve rapidly and resources are constrained [11]. Studies from various emerging markets have documented successful agile implementations despite infrastructure limitations, suggesting that the core principles of agile collaboration, responsiveness, and iterative delivery are transferable across diverse settings [18]. Adewale and Fagbohun [19] found that agile adoption in emerging economy fintech organizations was associated with improved team performance and faster delivery cycles, though they noted the importance of contextual adaptation. The literature also highlights the importance of tailoring agile practices to local organizational contexts rather than importing frameworks unchanged from Western environments [1].

Value chain considerations have also been integrated into discussions of business model design in emerging economies, with some researchers exploring how agile practices can be leveraged to enhance value delivery across organizational boundaries [20]. This perspective underscores the importance of viewing agile not merely as a project management technique but as a strategic capability that can influence how organizations create and deliver value. Gölgeci and colleagues discussed the reimagining of global value chains in the face of extreme events and contexts, highlighting the relevance of adaptive and resilient approaches that align with agile principles [21].

2.4 Agile in the Nigerian Context

In the Nigerian context, Mary and Nkiru surveyed software practitioners and found that 38 percent used Scrum, with cost constraints and insufficient team support cited as the main barriers [7]. However,

their study did not measure the overall adoption rate. Akinsola and colleagues reported that agile adoption in Nigerian IT projects has seen a significant rise in recent years, driven by changing customer needs [1]. Iroh and Nwala noted that agile training and certification programs are helping to build skills, but that organizational resistance to change remains a hurdle [8]. Akinwale and Olaoye [5] examined the challenges of agile adoption in Nigerian software firms, identifying infrastructure limitations, skill gaps, and management resistance as primary barriers. Oladimeji and Adebayo [6] found that organizational culture and existing project governance structures significantly influence the success of agile implementation in Nigerian IT projects. Ogunbanwo and Oluwagbemi [11] investigated the relationship between organizational culture and agile adoption, concluding that collaborative organizational cultures facilitate more effective agile implementation. Anya and Ugwu [18] developed a context-specific framework for measuring agile project success in Nigerian software development environments. More recently, a conference proceeding by Omoruyi and co-workers provided the data on which the present analysis is based, including the 79.2 percent adoption figure and the prominence of Scrum [9]. Our paper builds on that conference work by providing a fuller analysis, more detailed tables and figures, and a deeper discussion of implications for practice.

Recent studies have also explored the intersection of agile project management with data-intensive business contexts. Morthala discussed the orchestration of large-scale data integration in strategic information platforms, drawing attention to the growing importance of agility in managing complex data environments [22]. This perspective is increasingly relevant as Nigerian IT projects become more data-centric. Similarly, Patel examined innovative methodologies for optimizing medical information retrieval, emphasizing the need for precision and efficiency that can be supported by agile practices [23]. These studies illustrate the broadening application of agile beyond traditional software development.

2.5 Measuring Agile Project Success

The measurement of project success in agile environments has received considerable scholarly attention, with researchers noting a shift away from traditional triple-constraint metrics (cost, time, scope) toward value-oriented criteria [2]. Business value delivered, customer satisfaction, and stakeholder engagement have emerged as primary success indicators in agile projects [4]. This evolution reflects the fundamental agile principle that delivering working software that meets customer needs is more important than adhering to predetermined plans. Studies have demonstrated that organizations that adopt value-based success metrics tend to achieve better project outcomes and higher levels of customer retention [10]. The challenge of quantifying business value, however, remains an area of ongoing research, with various frameworks proposed for measuring value delivery in iterative development environments [11].

Research by Koch and colleagues provided additional evidence that agile success metrics are shifting toward affective, behavioural, and cognitive outcomes at the team level, suggesting that success extends beyond project deliverables to include team well-being and organizational learning [14]. This broader conceptualization of success aligns with the principles of the Agile Manifesto, which emphasizes individuals and interactions over processes and tools.

2.6 Project Governance and Agile Frameworks

Effective project governance is essential for realizing the benefits of agile methodologies. Research has examined how governance structures must evolve to support agile teams, balancing the need for oversight with the autonomy required for self-organizing teams [5]. Studies on scaled agile frameworks (SAFe, LeSS, and Scrum-at-Scale) have investigated how organizations coordinate multiple agile teams while

maintaining alignment with strategic objectives [6]. The role of the product owner in bridging business and technical domains, the importance of transparent backlog prioritization, and the integration of agile practices with existing project portfolio management processes are among the governance-related themes explored in the literature [8].

