

CSF and IT-BSC Integration in IS/IT Strategic Management: A Conceptual Model from a Systematic Literature Review

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Abstract. In the era of digital transformation, aligning Information Systems and Information Technology (IS/IT) strategies with organizational objectives remains a critical challenge in strategic management. Previous studies have examined Critical Success Factors (CSFs) in Strategic Information Systems Planning (SISP) and the IT Balanced Scorecard (IT-BSC) as a performance measurement framework. However, these approaches are often discussed separately, while their integration within a unified IS/IT strategic management perspective remains limited. This study conducts a Systematic Literature Review (SLR) using the PRISMA approach to examine the roles of CSFs and IT-BSC in IS/IT strategic management. A total of 27 articles published between 2020 and January 2026 were selected from multiple academic databases. The findings show that CSFs primarily support the identification and prioritization of IS/IT strategic initiatives through the SISP process, while IT-BSC is widely used to measure performance, assess alignment, and support structured strategic improvement. The review further indicates that CSFs and IT-BSC should be understood as complementary components. Based on the literature synthesis, this study proposes a conceptual CSF and IT-BSC integration model that links strategic objectives, CSFs, IS/IT needs, IT-BSC perspectives, and performance evaluation. The proposed model is literature derived and has not yet been empirically validated. Therefore, it should be understood as a conceptual basis for future empirical testing and further development in IS/IT strategic management.

Keywords: Systematic Literature Review (SLR), PRISMA, Critical Success Factors (CSF), IT Balanced Scorecard (IT-BSC), Performance Measurement.

1. INTRODUCTION

The alignment of Information Systems and Information Technology (IS/IT) strategies with business objectives remains a critical issue in contemporary organizations. As digital technologies increasingly shape organizational operations and decision-making, ensuring coherence between business strategy and IS/IT initiatives has become essential [1], [2]. Strategic alignment is widely recognized as a major organizational challenge and requires continuous adaptation between business needs and technological capabilities [3], [4], [5].

Strategic Information Systems Planning (SISP) plays an important role in facilitating such alignment by linking strategic, managerial, and operational considerations in IS/IT planning [6]. Within this context, Critical Success Factors (CSFs) are used to identify strategic priorities, align resources, and guide managerial decision-making [4]. Complementing this, the Information Technology Balanced Scorecard (IT-BSC) is applied to evaluate IT performance and business alignment through four perspectives: corporate contribution, user orientation, operational excellence, and future orientation [7]. Structured indicators are also important for assessing the effectiveness of IT contributions within organizations [8].

Despite extensive discussions of SISP, CSFs, and IT-BSC, the literature still tends to treat CSF-based strategic formulation and IT-BSC-based performance evaluation as separate streams. Limited attention has been given to how strategic priorities identified through CSFs can be systematically connected to performance measurement using the IT-BSC within a unified IS/IT strategic management cycle [1], [2], [9]. Therefore, this study aims to examine the role of CSFs in supporting IS/IT strategic priorities within SISP and the role of IT-BSC in measuring and enhancing IS/IT strategic performance. The novelty of this study lies in proposing a literature derived conceptual model that integrates CSFs as strategic formulation drivers and IT-BSC as a performance evaluation mechanism. This study contributes by providing a conceptual basis for linking strategic objectives, CSFs, IS/IT needs, IT-BSC perspectives, and performance evaluation in IS/IT strategic management. Based on this objective, the study addresses the following research questions:

- 1) RQ 1: How are Critical Success Factors (CSFs) applied in Strategic Information Systems Planning (SISP) to support IS/IT business alignment?

- 2) RQ 2: How is the IT Balanced Scorecard (IT-BSC) used to measure and enhance IS/IT strategic performance?

2. METHODS

This study adopts the Systematic Literature Review (SLR) methodology, following the guidelines established by the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) framework. The purpose of this review is to systematically identify, evaluate, and synthesize existing research concerning the application of Critical Success Factors (CSFs) in Strategic Information Systems Planning (SISP) and the use of the Information Technology Balanced Scorecard (IT-BSC) in measuring IS/IT strategic performance. The SLR approach was selected because it provides a structured and transparent process for study selection, data extraction, and synthesis, enabling the identification of research patterns, gaps, and relationships relevant to the research questions.

