VOL. 11. NO. 3 FEBRUARY 2026
P-ISSN: 2685-8223 | E-ISSN: 2527-4864
DOI: 10.33480 /jitk.v11i3.7068

JITK (JURNAL ILMU PENGETAHUAN DAN TEKNOLOGI KOMPUTER)

DECADE OF IT STRATEGIC PLANNING: SYSTEMATIC REVIEW OF FRAMEWORKS AND CRITICAL SUCCESS FACTORS

Bambang Suhartono[1*]; Tole Sutikno[2]; Imam Riadi[3]

Informatics Engineering[1]
Universitas Insan Pembangunan Indonesia, Tangerang Regency, Indonesia[1]
https://www.unipi.ac.id [1]
bambangsuhartono46@gmail.com*

Electrical Engineering[2]
Informatics Engineering[3]
Ahmad Dahlan University, Yogyakarta, Indonesia[2,3]
https://www.uad.ac.id[2,3]
tole@te.uad.ac.id, imam. riadi@mti.uad.ac.id

(*) Corresponding Author
(Responsible for the Quality of Paper Content)

Abstract— *Strategic planning for information technology (PSTI) is a crucial element in ensuring alignment between an organisation's business objectives and the use of information technology. In the last decade, challenges have arisen in adopting appropriate frameworks, methods and principles, especially amidst the complexities of digital disruption. This study aims to conduct a systematic literature review (SLR) of PSTI-related research during the period 2015-2024 using the PRISMA 2020 approach, with literature searches from leading academic databases such as Scopus, IEEE Xplore, SpringerLink, and Google Scholar during the period 2015-2024. A total of 62 scientific articles were analysed to evaluate the frameworks used, business sectors based on KBLI, implementation methods, principles applied, and critical success factors and research gaps. The results showed that Ward & Peppard, TOGAF, and Tozer frameworks were the most dominant approach. Key success factors include top management support, business and IT strategy alignment, effective IT governance, and organisational capability. This study makes a significant contribution to the development of theoretical foundations and practical guidelines for adaptive PSTI implementation, the KBLI-PSTI mapping, the systensis of framework/ methods/ princiles, alignment factors & organizational capabilities, and opens space for further research in less explored sectors.*

Keywords: *Information Systems, IT Framework, IT Governance, PRISMA, Strategic IT Planning.*

Intisari— *Perencanaan strategis teknologi informasi (PSTI) merupakan elemen krusial dalam memastikan keselarasan antara tujuan bisnis organisasi dengan pemanfaatan teknologi informasi. Dalam dekade terakhir, muncul berbagai tantangan dalam mengadopsi kerangka kerja, metode, dan prinsip yang sesuai, khususnya di tengah kompleksitas disrupsi digital. Studi ini bertujuan untuk melakukan tinjauan pustaka sistematis (systematic literature review, SLR) terhadap penelitian-penelitian terkait PSTI selama periode 2015–2024 dengan pendekatan PRISMA 2020. dengan pencarian literatur dari database akademik terkemuka seperti Scopus, IEEE Xplore, SpringerLink, dan Google Scholar selama periode 2015–2024. Total 62 artikel ilmiah dianalisis untuk mengevaluasi framework yang digunakan, sektor usaha berdasarkan KBLI, metode pelaksanaan, prinsip-prinsip yang diterapkan, serta faktor-faktor penentu keberhasilan dan kesenjangan riset. Hasil penelitian menunjukkan bahwa framework Ward & Peppard, TOGAF, dan Tozer merupakan pendekatan yang paling dominan. Faktor kunci keberhasilan mencakup dukungan manajemen puncak, keselarasan strategi bisnis dan TI, tata kelola TI yang efektif, serta kapabilitas organisasi. Kajian ini memberikan kontribusi signifikan dalam pengembangan landasan teoretis dan panduan praktis untuk*