Kuster and colleagues emphasized the importance of hybrid approaches that combine agile and traditional governance elements, particularly in organizations with established project management structures [17]. Ciric Lalic and co-authors found that the choice of project management approach traditional, agile, or hybrid has a significant impact on project success, with agile methods proving more effective in dynamic environments [16]. These governance-related considerations are particularly relevant in the Nigerian context, where organizations may have legacy governance structures that are not immediately compatible with agile principles.

3. Methodology

3.1 Research Design and Sampling

The study employed a descriptive cross-sectional survey design. The target population consisted of IT project managers who had worked on at least one IT project in Nigeria within the past three years. A convenience sampling technique was used to select 100 potential respondents from professional networks, industry associations (e.g., Nigeria Computer Society), and LinkedIn. As a convenience sample, the findings represent the experiences and perspectives of the surveyed respondents and are not intended to be statistically representative of the entire Nigerian IT industry. The results should be interpreted as descriptive evidence from this specific sample. Structured questionnaires were administered both online (via Google Forms, $n=62$, 73.8% of returned responses) and in person ($n=22$, 26.2% of returned responses) between July and September 2022. This distribution reflects the accessibility and convenience of the online format for the majority of respondents, while in-person administration was employed for respondents in locations with limited internet connectivity or those who preferred face-to-face interaction.

3.2 Relationship to Prior Conference Work

The dataset analyzed in this manuscript was originally collected as part of the conference proceeding by Omoruyi and co-workers [9]. The present study represents a substantial extension of that earlier work through the following new contributions: (1) a more comprehensive statistical analysis of the survey data, including additional descriptive statistics and cross-tabulations; (2) newly developed tables presenting the complete distribution of agile tools and success measures that were not included in the conference proceeding; (3) a more extensive discussion of the practical and theoretical implications of the findings; (4) a detailed limitations section addressing methodological considerations; and (5) a revised theoretical framework that situates the findings within the broader literature on agile adoption in developing economies. All data collection procedures, including questionnaire design, sampling, and administration, were conducted as described in the conference paper and are reported here to provide a complete methodological account. The analysis presented in this journal version has been independently conducted and extends beyond the descriptive statistics reported in the conference proceeding. The dataset ownership and intellectual property rights remain with the original research team, and all co-authors have consented to this extended analysis and publication. The tables and figures presented in this manuscript are new and distinct from those appearing in the conference paper.

3.3 Instrument and Data Collection

The questionnaire contained four sections. The first section collected demographic information: years of experience, firm size, and industry sector. The second section asked about agile adoption: whether the organization uses agile methods, how long it has been doing so, and which specific agile frameworks are used. The third section asked about agile practices and tools, using multiple-response questions with a checklist of common items drawn from the literature. The fourth section asked about reasons for adopting agile and how project success is measured.

The questionnaire items were developed based on a review of the agile project management literature, particularly drawing from established survey instruments used in prior adoption studies [2, 7, 10]. The content validity of the instrument was ensured by mapping each question to one or more of the study's research objectives: (1) measuring agile adoption rates; (2) identifying specific agile methodologies, practices, and tools used; (3) understanding the reasons for agile adoption; and (4) examining how project success is measured in agile environments.

All questions were pilot-tested with five project managers not included in the final sample. The pilot-testing procedure involved: (a) having each participant complete the questionnaire independently; (b) conducting cognitive interviews to assess comprehension of each question; (c) gathering feedback on the clarity, relevance, and appropriateness of items; and (d) evaluating the average completion time. Based on pilot-test feedback, the wording of three questions was adjusted for clarity, the response options for the practices checklist were expanded to include two additional items, and the demographic questions were refined to provide more precise categories. The final instrument was reviewed for face validity by two independent researchers with expertise in survey methodology and agile project management. Given the descriptive nature of the study and the use of established items from prior research, additional psychometric testing (e.g., Cronbach's alpha for scale reliability) was not applicable, as the questionnaire primarily consisted of single-item measures and categorical response options rather than multi-item scales.