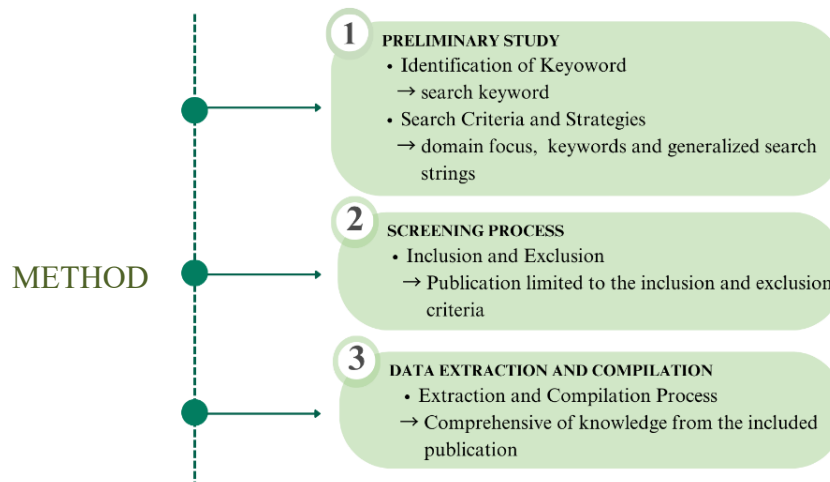


Figure 1. Systematic Literature Review Process

As illustrated in Figure 1, the research process consisted of three main stages: preliminary study, screening process, and data extraction and compilation. The preliminary study was conducted by identifying relevant keywords and defining search criteria related to SISP, CSFs, IT-BSC, and IS/IT strategic management. The screening process was then carried out by applying inclusion and exclusion criteria to select articles that were relevant to the research objectives. Finally, the data extraction and compilation stage was conducted by extracting important information from the selected studies,

grouping the articles based on their themes, and synthesizing the findings to answer the research questions and develop the proposed conceptual model.

2.1. Identification of Keywords

An initial exploratory search was conducted using academic database to refine keyword combinations relevant to the integration of SISP, CSF, and IT-BSC. Based on this preliminary analysis, a structured search strategy was applied, using this query:

("Strategic Information Systems Planning" OR "IS/IT Strategy" OR "IT/IS Strategy") AND ("Critical Success Factors" OR "CSF") AND ("IT Balanced Scorecard" OR "IT-BSC")

Figure 2. Search Query 1 for Systematic Literature Identification

("Strategic Information Systems Planning" OR "IS/IT Strategic Planning") AND ("Critical Success Factors" OR "IT Balanced Scorecard" OR "Business-IT Alignment")

Figure 3. Search Query 2 For Systematic Literature Identification

These query formulations were designed to capture literature related to the theoretical foundations, practical implementation, and performance implications of aligning IS/IT strategy with business objectives through CSF and IT-BSC. The same two core search queries were applied across all selected databases to maintain consistency in the literature search process. However, because each database provides different search fields, filtering options, and search interfaces, minor technical adaptations were made during the search process without changing the main keywords or research focus.

Table 1 Key Adaptations of Search Queries Across Databases

Database	Search	Key Adaption
ScienceDirect	Query 1 and Query 2	Queries were applied using available search fields and publication year filters.
Emerald Insight	Query 1 and Query 2	Queries were adjusted to the database search interface while maintaining the same keyword structure.

SpringerLink	Query 1 and Query 2	Queries were applied using phrase-based search and publication filters.
IEEE Xplore	Query 1 and Query 2	Queries were applied to title, abstract, and keyword fields using structured Boolean syntax.
Wiley Online Library	Query 1 and Query 2	Queries were applied using available search field options and publication filters.
Scopus	Query 1 and Query 2	Queries were applied to title, abstract, and keyword fields using structured Boolean syntax.

2.2. Search Criteria and Strategies

In the next stage, clear search parameters were defined to ensure the inclusion of high-quality and thematically relevant studies on SISP, CSFs, and IT-BSC. The search was limited to titles, abstracts, and keywords using targeted search terms. To maintain methodological rigor, only journal articles published between 2020 and January 2026 were included. The literature search was conducted in January 2026, therefore publications from 2026 were included only up to the final search period. Literature was retrieved from major academic databases, namely ScienceDirect, Scopus, IEEE Xplore, Emerald Insight, Springer, and Wiley Online Library. Articles without abstracts, incomplete metadata, or low relevance to the research focus were excluded. This process resulted in a curated set of studies aligned with the objectives of the review.

