

**MANAGEMENT INFORMATION SYSTEM FEASIBILITY STUDIES AND THE
PERFORMANCE OF MANUFACTURING COMPANIES IN NIGERIA: A CONCEPTUAL
FRAMEWORK.**

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Abstract

The study examines the conceptual relevance of Management Information System (MIS) feasibility study on the performance of manufacturing companies in Nigeria, focusing on technical, economic, operational, legal, and schedule feasibility. The study adopts a conceptual literature review approach. Relevant literature on Management Information Systems, feasibility assessment, accounting information systems, systems development, and technology acceptance was reviewed and synthesized thematically. General Systems Theory and the Technology Acceptance Model provide the theoretical foundation for the proposed framework. No primary data or statistical analysis was employed. The conceptual synthesis indicates that feasibility study provides an important basis for evaluating the viability of a proposed MIS before implementation. Technical feasibility addresses technological readiness; economic feasibility considers resource requirements and anticipated value; operational feasibility focuses on organizational compatibility and user acceptance; legal feasibility addresses regulatory requirements; while schedule feasibility considers the realism of the implementation timeframe. The dimensions are viewed as complementary considerations that may support performance rather than as statistically ranked determinants. The paper provides a conceptual framework for managers, accountants, and system developers to evaluate proposed MIS projects before committing substantial resources. It also highlights implications for accounting information quality, management control, financial reporting, budgeting, cost monitoring, and operational decision-making. The framework provides a basis for future empirical studies to test the proposed relationships in Nigerian manufacturing organizations.

Keywords: *Feasibility Study, Management Information System, Performance.*

Introduction

Changing circumstances and environments have necessitated the need for the proper dissemination of information at various levels of management. The development and use of information management systems (MIS) is a modern phenomenon concerned with the use of appropriate information that will lead to better planning, better decision-making and better results (Nasir, 2005). The successful implementation of MIS projects requires substantial organizational resources, including financial investment, technological infrastructure, skilled personnel, and management support (Pressman & Maxim, 2019).

Manufacturing firms, in particular, require information systems capable of supporting production planning, inventory control, cost management, budgeting, financial reporting, internal control and managerial decision-making. Management Information Systems (MIS) integrate people, processes, technology and data to provide information that supports planning, coordination, monitoring and control within organizations (Laudon et al., 2025). From an accounting and finance perspective, the value of such systems extends beyond general administrative support because the quality of

information generated by an information system can affect the quality of financial reporting, management control, resource allocation and investment decisions.

The accounting dimension of information systems is particularly important in manufacturing organizations because financial and operational activities generate large volumes of interconnected transactions. Production costs, inventory movements, purchases, sales, payroll, receivables, payables and cash transactions must be captured, processed and transformed into information for both internal and external decision-making. Recent evidence from Nigerian manufacturing firms indicates the relevance of accounting information systems to organizational outcomes. Ighoroje et al. (2025), for example, examined accounting information system quality and employee productivity among manufacturing firms in South-South Nigeria and reported that information quality, data quality, service quality and system quality were positively associated with employee productivity.

The findings suggest that the usefulness of information systems in manufacturing cannot be separated from the quality and suitability of the systems adopted by organizations. However, attention to system effectiveness has often focused on the characteristics or outcomes of systems after implementation, while comparatively less conceptual attention has been directed toward the assessment undertaken before an organization commits substantial resources to an MIS project. This pre-implementation assessment is important because information-system projects require decisions concerning technology, financial resources, organizational processes, regulatory requirements and implementation timeframes.

A feasibility study provides a structured basis for examining these conditions before system development or deployment. In systems development, feasibility analysis is concerned with determining whether a proposed system is sufficiently viable to proceed by considering issues such as technical capability, economic justification, operational suitability and implementation constraints (Dennis et al., 2019). In the present study, MIS feasibility study is conceptualized more specifically as a pre-implementation evaluation of whether a proposed information system can be technically implemented, economically justified, operationally accommodated, legally supported and delivered within a realistic timeframe.