3.4 Ethical Considerations

Participation was voluntary, and all responses were anonymized. Informed consent was obtained before the questionnaire was administered. No personally identifiable information was collected. The research was conducted in accordance with ethical guidelines for survey research.

3.5 Data Analysis

For multiple-response questions (Tables 4, 5, and 6), the denominator for percentage calculations is the total number of agile adopters ($n = 61$), not the total number of responses across all categories. This approach is consistent with standard practice for multiple-response survey items, where percentages indicate the proportion of respondents who selected each option. Since respondents could select multiple options, the percentages across rows do not sum to 100%.

Responses were entered into SPSS version 26. Descriptive statistics (frequencies, percentages, means) were used to summarize the data. Open-ended responses were coded into categories. Missing data were minimal (less than 2 percent) and were handled by listwise deletion.

4. Results

4.1 Respondent Characteristics

Out of 100 questionnaires distributed, 84 were returned (84 percent response rate). After screening, 77 were fully completed and used for analysis. The 77 fully completed responses form the basis for all reported percentages and frequencies in this study. Of these 77 respondents, 61 (79.2%) reported that their organizations use agile project management methodologies, while 16 (20.8%) reported that they do not currently use agile methods. The percentages reported throughout this section are calculated with the total sample of 77 as the denominator unless otherwise specified. Table 1 shows the work experience of respondents. The majority (51.9 percent) had between 1 and 5 years of experience, while 24.7 percent had 6–10 years, and 11.7 percent had more than 10 years. Only 11.7 percent had less than one year of experience. This indicates that the sample was experienced enough to provide reliable information about agile practices.

Table 1: Work experience of respondents

Years of experience	Frequency	Percent
Less than 1 year	9	11.7
1–5 years	40	51.9
6–10 years	19	24.7
More than 10 years	9	11.7

Firm size distribution is shown in Table 2. 40.3 percent of respondents worked in organizations with fewer than 50 employees, while 33.8 percent worked in firms with more than 500 employees. The remainder worked in medium-sized firms (50–200 employees: 18.2 percent; 201–500 employees: 7.8 percent). This mix suggests that agile adoption is not limited to small startups; large enterprises are also embracing it.

Table 2: Firm size distribution

Number of employees	Frequency	Percent
< 50	31	40.3
50–200	14	18.2
201–500	6	7.8
> 500	26	33.8

4.2 Agile Adoption Rate

Figure 1 shows that 79.2 percent of respondents reported that their organizations use agile project management methodologies. This is a substantial majority and indicates that agile has moved beyond niche adoption in Nigeria. Moreover, of the 16 respondents who were not yet using agile, 81.2 percent said they planned to adopt it in the future.

The adoption rate of 79.2% is calculated as 61 adopters divided by the total of 77 valid responses ($61/77 = 0.792$). Of the 16 non-adopters, 13 respondents (81.2% of non-adopters, representing 16.9% of the total sample) indicated they planned to adopt agile in the future, while 3 respondents (18.8% of non-adopters, 3.9% of total sample) reported no current plans for future agile adoption.

The adoption calculation is derived from the full sample of 77 respondents. Specifically, the 61 adopters represent 79.2% of the total sample ($61/77 = 0.79216$, rounded to 79.2%). The 16 non-adopters represent 20.8% of the total sample ($16/77 = 0.20779$, rounded to 20.8%). All subsequent analyses involving the agile adopters (e.g., methodology preferences, practices, tools, reasons for adoption, and success measures) are based on responses from these 61 adopters, with the exception of Table 1 (work experience) and Table 2 (firm size), which describe characteristics of the full 77-respondent sample.

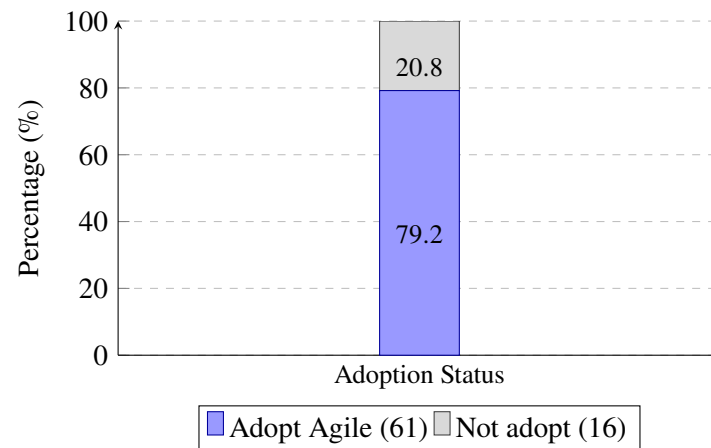


Figure 1: Agile adoption rate among surveyed Nigerian IT organizations. Of the 77 valid responses, 61 respondents (79.2%) reported using agile methodologies; 16 respondents (20.8%) reported not using agile methodologies.