Table 2. Inclusion and Exclusion Criteria

Parameter	Inclusion Criteria	Exclusion Criteria
Publication Year	Publish within 2020–January 2026	Released outside 2020–January 2026
Language	Written in English	Written in languages other than English
Accessibility	Studies with complete and accessible full-text content	Inaccessible full text, or incomplete articles
Relevance	Relevant to CSF, IT-BSC, and SISP	Irrelevant to IS planning, CSF, or IT-BSC frameworks

Parameter	Inclusion Criteria	Exclusion Criteria
Area	Information Systems, Strategic Planning, Performance Measurement, IS Management	Non-related publications outside IS/IT strategy or performance frameworks
Publication Stage	Final published work	Unpublished manuscripts or articles still in press

2.3. Screening Process

Following the completion of the database search carried out using specific keyword combinations and detailed Boolean queries a total of 121 records were initially collected from multiple databases. These entries then underwent a multi-phase filtering process to assess their relevance and ensure the scholarly quality of the included studies.

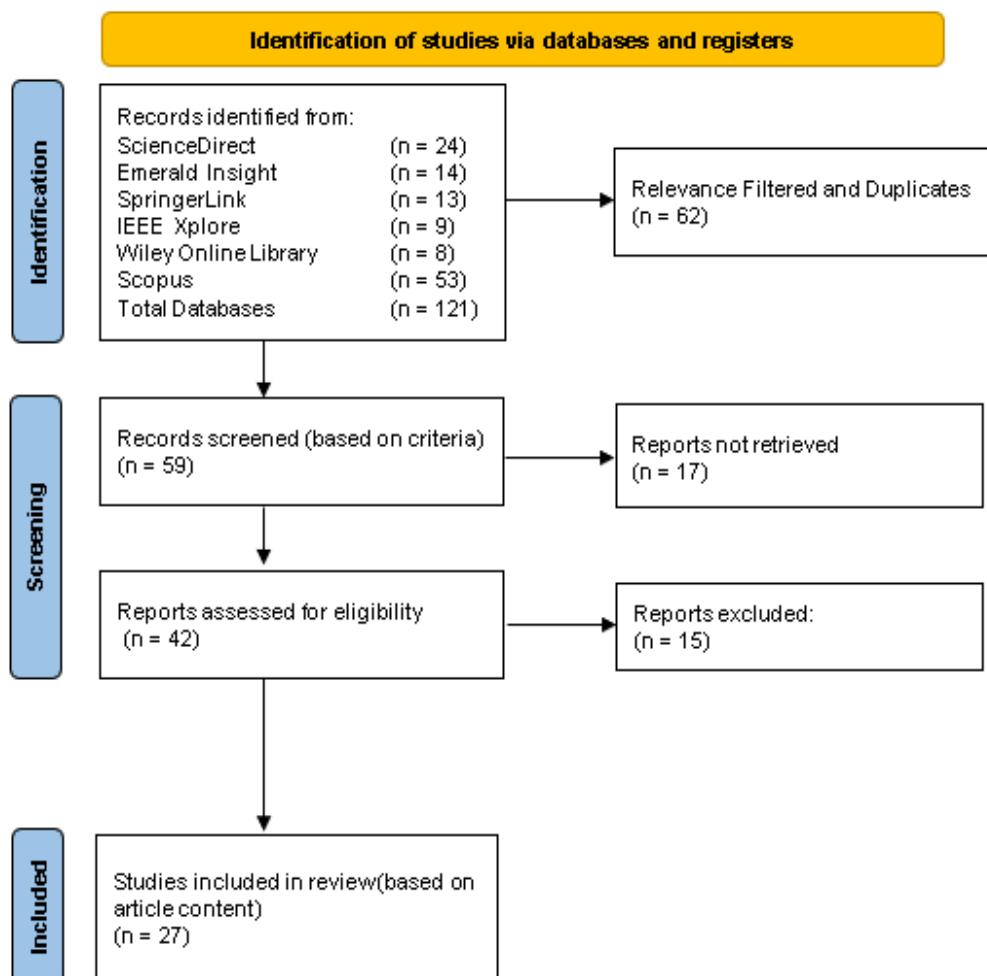


Figure 4. PRISMA Flowchart Process

The literature search process was conducted through six major databases: ScienceDirect (24), Emerald Insight (14), SpringerLink (13), IEEE Xplore (9), Wiley Online Library (8), and Scopus (53), resulting in a total of 121 identified records. A total of 62 records were removed during relevance filtering and duplicate checking, leaving 59 records for further screening based on the inclusion and exclusion criteria. In the screening stage, 17 reports were not retrieved because the full text was inaccessible, incomplete, or did not provide sufficient information for further assessment. Therefore, 42 reports were assessed for eligibility. During the eligibility assessment, 15 reports were excluded because they did not sufficiently address CSF, SISP, IT-BSC, or IS/IT strategic management. Finally, 27 articles were included in this systematic review because they met all selection criteria and were directly relevant to the research objectives.