Accredited Rank 2 (Sinta 2) based on the Decree of the Dirjen Penguatan RisBang Kemenristekdikti No.225/E/KPT/2022, December 07, 2022. Published by LPPM Universitas Nusa Mandiri

VOL. 11. NO. 3 FEBRUARI 2026
P-ISSN: 2685-8223 | E-ISSN: 2527-4864
DOI: 10.33480/jitk.v11i3.7068

implementasi PSTI yang adaptif, pemetaan KBLI–PSTI , sintesis dari kerangka kerja/ metode/ prinsip, penyelarasan faktor dan organisasi kemampuan serta membuka ruang bagi penelitian lanjutan di sektor-sektor yang masih kurang tereksplorasi.

***Keywords**: Sistem Informasi, Kerangka Kerja TI, Tata Kelola TI, PRISMA, Perencanaan TI Strategis.*

INTRODUCTION

Information Technology (IT) strategic planning has evolved into a critical element that determines an organisation's sustainability and competitive advantage amid the rapid development of digital technology. IT is a key driver for innovation and transformation in various industry sectors. In this context, structured and systematic IT planning becomes crucial to ensure that the technology implemented supports the organisation's long-term business goals and strategies [1]. IT strategic planning has become a crucial aspect in the management of modern organisations. In an increasingly digitalised world, organisations that do not have a well-thought-out IT plan risk falling behind in global competition and face major challenges in maintaining market relevance [2]. IT is become a key factor in building sustainable competitive advantage [3].

Therefore, companies are expected to align IT planning with the organisation's strategic goals in order to support the achievement of long-term goals and adaptation to rapid market changes[4] . IT strategic planning is part of the IT governance concept, which is a part that must be carried out in aligning the needs of the organisation [5]. Based on the opinion above, it can be concluded an Information Technology (IT) Strategic Plan is a formalized document that outlines how an organisation will use information technology to support and achieve its overall business goals, objectives, and mission. It defines the long-term vision, priorities, and initiatives for IT, ensuring alignment between technological investments and organisational strategy

The main factor affecting the success of IT strategic planning is the alignment between IT and business strategy. Basically, IT should act as an enabler to achieve organisational goals, not just as a supporting tool. Organisations that successfully achieve alignment of IT and business strategy have a greater chance of improving efficiency, responding quickly to market changes, and innovating in accordance with existing technological developments [6]. The success of IT planning is highly dependent on the understanding and involvement of business and IT management in designing and implementing IT strategies [7].

As technology continues to advance, organisations around the world are increasingly relying on digital technology to create added value and gain competitive advantage. However, a major challenge facing organisations is how to manage such rapid technological changes and integrate them with existing business strategies. The adoption of new technologies such as cloud computing, big data, artificial intelligence (AI), and the Internet of Things (IoT) increasingly demands IT planning that is flexible and responsive to the external and internal changes that occur [8] Companies that fail to adapt new technologies well can be left behind and lose out in an increasingly digital market [9].

In addition, IT planning must also consider external factors, such as regulatory changes, cyber threats, and global market conditions. These factors can influence IT planning decisions and limit an organisation's room for manoeuvre in using technology. Long-term success in IT planning depends not only on the technology implemented, but also on the organisation's ability to manage risk and deal with market and regulatory uncertainty [10].

Another challenge that needs to be faced is risk management and information security. Threats to data security and IT infrastructure have increased rapidly as the global IT environment becomes more complex. Organisations must plan IT by considering aspects of data protection and risk mitigation to avoid huge losses due to security breaches [11]. IT security and data protection are top priorities in IT planning to maintain the integrity and continuity of organisational operations.[12]