The relevance of such assessment becomes clearer when information-system implementation is viewed from a systems perspective. An MIS comprises interdependent technological, human, financial, procedural and organizational components. Consequently, technical suitability alone may not be sufficient to support effective implementation. A system may be technologically capable but financially difficult to sustain, incompatible with established work processes, inconsistent with regulatory requirements or unrealistic in terms of implementation time.

A system that is appropriately designed and implemented can support the timely capture and processing of accounting and operational information, thereby providing a stronger basis for budgeting, cost control, inventory monitoring, financial reporting and managerial decision-making. Conversely, weaknesses in system requirements, implementation arrangements or organizational compatibility may undermine the usefulness of information generated by the system. This does not imply that feasibility assessment automatically produces superior organizational performance; rather, it suggests that the conditions examined during feasibility study may provide an important foundation.

Evidence from other developing-country contexts similarly indicates that information-system implementation can be affected by weaknesses in planning and requirements definition. A qualitative meta-synthesis of information-system project failures in developing countries identified inadequate requirements engineering, inadequate project management and incomplete system features among prominent causal factors associated with project failure (Nyansiro et al., 2021). This evidence supports the importance of careful pre-implementation assessment. The study therefore treats inadequate feasibility study as a conceptual problem requiring investigation rather than as an established fact about Nigerian manufacturers.

Against this background, the central concern of this study is not simply whether MIS is associated with organizational performance. Existing Nigerian studies have already examined relationships between MIS characteristics and outcomes such as productivity, decision-making and financial performance. Rather, the concern is the relatively less explored pre-implementation stage: whether and how systematic feasibility assessment provides a basis for the effective implementation and subsequent functioning of MIS in manufacturing organizations.

The study consequently focuses on five feasibility dimensions—technical, economic, operational, legal and schedule feasibility. These dimensions are treated as complementary areas of assessment rather than as an exhaustive classification of all possible feasibility considerations. Organizational readiness and strategic alignment are recognized as cross-cutting conditions, with user preparedness, process compatibility and organizational capability addressed primarily through operational feasibility.

Importantly, the present study adopts a conceptual research design. It therefore does not estimate the statistical effect of feasibility study on firm performance, establish causal relationships or rank the relative contribution of the five dimensions. Instead, it synthesizes theoretical and empirical literature to develop a conceptual explanation of how feasibility study affect the performance of manufacturing companies in Nigeria.

Literature review

Theoretical framework

General Systems Theory

General Systems Theory (GST), developed by von Bertalanffy (1968), provides an overarching framework for understanding organizations as systems composed of interconnected and interdependent elements. The theory emphasizes that the behaviour and effectiveness of a system cannot be adequately understood by examining its components in isolation because changes in one component may affect the functioning of other components. Organizations can therefore be viewed as open systems in which people, processes, technologies, resources and structures interact continuously with one another and with the external environment (Bertalanffy, 1968).

This systems perspective is particularly relevant to Management Information Systems because an MIS is not simply a technological artefact. It represents an organizational system in which hardware, software, databases, networks, users, procedures, managerial processes and organizational resources interact to produce information for planning, coordination, control and decision-making. Consequently, the viability of an MIS cannot be adequately determined by considering the technical characteristics of the proposed system alone. Its feasibility depends on whether the different conditions required for the system to function can operate together within the organizational environment.

In this study, GST provides the integrating logic through which the five feasibility dimensions are connected. Technical feasibility addresses whether the required technological infrastructure, expertise and system capabilities are available and appropriate. Economic feasibility addresses whether the financial resources required for development, implementation and maintenance are justified by the expected organizational value. Operational feasibility considers whether the proposed system is compatible with existing work processes, organizational arrangements and user requirements. Legal feasibility concerns whether the proposed system can operate within applicable laws, regulations, contractual obligations and information-governance requirements. Schedule feasibility addresses whether the system can be developed and implemented within a timeframe that is realistic in relation to organizational requirements and available implementation capacity.

The relevance of GST is therefore not that it predicts that each feasibility dimension will independently produce a particular level of MIS performance. Rather, the theory provides a basis for understanding why feasibility dimensions should be examined as interconnected conditions of system viability. A technically suitable system, for example, may still face implementation difficulties

if the organization cannot finance it, accommodate it operationally, comply with relevant legal requirements or implement it within a realistic timeframe. Similarly, economic viability alone does not establish that an MIS will be technically workable or acceptable to its users. The systems perspective consequently supports the proposition that MIS feasibility should be evaluated across complementary dimensions rather than through a single feasibility criterion.