2.4. Quality Assessment of Article

To strengthen methodological rigor and reduce selection bias, the eligibility and quality assessments were conducted through qualitative agreement between the two authors using structured criteria. Each article was evaluated based on five criteria: relevance to the research questions, methodological clarity, contribution to IS/IT strategic management, completeness of information, and publication credibility. Publication credibility was assessed by considering whether the article was published in a peer-reviewed journal or a reputable academic proceeding indexed in recognized academic databases. Articles with inaccessible full text, incomplete information, weak methodological explanation, or limited relevance to the research focus were excluded. The level of agreement between the two authors was determined through discussion and consensus based on the assessment criteria. This approach was considered appropriate because the assessment was qualitative and focused on thematic relevance, methodological clarity, and contribution to the research questions.

Table 3. Quality Assessment Criteria

Criteria	Description	Assessment Basis
Relevance to research questions	The study discusses CSF, SISP, IT-BSC, IS/IT strategy, or business-IT alignment	Qualitative assessment
Methodological clarity	The study clearly explains its research design, method, or analytical approach	Qualitative assessment

Criteria	Description	Assessment Basis
Contribution to IS/IT strategic management	The study provides findings related to strategic planning, alignment, governance, performance measurement, or improvement	Qualitative assessment
Completeness of information	The full text is accessible and provides sufficient information for synthesis	Qualitative assessment
Publication credibility	The study is published in a peer-reviewed journal or reputable academic proceeding indexed in recognized databases	Qualitative assessment

2.5. Compilation of Included Studies and Data Extraction

After the quality assessment stage, data extraction was conducted to identify the main information from each included article. The extracted data included article identity, research focus, method, key concepts, main findings, and relevance to CSF, SISP, IT-BSC, business–IT alignment, or IS/IT strategic management. The extracted findings were then coded thematically through three stages. First, each article was assigned an initial code based on its dominant focus, such as CSF in SISP, IS/IT strategy formulation, IT-BSC performance measurement, alignment evaluation, digital transformation, or IT project success. Second, similar codes were grouped into broader themes, as presented in Table 4. Third, the themes were synthesized to identify the relationships among strategic objectives, CSFs, IS/IT needs, IT-BSC perspectives, and performance evaluation. These synthesized relationships were then used as the basis for developing the proposed conceptual model. In this process, CSF-related themes informed the strategic formulation side of the model, while IT-BSC-related themes informed the performance evaluation side.

Table 4. Summary of the 27 Studies Included in the Final Review

Main Theme	Focus	Related Studies	Key Insight
SISP– CSF	CSFs in strategic IS/IT planning	[4], [10], [11], [12],	SISP is mainly driven by alignment, management support, resources, capability, and planning quality.

Main Theme	Focus	Related Studies	Key Insight
		[13], [14], [15], [16]	
SISP – IT/IS Strategy	Strategy Formulation and implementation	[17], [18], [19]	Structured IS strategy processes improve acceptance and implementation, while weak analysis reduces effectiveness
SISP – Ward & Peppard	Planning frameworks and application portfolio	[20], [21], [22]	These approaches support roadmap development, application planning, and organizational improvement.
SISP – IT Alignment	Governance and strategic value	[23]	Governance and top management participation strengthen alignment and strategic value creation.
IT BSC – Performance Measurement	KPI-based IT evaluation	[8], [24]	IT-BSC measures IT performance through competency, service, continuity, and improvement dimensions.
IT BSC – Alignment and Improvement	Gap analysis and maturity evaluation	[25]	IT-BSC identifies performance gaps and helps prioritize improvement actions.
IT BSC – Integrated Strategic Planning	IT-BSC combined with other frameworks	[7], [26]	IT-BSC integration supports planning, decision-making, and roadmap development.
CSF – Digital Transformation	DT success and organizational performance	[27], [28], [29], [30], [31]	Digital transformation depends on readiness, agility, governance, leadership, and technology capability.
CSF – IT Project	ICT projects and public sector implementation	[32], [33]	Project success is mainly influenced by leadership, user involvement, communication, and competence.