To understand the context of cross-sector PSTI implementation, this study adopts the KBLI classification as a framework for categorizing business sectors in Indonesia. In Based on the Indonesian standard classification of business fields (KBLI) [17], the grouping of business fields is divided into 21 business fields based on their economic activities, including: (1)Agriculture, Forestry, and Fisheries, (2)Mining and Quarrying, (3)Processing Industry, (4)Procurement of Electricity, Gas, Steam/Hot Water and Cold Air, (5)Water Treatment, Waste Treatment, Material Recovery and Remediation Activities, (6)Construction, (7)Wholesale & Retail Trade;

Repair and Maintenance of Cars and Motorcycles, (8)Transportation and Warehousing, (9)Provision of Accommodation and Food & Beverages, (10)Information and Communication, (11) Financial and Insurance Activities, (12)Real Estate, (13)Professional, Scientific, and Technical Activities, (14)Rental and Leasing without Option Rights, Employment, Travel Agencies, Business Support, (15)Government Administration, Defence, and Compulsory Social Security, (16)Education, (17)Human Health and Social Activities, (18)Arts, Entertainment, and Recreation, (19)Other Service Activities, (20)Activities of Households as Employers; Production Activities by Households for Own Consumption, (21)Activities of International Agencies and Extra-International Agencies)

In addition, in IT strategic planning, companies must anticipate rapid changes in technology and markets. Companies that want to be successful in IT planning need to have an IT strategy that is adaptive and capable of transforming to keep up with market and technology changes [13]. Strong IT leadership also plays an important role in successful IT strategic planning. IT leaders need to understand business needs and act as a liaison between IT and business management to ensure that IT can support the achievement of organisational goals [14]. IT leaders who have a good understanding of technology and business can assist organisations in designing IT strategies that are in line with business objectives [15].

Overall, effective IT strategic planning requires deep integration of technology, management, and business objectives. The constituent factors that have been identified in the literature must be carefully considered so that IT can make the maximum contribution to achieving the organisation's long-term goals.

From the above, this article aims to answer key questions related to:

1. How is the application of SLR using the PRISMA method related to IT strategic planning?
2. What business fields have implemented IT strategic planning based on the Indonesian Standard Industrial Classification (KBLI)?
3. What framework, methodes, principles, and factors are commonly used in IT strategic planning?
4. What are the research gaps that are still relevant to be studied?

Based on this background, this research aims to answer 6 research questions covering aspects of methods, business fields (KBLI), frameworks, methods, principles, and success factors in IT strategic planning. This study contributes to the body of knowledge on Information Technology Strategic Planning (ITSP) by providing four main contributions:

1. KBLI–ITSP Mapping: This research introduces a conceptual mapping between the *Klasifikasi Baku Lapangan Usaha Indonesia (KBLI)* and ITSP domains, offering a structured understanding of how different business sectors align their IT strategies with national industrial classifications.
2. Synthesis of Frameworks, Methods, and Principles: The study synthesizes various ITSP frameworks—such as Ward and Peppard, TOGAF, and COBIT 2019—along with underlying strategic planning principles, providing an integrated perspective for future implementations.
3. Alignment Factors and Organizational Capabilities: The paper identifies and classifies critical success factors influencing the alignment between business and IT strategies, emphasizing organizational capabilities, resource readiness, and governance structures.
4. Research Agenda: Finally, the study proposes a future research agenda to bridge theoretical insights with practical applications, particularly in the Indonesian context and other emerging economies undergoing digital transformation.

By conducting a comprehensive Systematic Literature Review (SLR) of scientific literature over the past 10 years (2015-2024), this article is expected to provide strategic insights for researchers and practitioners in designing effective IT planning. Structure of the paper: The remainder of this paper is organized as follows. Section II describes the research methodology, including the systematic literature review process. Section III presents the results and discussion, including the synthesis of frameworks and alignment factors. Section IV provides conclusions, implications, and recommendations for future research.