Among adopters, the duration of agile use varied. Nearly half (46.7 percent) had been using agile for 1–3 years, while 43.3 percent had used it for more than three years. Only 10 percent were in their first year of agile adoption. This suggests that agile is not a passing fad; organizations have sustained it over multiple years.

4.3 Agile Methodologies Used

Table 3 shows the distribution of agile methodologies. Scrum dominates, with 71.1 percent of respondents identifying it as the methodology they follow most closely. Kanban is a distant second at 13.3 percent. Iterative development accounted for 8.3 percent, while Lean Development, Extreme Programming (XP), and Scrum/XP hybrids each accounted for less than 5 percent.

Table 3: Most closely followed agile methodology (among 61 agile adopters)

Methodology	Frequency	Percent
Scrum	43	70.5
Kanban	8	13.1
Iterative development	5	8.2
Lean Development	2	3.3
Xtreme Programming (XP)	1	1.6
Scrum/XP hybrid	1	1.6
Total	60	98.4
No single methodology identified	1	1.6

4.4 Agile Practices and Tools

Respondents were asked to select all agile practices they use. The top five practices were daily standup (13.9 percent of all mentions), sprint/iteration planning (11.8 percent), product road mapping (11.0 percent), sprint/iteration reviews (10.8 percent), and retrospectives (9.7 percent). These are all core Scrum events, which aligns with the dominance of Scrum as a framework.

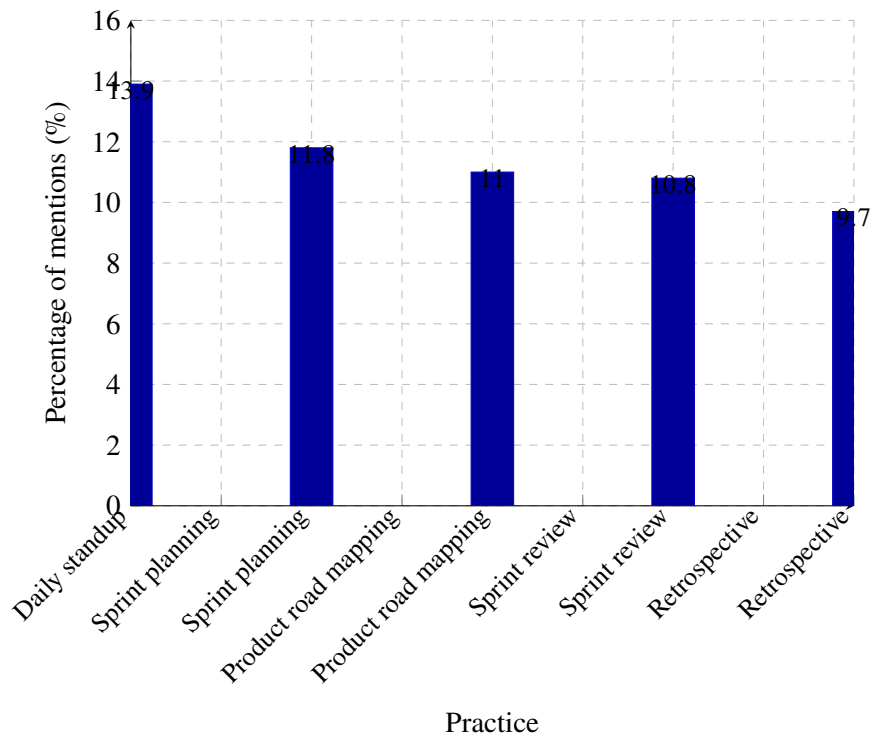


Figure 2: Top five agile practices used by surveyed Nigerian IT organizations (n = 61 agile adopters). Percentages represent the proportion of respondents who reported using each practice.