3. RESULTS AND DISCUSSION

3.1. RQ1: How are Critical Success Factors (CSFs) applied in Strategic Information Systems Planning (SISP) to support IS/IT business alignment?

The reviewed studies show that Critical Success Factors (CSFs) are applied in Strategic Information Systems Planning (SISP) as strategic tools to identify and prioritize the main conditions required to align IS/IT initiatives with business objectives. In the early planning stage, CSFs help determine key strategic priorities such as compliance, cybersecurity, internal resources, and management understanding, ensuring that IS/IT planning is directed toward organizational goals and risk considerations [4], [10]. CSFs are also used as alignment enablers during SISP implementation. Several studies highlight that business–IT alignment depends on top management support, governance structures, resource availability, inter-departmental cooperation, employee capability, and environmental analysis, all of which strengthen the effectiveness of IS/IT strategic planning across organizational settings [11], [12], [14]

In addition, CSFs function as analytical criteria for prioritizing IS/IT initiatives and translating business needs into strategic actions. Factors such as customer service, cost efficiency, employee productivity, inventory management, technology utilization, strategic awareness, and application planning were used to guide IS/IT strategy formulation and improve alignment between business and IS strategy [15], [16], [21]. The studies further indicate that CSFs support alignment by reinforcing governance and organizational readiness. Robust IT governance, leadership, communication, risk management, and stakeholder participation were found to be essential in ensuring that IS/IT initiatives remain aligned with broader organizational objectives, especially in digital transformation and public sector contexts [13], [23], [33]. Overall, the literature suggests that CSFs are applied in SISP to identify strategic priorities, support business–IT alignment, guide the prioritization of IS/IT initiatives, and strengthen implementation readiness. This confirms that CSFs provide a structured foundation for aligning IS/IT strategy with organizational goals.

To simplify the interpretation of the findings, Figure 5. illustrates the synthesized role of Critical Success Factors (CSFs) in Strategic Information Systems Planning (SISP). The

Figure shows how CSFs support SISP activities, influence IS/IT strategic decisions, and contribute to business–IT alignment.



Figure 5. Synthesized Role of Critical Success Factors in SISP to Support Business–IT Alignment

Figure 5 shows that CSFs act as strategic drivers in the SISP process. The synthesis indicates that factors such as top management support, resources, governance, and organizational capability help support the identification of priorities, guide IS/IT planning, and align organizational resources. These elements then influence IS/IT strategic decisions, including strategy formulation, initiative prioritization, and implementation planning. Therefore, CSFs contribute to business–IT alignment by connecting organizational needs with more focused IS/IT strategic actions.

3.2. RQ2: How is the IT Balanced Scorecard (IT-BSC) used to measure and enhance IS/IT strategic performance?

The reviewed studies indicate that the IT Balanced Scorecard (IT-BSC) is mainly used as a structured framework to measure the effectiveness, efficiency, and strategic contribution of IS/IT within organizations. IT-BSC is applied through defined perspectives and key performance indicators to evaluate IT performance in a systematic manner. In this context, IT competency, IT service ability, business continuity, and IT improvement

were identified as the main performance dimensions for assessing IT contribution and implementation performance [8], [24].

Beyond performance measurement, IT-BSC is also used to assess business–IT alignment and identify performance gaps that require improvement [25]. The use of weighted KPIs in IT-BSC helped evaluate Business–IT alignment and IT maturity, while also providing prioritized improvement actions across different perspectives [21], [26]. This shows that IT-BSC functions not only as an evaluation tool, but also as a mechanism for identifying weaknesses in current IS/IT performance.

The findings further show that IT-BSC supports strategic enhancement when integrated with other planning approaches. In an electrical appliance company, IT-BSC was combined with Critical Success Factors and the Ward and Peppard framework to align business and IT strategies, evaluate performance across four IT-BSC perspectives, and produce an IS/IT strategic roadmap and application portfolio [21]. Similarly, in health information technology strategic planning, the integration of Balanced Scorecard with risk and maturity assessment improved decision making, resource allocation, risk management, and strategic alignment [26]. Overall, the literature shows that IT-BSC is used in three main ways: to measure IS/IT performance through structured indicators, to assess alignment and identify performance gaps, and to support strategic improvement through roadmap development and better decision-making. These findings confirm that IT-BSC plays an important role in both measuring and enhancing IS/IT strategic performance.