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), developed by Davis (1989), provides a more specific explanation of the behavioural mechanism through which the characteristics of an information system may affect users' willingness to accept and use it. TAM proposes that perceived usefulness and perceived ease of use are central beliefs underlying users' acceptance of information technology. Perceived usefulness refers to the extent to which an individual believes that using a particular system will enhance job performance, while perceived ease of use concerns the extent to which the individual believes that using the system will require relatively little effort (Davis, 1989). Davis's original work established these constructs as important explanatory elements in understanding information technology acceptance.

TAM is particularly relevant to the operational dimension of MIS feasibility. An MIS may be technically functional and economically affordable but still encounter difficulties if its intended users perceive it as difficult to use, unsuitable for their tasks or incapable of providing meaningful benefits. Operational feasibility therefore provides the point of connection between the proposed system and the users who must incorporate it into their daily activities. Where feasibility assessment considers user requirements, workflow compatibility, usability, training needs and expected work benefits, it can conceptually create conditions under which users may perceive the proposed system as useful and relatively easy to use.

TAM, however, is not used in this study to explain all five feasibility dimensions. In particular, perceived usefulness and perceived ease of use do not provide a direct theoretical explanation for whether an MIS complies with legislation, can be financed, or can be completed within an appropriate implementation period. Extending TAM to make it explain legal, economic and schedule feasibility without an established theoretical pathway would therefore weaken the theoretical framework. Instead, those dimensions are situated within the broader systems perspective provided by GST, while TAM is used to illuminate the user-acceptance component that is most directly connected to operational feasibility.

GST and TAM consequently perform different but complementary functions in the theoretical framework. GST provides the macro-level systems explanation, emphasizing the interdependence of technology, resources, organizational processes, users, regulations and implementation conditions. TAM provides the micro-level behavioural explanation, focusing specifically on how users' perceptions of usefulness and ease of use can influence acceptance and utilization of an information system.

The two theories can therefore be integrated without treating them as competing explanations. GST explains why the feasibility of an MIS must be assessed as a multidimensional and interconnected organizational issue, while TAM explains one important mechanism through which the operational and user-related characteristics identified during feasibility assessment may be reflected in system acceptance and use. In this sense, TAM operates within the broader systems logic of GST rather than serving as an explanation for every feasibility dimension.

Conceptual review

Management Information System

Management Information System (MIS) refers to an organized and integrated system made up of people, procedures, data and technology that is designed to collect, process, store, and disseminate information for organizational decision-making (Turban et al., 2021). O'Brien and Marakas (2011)

defined MIS as an organized combination of people, hardware, software, communication networks, and data resources that collects, transforms, and disseminates information in an organization. This definition emphasizes that MIS is not limited to computer systems alone; rather, it encompasses both human and technological components that work together to support managerial activities.

Feasibility Study

A feasibility study is an assessment of the practicality of a proposed plan or project. It analyzes the viability of a project to determine whether it is likely to succeed. Feasibility study is designed to identify potential issues and problems that could arise while pursuing the project, often examining factors such as costs, resources, market demand, and risks before major investments are made.

A feasibility study is a systematic assessment undertaken during the initiation and planning stages of a proposed system to determine whether the project is sufficiently viable to proceed. In the context of information systems development, feasibility analysis involves examining the risks, resources, costs, organizational conditions and technical requirements associated with a proposed system before substantial development and implementation commitments are made. Dennis et al., (2019) explain that feasibility study forms part of information systems project initiation and is used to assess the risks associated with a proposed system, particularly its technical, economic and organizational feasibility. Similarly, Kendall and Kendall (2019) regard feasibility assessment as an important stage in systems analysis through which the technical, economic and operational viability of a proposed system is examined before further development is undertaken.

A feasibility study is a systematic investigation conducted before project implementation to determine whether a proposed project is technically feasible, economically viable, operationally practical, legally compliant, and achievable within the specified timeframe (Gido et al., 2018). Through feasibility studies, organizations can identify potential risks, estimate costs and benefits, evaluate resource requirements, and determine project suitability before committing scarce organizational resources (Kerzner, 2022).