Regarding agile tools, the most frequently mentioned was an agile project management tool (e.g., Jira, Azure DevOps) at 13.7 percent of mentions, followed by product road mapping tools (11.6 percent) and wireframing tools (10.2 percent). The complete distribution of agile tools mentioned by respondents is presented in Table 4 below. Kanban boards were used less prominently (7.4 percent), which is interesting given the global popularity of Kanban.

4.5 Reasons for Adopting Agile

Table 5 presents the reasons why organizations adopted agile. Accelerating software delivery was the top reason (13.0 percent of all mentions), followed by increasing team productivity (11.9 percent), and enhancing the ability to manage changing priorities (10.8 percent). Reducing project cost was the least cited reason (1.9 percent), suggesting that organizations are not primarily motivated by cost savings but by speed and adaptability.

4.6 Measuring Agile Success

Table 6 shows how organizations measure the success of their agile projects. Business value delivered was the most important metric (11.9 percent of mentions), closely followed by customer/user satisfaction (10.8 percent). Customer retention (9.4 percent) and planned vs. actual release dates (9.0 percent) were also

Table 4: Agile tools used by respondents (multiple responses). Percentages are calculated as the number of mentions of each tool divided by the total number of valid responses (n = 61 agile adopters). Respondents could select multiple tools, so percentages do not sum to 100%.

Tool type	Mentions	Percent
Agile project management tool (e.g., Jira, Azure DevOps)	30	13.7
Product road mapping tools	25	11.6
Wireframing tools	22	10.2
Kanban boards	16	7.4
Collaboration platforms (e.g., Slack, Microsoft Teams)	15	6.9
Version control systems (e.g., Git, GitHub)	14	6.5
Continuous integration tools (e.g., Jenkins, GitLab CI)	12	5.6
Testing automation tools	11	5.1
Burndown/velocity tracking tools	10	4.6
Documentation tools	9	4.2
Other tools	13	6.0

Table 5: Reasons for adopting agile (multiple responses). Percentages are calculated as the number of mentions of each reason divided by the total number of valid responses (n = 61 agile adopters). Respondents could select multiple reasons, so percentages do not sum to 100%.

Reason	Mentions	%
Accelerate software delivery	49	13.0
Increase team productivity	45	11.9
Enhance ability to manage changing priorities	41	10.8
Improve business-IT alignment	35	9.3
Enhance software quality	30	7.9
Improve project visibility	29	7.7
Enhance delivery predictability	28	7.4
Reduce project risk	24	6.3
Better respond to volatile market conditions	20	5.3
Better manage distributed teams	20	5.3
Improve engineering discipline	19	5.0
Increase software maintainability	16	4.2
Improve team morale	14	3.7
Reduce project cost	7	1.9

highly ranked. Traditional metrics such as budget vs. actual cost (6.5 percent) and estimation accuracy (3.6 percent) were less prominent. This shift away from the classic triple constraint (cost, time, scope) toward value-based metrics is a notable finding.

Table 6: Measures of agile project success (multiple responses). Percentages are calculated as the number of mentions of each success measure divided by the total number of valid responses (n = 61 agile adopters). Respondents could select multiple measures, so percentages do not sum to 100%.

Success measure	Mentions	Percent
Business value delivered	33	11.9
Customer/user satisfaction	30	10.8
Customer retention	26	9.4
Planned vs. actual release dates	25	9.0
Product utilization	20	7.2
Budget vs. actual cost	18	6.5
Revenue / sales impact	17	6.1
Burn-up chart	15	5.4
Planned vs. actual stories per iteration	13	4.7
Scope change in a release	13	4.7
Cycle time	12	4.3
Defects over time	12	4.3
Release burndown	12	4.3
Estimation accuracy	10	3.6
Iteration burndown	10	3.6

5. Discussion

The survey results show that agile project management is widely implemented among the surveyed Nigerian organizations and has been so for several years. The 79.2% adoption rate observed in this sample is roughly on par with global figures reported by VersionOne (86%). While this suggests that the surveyed organizations have kept pace with international trends, the convenience sampling method used in this study limits the generalizability of these findings to the entire Nigerian IT industry. The results should therefore be interpreted as descriptive findings from the 77 surveyed project managers rather than as representative estimates of the broader Nigerian IT sector.