To facilitate the interpretation of the findings, Figure 6. illustrates the synthesized role of the IT Balanced Scorecard (IT-BSC) in measuring and enhancing IS/IT strategic performance. The figure shows how IT-BSC functions as a structured framework for performance measurement, supports the identification of performance gaps, and provides a basis for strategic improvement. Figure 6 explains how IT-BSC supports the measurement and enhancement of IS/IT strategic performance. The synthesis shows that IT-BSC begins with structured perspectives that help organizations evaluate IS/IT performance through effectiveness, efficiency, and IT contribution. The evaluation results are then used to identify performance gaps and determine improvement priorities. These gaps become the basis for strategic improvement, including roadmap development, decision-making, and continuous improvement. Therefore, IT-BSC functions

not only as a performance measurement tool, but also as a strategic evaluation mechanism that supports the improvement of IS/IT alignment and performance.

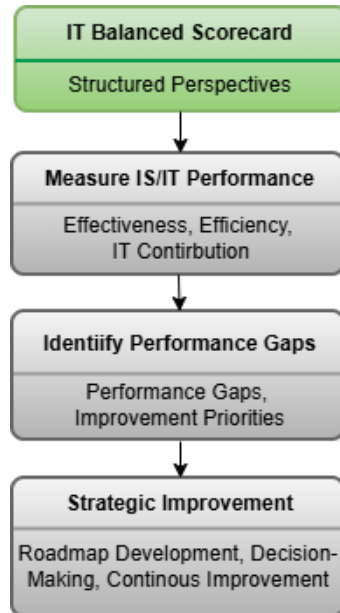


Figure 6. Synthesized Role of IT Balanced Scorecard in Measuring and Enhancing IS/IT Strategic Performance

3.3. Discussion

1) Meaning of Findings

The synthesis shows that existing literature generally treats Critical Success Factors (CSFs) and the IT Balanced Scorecard (IT-BSC) as distinct managerial instruments in IS/IT strategic management. This fragmentation can be explained by the different analytical orientations of the two streams of literature. CSF-related studies generally focus on the formulation side of IS/IT strategy, particularly the identification of strategic priorities, success determinants, governance requirements, and organizational readiness. In contrast, IT-BSC-related studies are more commonly positioned on the evaluation side, emphasizing performance indicators, alignment assessment, gap identification, and improvement actions. As a result, prior studies often stop either at the identification of strategic success factors or at the measurement of IT performance, without clearly explaining how strategic priorities can be translated into measurable performance perspectives. This separation creates a conceptual gap between strategic formulation and performance evaluation in IS/IT strategic management.

The findings indicate that CSFs and IT-BSC represent two complementary functions within IS/IT strategic management. CSFs provide the formulation logic by identifying which strategic conditions, priorities, and organizational capabilities need to be addressed, while IT-BSC provides the evaluation logic by translating those priorities into measurable performance perspectives. The main implication is that IS/IT strategic management should not stop at identifying critical success factors or measuring IT performance separately. Instead, strategic priorities need to be connected to evaluation mechanisms so that planning, implementation, and improvement can operate as a continuous cycle. Therefore, business–IT alignment should be understood as a dynamic process supported by strategic prioritization, performance measurement, and continuous refinement. This interpretation provides the basis for the proposed CSF and IT-BSC integration model discussed in the following section.

2) Proposed CSF and IT-BSC Integration Model for IS/IT Strategic Management

The findings from RQ1 and RQ2 indicate that Critical Success Factors (CSFs) and the IT Balanced Scorecard (IT-BSC) play complementary roles in IS/IT strategic management. CSFs help identify the strategic priorities and key conditions required for successful implementation, while IT-BSC provides a structured mechanism for translating those priorities into measurable performance dimensions. Based on the findings, this study proposes a conceptual integration model that combines CSFs and IT-BSC into a unified framework for IS/IT strategic management.

Figure 7. was developed from components identified in the reviewed literature and the synthesis conducted in this study. The literature-supported components include organizational strategic objectives, CSFs, IS/IT needs, IT-BSC perspectives, and performance evaluation, as these elements were discussed in studies on SISP, CSF, IT-BSC, and business–IT alignment. The conceptual extension of this study lies in the synthesis-based linkage among these components, particularly by connecting CSFs as strategic formulation drivers with IT-BSC as a performance evaluation mechanism. This linkage shows how strategic priorities identified through CSFs can be translated into IS/IT needs and then positioned within IT-BSC perspectives. Therefore, Figure 7 should be understood as a literature-derived conceptual model that bridges strategic formulation and performance evaluation.