This study conceptualizes MIS feasibility study as a pre-implementation evaluation of the practical viability of a proposed Management Information System, involving the systematic examination of the conditions that may support or constrain its development, implementation and subsequent use. The assessment is not presented as a guarantee that an MIS will perform successfully; rather, it provides an informed basis for identifying risks, resource requirements, constraints and implementation conditions before the organization commits substantial resources to the system.

Components of Feasibility Studies

Feasibility studies in Management Information Systems (MIS) comprise a series of systematic assessments undertaken during the planning stage of information systems development to determine whether a proposed system is capable of achieving the intended organizational objectives within existing technological, financial, operational, legal, and temporal constraints. They provide a structured framework for evaluating the practicality of an information systems project before substantial organizational resources are committed (Laudon et al., 2025). Consequently, feasibility studies have become an indispensable component of systems analysis and design because they enable organizations to minimize implementation risks, optimize resource allocation, and improve the probability of successful system deployment (Dennis, et al, 2021).

Within the systems development life cycle (SDLC), feasibility studies are undertaken immediately after the preliminary investigation and before the system design phase. The outcome of the feasibility analysis determines whether the project should proceed, be redesigned, postponed, or abandoned. Rather than focusing on a single aspect of project viability, feasibility studies integrate multiple components that collectively evaluate the readiness of an organization to implement a proposed Management Information System (Kendall & Kendall, 2019).

Technical Feasibility

The technical component evaluates the technological capability of an organization to develop, acquire, implement, and sustain a proposed Management Information System. This assessment extends beyond the availability of hardware and software to include network infrastructure, database management systems, cybersecurity architecture, cloud computing capability, systems integration, and the availability of technical expertise required throughout the system life cycle (Dennis et al., 2021).

The objective of technical assessment is to determine whether the proposed system can be supported by the organization's existing technological environment or whether significant investments in infrastructure and technical capacity will be required. It also examines issues relating to system compatibility, interoperability, reliability, scalability, flexibility, and future technological expansion. According to Laudon et al., (2025).

In the context of Management Information Systems, technical capability directly influences system quality, processing efficiency, information reliability, system availability, and cybersecurity performance. Consequently, inadequate technical assessment may result in poor system performance, security vulnerabilities, integration failures, and ultimately reduced organizational confidence in the information system.

Economic Feasibility

The economic component examines the financial implications of implementing a proposed Management Information System. It evaluates whether the expected organizational benefits outweigh the costs associated with system acquisition, development, implementation, operation, maintenance, training, and future upgrades (Baltzan & Phillips, 2022).

Economic evaluation is based on the principle that organizational investments should generate measurable value. Accordingly, this component requires the identification of both tangible and intangible costs and benefits. Tangible benefits include reduced operating costs, increased productivity, improved processing speed, reduced paperwork, and enhanced profitability, while intangible benefits include improved decision quality, better customer satisfaction, enhanced organizational image, and increased managerial effectiveness (O'Brien & Marakas, 2011).

Several financial evaluation techniques including cost-benefit analysis, return on investment, net present value, internal rate of return, and payback period are commonly employed to assess the financial viability of MIS projects (Baltzan & Phillips, 2022). A favourable economic assessment provides management with evidence that the proposed system represents an efficient allocation of organizational resources and is capable of delivering sustainable economic value.

Legal Feasibility

The legal component evaluates whether the proposed Management Information System complies with all applicable legal, regulatory, contractual, and ethical requirements governing organizational information management. As organizations increasingly rely on digital technologies for information processing and service delivery, compliance with legal requirements has become an important determinant of information system sustainability (Laudon et al., 2025).

Failure to conduct adequate legal assessment may expose organizations to litigation, financial penalties, reputational damage, and operational disruption. Consequently, legal feasibility contributes significantly to organizational trust, regulatory compliance, and long-term information system sustainability.