The descriptive cross-sectional design of this study precludes causal interpretations of the relationships between agile adoption and project outcomes. The reported associations between agile practices and perceived success measures reflect the perceptions and reported experiences of the surveyed respondents rather than independently verified causal effects.

The dominance of Scrum is unsurprising. Scrum provides a clear set of roles (product owner, scrum master, development team), events (sprint planning, daily stand-up, sprint review, retrospective), and artifacts (product backlog, sprint backlog, increment) that are easy to adopt incrementally [3]. Kanban, while present, was used by only 13.3 percent of adopters. This may reflect a preference for the structured time-boxing of Scrum over the flow-based approach of Kanban, though hybrid approaches are also possible [10].

Daily stand-ups and sprint planning are the most widely used practices, which is consistent with the literature [2]. What is less common in prior studies is the high ranking of product road mapping and wireframes. These are not part of the core Scrum guide, but they appear to be important for Nigerian teams to align development with business strategy and to communicate with stakeholders. This may

suggest that local adaptations of agile are occurring, though further qualitative research would be needed to confirm this interpretation.

The reasons for adopting agile match the global discourse: speed, productivity, and adaptability. Notably, cost reduction was a low priority. This aligns with the agile philosophy that value creation, not cost minimization, is the primary goal [4]. The survey results indicate that the project managers in this sample prioritize value creation over cost minimization when describing their reasons for adopting agile. This is consistent with, though not direct evidence of, an understanding of the agile philosophy that value creation, not cost minimization, is a primary goal [4].

The shift from traditional success metrics (cost, schedule) to value-based metrics (business value delivered, customer satisfaction) is among the notable findings of this study. In many organizations, agile is superficially adopted while measurement remains rooted in waterfall thinking [2]. The respondents in this survey reported greater emphasis on value-based metrics than on traditional cost and schedule metrics. This reported emphasis on business value and customer satisfaction may indicate a commitment to agile principles, although the survey design does not permit independent verification of actual measurement practices or outcomes. Future research could explore whether this reported emphasis corresponds to observable changes in project governance and decision-making.

A limitation of the study is the convenience sampling method. The sample of 77 respondents, while providing valuable descriptive insights, cannot be assumed to be representative of the entire Nigerian IT industry. The respondents were predominantly from Lagos, Abuja, and Port Harcourt, which are major tech hubs. Organizations in smaller cities, rural areas, and regions with different economic and infrastructure conditions may exhibit different adoption patterns, practices, and perceptions. Consequently, the findings should be interpreted as descriptive evidence from the surveyed respondents rather than as population estimates. Furthermore, the reliance on self-reported data means that we did not independently verify whether organizations truly practice agile or merely report doing so. Future research could combine surveys with case studies or direct observation.

6. Conclusion

This study assessed the adoption of agile project management in IT projects among 77 surveyed Nigerian project managers. The key descriptive findings from this sample are: (1) agile is widely adopted, with 79.2% of surveyed organizations using it; (2) Scrum is the predominant framework, followed by Kanban; (3) daily stand-ups, sprint planning, and product road mapping are the most common practices; (4) the main reported drivers are faster delivery, higher productivity, and adaptability to change; and (5) perceived success is measured primarily by business value and customer satisfaction, rather than by traditional cost or schedule metrics.

For practitioners, these findings from the surveyed organizations indicate that agile adoption is feasible among the sampled Nigerian IT project managers. Organizations that have not yet adopted agile and that share characteristics similar to the surveyed sample may consider starting with Scrum, investing in training, and gradually introducing practices like daily stand-ups and retrospectives. However, the present study measures adoption, reported practices, motivations, and perceived success measures; it does not establish causal relationships between agile adoption and independent measures of project success. Organizations should evaluate their specific context, resources, and constraints when considering agile implementation and should not assume that the reported perceptions of success in this sample will necessarily translate to their own organizational contexts. For researchers, the study highlights the need for more in-depth qualitative work to understand how Nigerian teams adapt agile practices to local conditions and whether

the value-based success metrics are genuinely achievable.

Future work could extend this research by comparing agile adoption across different sectors (finance, telecom, government) within Nigeria, by examining the relationship between agile maturity and project outcomes, and by replicating the survey in other African countries to enable cross-regional comparisons.

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