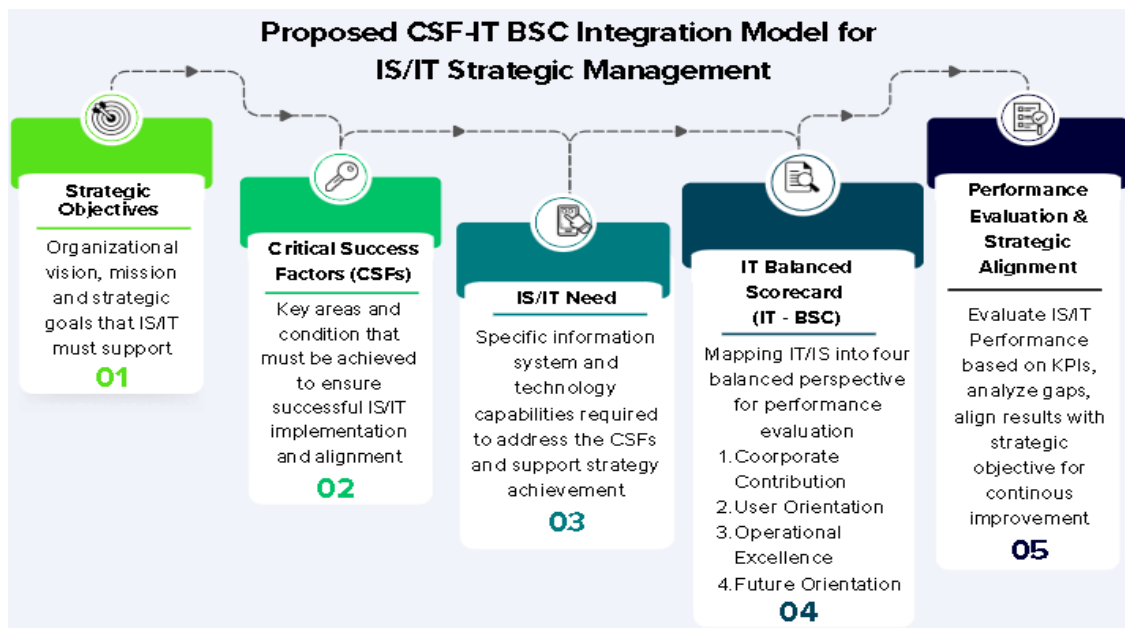


Figure 7. Proposed CSF and IT-BSC Integration Model for IS/IT Strategic Management

In the proposed model, organizational strategic objectives act as the starting point for identifying critical success factors. This element is derived from studies showing that SISP is used to connect organizational goals with IS/IT planning priorities and business-IT alignment [11], [14], [23]. These CSFs represent the essential areas that must be addressed to ensure that IS/IT initiatives effectively support organizational goals. Previous studies indicate that CSFs in IS/IT strategic planning commonly include top management support, governance, resources, organizational capability, and planning quality [4], [10], [16]. Once the CSFs are determined, they are translated into IS/IT needs, which reflect the required information systems, technological capabilities, application planning, and managerial support necessary for implementation [15], [20], [21], [22]. These IS/IT needs are then mapped into the four perspectives of the IT Balanced Scorecard, namely corporate contribution, user orientation, operational excellence, and future orientation, as IT-BSC provides structured perspectives for evaluating IS/IT performance and contribution [8], [24] [25].

Through this structure, the model connects strategic intent with performance evaluation in a systematic manner. CSFs function as strategic drivers that define what must be prioritized, whereas IT-BSC serves as the evaluative mechanism that determines how those priorities can be monitored and assessed. This relationship is supported by studies

showing that IT-BSC can be used to evaluate performance gaps, assess business-IT alignment, and support strategic improvement through roadmap development and decision-making [7] [25], [26]. This allows organizations to move from general strategic objectives toward a more structured performance management process in which strategic priorities are not only identified, but also positioned within relevant evaluation domains.

To clarify the traceability of the proposed model, Table 5 links the components of Figure 7 with the reviewed study groups and distinguishes between literature-supported components and the synthesis-based linkage proposed in this study.