Operational Feasibility

The operational component focuses on the extent to which the proposed Management Information System is compatible with existing organizational processes, operational procedures, and user requirements. Unlike the technical component, which evaluates technological readiness, operational

assessment emphasizes organizational functionality and human interaction with the proposed system (Kendall & Kendall, 2019). The implementation of an information system requires systematic analysis of organisational needs, existing processes and user requirements before the system is designed and deployed. A structured systems analysis and design approach enables organisations to determine whether a proposed system is appropriate for their operational requirements and capable of addressing identified information needs (Dennis et al., 2021).

Operational feasibility determines whether employees possess the skills necessary to use the system effectively, whether organizational procedures require modification, whether management supports the project, and whether users are willing to adopt the new technology. It also evaluates whether the proposed system adequately addresses the operational problems it was designed to solve.

Operational assessment therefore serves as a mechanism for reducing resistance to change while ensuring that the Management Information System aligns with organizational workflows, business processes, and managerial information requirements.

Schedule Feasibility

The schedule component examines whether the proposed Management Information System can be completed within the required implementation period using available organizational resources. Time represents one of the most critical constraints in information systems development because project delays frequently result in increased costs, technological obsolescence, loss of management support, and reduced user confidence (Dennis et al., 2021).

Schedule assessment requires detailed estimation of project duration, implementation milestones, staffing requirements, procurement activities, testing schedules, user training, and deployment timelines. It also identifies factors likely to delay implementation, including resource shortages, technological complexity, procurement bottlenecks, vendor dependency, policy approvals, and organizational resistance.

A realistic implementation schedule enables organizations to coordinate project activities effectively, manage stakeholder expectations, and ensure timely realization of project benefits. Conversely, unrealistic implementation schedules often contribute to project failure through budget overruns, incomplete system testing, inadequate user training, and implementation fatigue.

Synthesis of the feasibility components

The selection of technical, economic, operational, legal, and schedule feasibility in this study is based on their recurring relevance to the assessment of information system implementation decisions in the reviewed literature. Rather than treating these five dimensions as an exhaustive taxonomy of feasibility, the study considers them as core and analytically distinguishable areas through which the viability of a proposed Management Information System can be assessed. Technical feasibility addresses whether the organisation possesses, or can reasonably obtain, the technological infrastructure, expertise, and capabilities required for the proposed system. Economic feasibility considers the financial implications of the system, including implementation costs, resource requirements, and the anticipated value of the investment. Operational feasibility focuses on the compatibility of the proposed system with existing processes, work practices, users, and organisational arrangements. Legal feasibility addresses conformity with applicable laws, regulations, contractual obligations, and information-governance requirements, while schedule feasibility considers the realism of the proposed implementation timeframe and the organisation's capacity to deliver the project within that

The five dimensions were consequently selected to provide a parsimonious framework covering the major practical questions that arise when an organisation evaluates an MIS proposal: Can it be implemented technically? Can it be justified economically? Can the organisation operate and accept it? Can it be implemented within applicable legal requirements? And can it realistically be delivered within the proposed timeframe? This framework does not imply that other feasibility considerations

are unimportant. Strategic alignment, organisational readiness, managerial support, and related considerations may also influence MIS implementation and are recognised as contextual factors within the relevant dimensions.

Accordingly, the study treats the five dimensions as a conceptual framework for organising the literature, rather than as an empirically proven or universally complete classification of MIS feasibility. Their selection reflects their analytical distinctiveness and practical relevance to MIS feasibility study while recognising that the boundaries between feasibility dimensions may overlap depending on the organisational and technological context.

Empirical review

Nwekwo (2023) investigated the implementation of computer-based management information systems in Nigerian manufacturing organisations. The study adopted a survey design and purposive sampling technique, using questionnaires and oral interviews for data collection. The study found that the implementation of computer-based MIS was significant and further established that management capacity to support and sustain MIS implementation and resistance to newer or improved systems were significant challenges.

Nworie and Oguejiofor (2023) investigated the effect of management information systems on the performance of cement-producing firms in Southeast Nigeria. The study examined transaction processing systems, decision support systems and executive support systems using a descriptive survey design. From a population of 143 relevant staff in four cement companies, 141 respondents were selected, and Pearson Product Moment Correlation was used to test the relationships between the variables. The findings indicated that transaction processing systems, decision support systems and executive support systems had significant positive effects on firm performance.

Lawal and Afolayan (2023) examined management information systems and organisational performance in the Nigerian service industry. Using a survey design, the researchers obtained data from 50 participants and applied Pearson Product Moment Correlation to test the hypotheses. The findings indicated significant relationships between MIS and employee performance and analytical capabilities.

Nwiyii et al., (2022) examined the relationship between management information systems and organisational performance among selected production companies in South-South Nigeria. The researchers adopted an explanatory cross-sectional survey design and studied 180 managers drawn from 36 production companies. Data obtained from 167 valid responses were analysed using Spearman Rank Order Correlation and the t-test. The findings revealed significant positive relationships between MIS and market expansion, product innovation and customer satisfaction. The study concluded that management information systems contribute to organisational performance through improved innovation, customer satisfaction and market expansion.

Eze et al., (2021) examined the relationship between management information systems and firm performance in the Nigerian manufacturing sector. The study focused on decision support systems and executive information systems and adopted a survey research design involving employees of selected manufacturing firms at Agbara Industrial Estate, Ogun State. The findings showed that both decision support systems and executive information systems had significant positive effects on manufacturing firms' performance.

Summary of empirical literature and research gap

The empirical literature provides evidence that information systems are relevant to organisational and manufacturing performance, but the existing evidence does not directly resolve the question of how feasibility studies relates to organizational performance. For example, Nworie and Oguejiofor (2023) examined the relationship between MIS and the performance of cement-producing firms in Southeast Nigeria. Their study considered transaction processing systems, decision support systems, and executive support systems and reported positive relationships between these MIS components

and firm performance. The study therefore provides Nigerian manufacturing evidence on the performance implications of MIS, but its focus was on the functionality and use of MIS rather than on the feasibility assessment undertaken before an MIS project is adopted or implemented.

The closest literature therefore reveals an important distinction. Existing Nigerian studies have largely examined the characteristics, quality, utilisation, or effectiveness of information systems and their association with organisational outcomes, whereas comparatively less attention has been directed toward the pre-implementation feasibility assessment through which an organisation determines whether a proposed MIS is technically, economically, operationally, legally, and temporally suitable. In particular, the reviewed studies do not provide a sufficiently integrated examination of these five feasibility considerations within a single conceptual framework for understanding MIS feasibility study and the performance of manufacturing companies in Nigerian. This study addresses this conceptual gap by synthesising the literature on MIS feasibility and organisational performance and examining the proposed relationship between five feasibility dimensions, technical, economic, operational, legal, and schedule feasibility. Given the conceptual nature of the study, the objective is not to estimate the statistical effect or relative contribution of these dimensions, but to develop an evidence-informed conceptual explanation of how feasibility studies affect performance in the context of Nigerian manufacturing organisations.

Methodology

This study adopted a conceptual literature review approach to examine the relationship between Management Information System (MIS) feasibility studies and the performance of manufacturing companies in Nigeria. The study synthesises existing theoretical and empirical literature to develop an evidence-informed understanding of how feasibility study may relate to organisational performance.

Relevant literature was identified through searches of major academic databases and scholarly search platforms, including Google Scholar, Scopus, Web of Science, ScienceDirect, and ResearchGate, where accessible. The search focused on publications addressing management information systems, feasibility studies, information system implementation, organisational performance, and manufacturing organisations.

The principal search terms and combinations included: "Management Information System," "MIS feasibility study," "information system feasibility," "technical feasibility," "economic feasibility," "operational feasibility," "legal feasibility," "schedule feasibility," The search covered literature published primarily between 2015 and 2025, while earlier seminal works were retained where they provided important theoretical or conceptual foundations for understanding information systems, feasibility assessment, or organisational performance.

The identified literature was screened in stages. First, titles and abstracts were examined to determine their relevance to the study's research focus. Publications that appeared relevant were subsequently assessed based on their objectives, theoretical orientation, methodology, findings, and relevance to MIS feasibility and organisational performance. Duplicate and clearly irrelevant materials were excluded during the screening process.