Table 5. Model Traceability From Reviewed Themes to Figure 7 Components

Figure 7 Component	Supporting Reviewed Theme	Evidence Basis	Role in the Proposed Model
Strategic Objectives	SISP-IT/IS Strategy; SISP-IT Alignment	Literature Supported	Starting point for aligning IS/IT planning with organizational goals
Critical Success Factors	SISP-CSF; CSF-Digital Transformation; CSF-IT Project	Literature Supported	Strategic drivers for identifying priorities and readiness factors
IS/IT Need	SISP-Ward & Peppard; SISP-IT/IS Strategy	Literature Supported and Synthesis Based	Translation of CSFs into required systems, capabilities, and managerial support
IT BSC Perspective	IT-BSC-Performance Measurement; IT-BSC-Alignment and Improvement	Literature Supported	Performance evaluation dimensions for IS/IT strategy
Performance Evaluation and Strategic Improvement	IT-BSC-Integrated Strategic Planning; IT-BSC-Alignment and Improvement	Literature Supported	Mechanism for assessing implementation, identifying gaps, and supporting continuous improvement

The proposed integration model highlights that CSFs and IT-BSC should not be treated as separate instruments. Instead, both can be understood as interconnected components within a continuous IS/IT strategic management cycle. In this cycle, CSFs provide direction and focus, while IT-BSC translates that direction into a balanced performance perspective. As a result, the model offers a clearer conceptual pathway for aligning organizational strategy, IS/IT needs, and strategic performance management.

The contribution of this proposed model lies in its integrative perspective. Previous studies commonly discuss CSFs as determinants of strategic success and IT-BSC as a framework for performance measurement in separate contexts. In contrast, this study synthesizes both concepts into a single conceptual model that supports alignment between strategic priorities and performance evaluation in IS/IT management. Although the model is conceptual and derived from literature synthesis, it provides a foundation for future implementation in strategic planning, performance assessment, and decision support contexts.

3) Research Gap

Although the findings of this study indicate that the CSF and IT-BSC approaches contribute significantly to IS/IT strategy planning and evaluation, the results of the analysis also reveal a number of conceptual and practical gaps in the existing literature. Identifying these gaps is important for understanding the limitations of previous research and providing clear direction for future studies.

Table 6. Research Gap of This Study

Research Gap	Direct Evidence from Reviewed Literature	Author's Conceptual Interpretation	Future Research
Limited integration between CSF and IT-BSC frameworks	The reviewed studies mostly discuss CSFs in the context of strategic formulation, SISP, governance, and implementation	This separation indicates that CSF and IT-BSC have not been sufficiently integrated into a unified IS/IT strategic management cycle that links	Future research should develop and empirically validate integrated models that connect CSF-based strategic identification with

Research Gap	Direct Evidence from Reviewed Literature	Author's Conceptual Interpretation	Future Research
	readiness, while IT-BSC is mainly discussed in relation to performance measurement, alignment assessment, and improvement evaluation.	strategic prioritization with performance evaluation.	IT-BSC-based performance measurement within a unified IS/IT strategic governance framework.
Sectoral and regional concentration of studies	Many reviewed studies are conducted in specific sectors, such as higher education, public institutions, manufacturing, and selected regional contexts.	This concentration may limit the generalizability of the findings and suggests that the applicability of the CSF and IT-BSC integration model may vary across organizational types and geographical settings	Future research should test the applicability of integrated CSF and IT-BSC models across diverse industries and geographies, including SMEs, non-higher education institutions, and rural sectors.

4. CONCLUSION

This study systematically reviewed recent literature on Critical Success Factors (CSFs) and the IT Balanced Scorecard (IT-BSC) in IS/IT strategic management. The findings show that CSFs and IT-BSC perform complementary roles, in which CSFs support strategic formulation by identifying priorities, success determinants, governance needs, and organizational readiness, while IT-BSC supports performance evaluation by translating those priorities into structured measurement perspectives, gap identification, and improvement actions. Based on this synthesis, the study proposes a literature derived

conceptual model that links strategic objectives, CSFs, IS/IT needs, IT-BSC perspectives, and performance evaluation to bridge strategic formulation and performance measurement in IS/IT strategic management. However, the proposed model remains conceptual and has not yet been empirically validated. Therefore, future research should validate the model in real organizational contexts and across different sectors to examine its applicability, usefulness, and effectiveness in supporting IS/IT strategic planning, performance evaluation, and strategic governance.

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Appendix 1. Classification of References Used in the Study

Reference Category	Reference Number	Purpose
Background Only	[1], [2], [3], [5], [6], [9]	Used to support the background, theoretical foundation, and research context
Background and Final Review Article	[4], [7], [8]	Used both as theoretical/background support and as part of the 27 reviewed studies
Final Review Article	[10]–[33]	Used as the final review studies in the systematic literature review