The final body of literature was therefore selected on the basis of conceptual relevance, methodological credibility, and direct contribution to the subject under investigation, rather than on the basis of statistical significance or the magnitude of reported relationships.

The selected literature was analysed using a thematic narrative synthesis. Rather than aggregating statistical results, the study organised the evidence around major themes emerging from the literature. Particular attention was given to the five commonly discussed dimensions of feasibility studies: technical, economic, operational, legal, and schedule feasibility.

For each dimension, the review considered how the literature conceptualises the dimension, the organisational or implementation issues to which it relates, and the potential mechanisms through

which it may inform organisational performance. The review also considered areas of convergence, differences, and limitations in the existing literature.

The synthesis was interpretive rather than statistical. Similarly, the study does not claim that the five dimensions have an equal or collective measurable effect, nor does it establish that any one dimension is more important than another.

The findings and propositions generated from the review should consequently be regarded as a basis for further empirical investigation. Future studies may test the proposed relationships using survey, longitudinal, case-study, or mixed-method research designs involving manufacturing companies in Nigeria.

Discussion of Findings

The review of the literature suggests that feasibility assessment is an important consideration in the planning and implementation of Management Information Systems (MIS). Across the studies and conceptual arguments examined, feasibility studies are generally presented as a means through which organisations can assess the suitability of a proposed information system before committing substantial financial, technical, and human resources to its implementation. The literature therefore supports a proposed relationship between the quality of feasibility assessment and the quality of decisions made concerning MIS adoption and implementation. However, this relationship should be interpreted as a conceptual inference from the reviewed literature rather than as a statistically established causal effect.

The reviewed literature identifies several dimensions of feasibility that are relevant to MIS planning, including technical, economic, operational, legal, and schedule considerations.

Overall, the reviewed literature provides conceptual support for the proposition that feasibility assessment can assist organisations in making more informed MIS implementation decisions. However, because the present study is based on a narrative conceptual review, it does not estimate causal relationships, test statistical significance, determine the collective effect of the identified feasibility dimensions, or establish their relative importance. The findings should therefore be interpreted as an evidence-informed conceptual synthesis that provides a basis for further empirical investigation rather than as definitive evidence of the effect of feasibility studies on MIS performance.

Conclusion and Suggestions for future research

Conclusion

The review indicates that feasibility studies have considerable conceptual relevance to the planning and implementation of Management Information Systems (MIS). A well-structured feasibility assessment can provide a basis for examining technological readiness, resource availability, anticipated costs and benefits, potential risks, and the compatibility of a proposed system with organizational needs. In this regard, feasibility studies may be viewed as an important component of the MIS planning process because they provide decision-makers with information that can inform decisions concerning system adoption and implementation.

This study proposes that the quality and comprehensiveness of feasibility assessment may influence the quality of decisions surrounding MIS adoption and implementation. The proposition is particularly relevant to organizations seeking to align information systems with their strategic, operational, technological, and financial requirements. Nevertheless, because the study adopts a narrative conceptual review rather than an empirical causal design, it does not establish the magnitude, direction, or statistical significance of the relationship between feasibility studies and MIS effectiveness. It also does not provide sufficient evidence to establish feasibility studies as a definitive or universally applicable critical success factor.

Future empirical studies could therefore examine this conceptual proposition using quantitative or mixed-method approaches to determine whether, and to what extent, specific dimensions of

feasibility assessment are associated with MIS implementation success, user acceptance, operational efficiency, and organizational performance across different organizational settings.

Suggestions for future research

Future studies should move beyond the conceptual arguments presented in this paper by empirically validating the proposed MIS feasibility-performance relationships within Nigerian manufacturing companies. Researchers could also adopt longitudinal approaches to determine whether the performance benefits associated with feasible MIS implementation are sustained over time. Further investigation is recommended into factors that may explain or influence these relationships, particularly employee acceptance, user satisfaction, information quality, management support, organisational culture and firm size. Cross-sectoral studies involving manufacturing and other industries could provide additional insight into whether the proposed relationships are context-specific or applicable across different organisational settings. In addition, future research should consider the growing influence of artificial intelligence, cloud-based systems and Industry 4.0 technologies in redefining the feasibility and performance implications of management information systems.

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