MATERIALS AND METHODS

This research adopts the Systematic Litersature Review (SLR) methodology to identify, evaluate, and analyse relevant research related to Information Technology (IT) strategic planning. The main question on which this research is based is: "What business fields have implemented IT strategic planning, what are the factors that shape IT strategic planning in the existing literature?", "What frameworks or approaches are used in IT strategic planning", "What are the gaps in research that are still relevant to be reviewed?". These questions are designed to assist researchers in

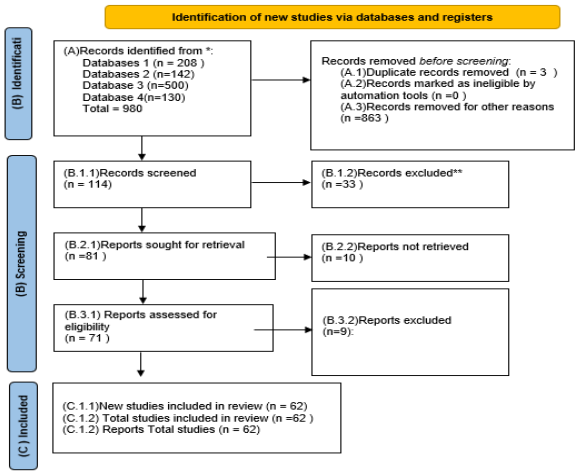
Accredited Rank 2 (Sinta 2) based on the Decree of the Dirjen Penguatan RisBang Kemenristekdikti No.225/E/KPT/2022, December 07, 2022. Published by LPPM Universitas Nusa Mandiri

VOL. 11. NO. 3 FEBRUARI 2026
P-ISSN: 2685-8223 | E-ISSN: 2527-4864
DOI: 10.33480/jitk.v11i3.7068

filtering and categorising relevant studies, as well as to assess how different factors influence IT planning.

In this case the author uses a reference with the PRISMA method approach. PRISMA is a systematic, transparent, and replicable approach to identifying, evaluating, and synthesising research results relevant to specific research questions. PRISMA, which stands for Preferred Reporting Items for Systematic Reviews and Meta-Analyses, provides checklist-based reporting guidelines and flowcharts that help improve the quality of reporting from SLRs. The PRISMA method provides a clear reporting structure and allows researchers to document each stage of the literature search and selection with high transparency. This increases credibility and allows duplication or revalidation of results by other researchers [7].

The review protocol was not registered in OSF or PROSPERO but was developed internally following the PRISMA-S extension for search reporting. The last literature search was conducted on 21 July 2025, covering publications from 2015 to 2024.The methodology of this research was carried out in 3 major stages, as shown in the following figure:



Source : (Research Results, 2025)

Figure 1.PRISMA Method - Systematic Literatature Review of IT Strategic Planning (PSTI)

1. Stage A: Identification

Is the initial stage of identifying potential references (records) from various sources. The activities carried out are systematic searches of various databases (such as: scopus, ScienceDirected, springerlink, and Google Schoolar as a broad supplementary search).

The search for relevant studies was selected using keywords such as "Relevant studies were selected using keywords such as "information technology strategic planning or ITSP, strategic planning of information technology or SPIT, information system strategic planning or ISSP, IT Strategic Planning or ITSP. Searches were conducted through various reputable academic databases to ensure that all relevant sources were covered in the analyses. All databases were merged and articles that were duplicate (A1), unsuitable based on analysis tools (such as mendeley) (A2), or deleted for other reasons (A3) were removed.

2. Stage B: Screening

This is the stage after the Identification stage, checking the eligibility of articles that will be analysed in depth by reading the full text / full article. Decent articles are collected and summarised (B.1.1). The study selection was conducted by two independent reviewers. The study selection was conducted by two independent reviewers. A pilot test was performed to calibrate inclusion decisions. The inter-rater reliability was measured using Cohen's $\kappa = 0.86$, indicating strong agreement. The activities that will be carried out are reading the entire article, checking whether the article really fulfils all the inclusion criteria and does not violate the exclusion criteria. In addition, it also lists and totals the excluded articles and their reasons, these articles are articles that are not continued for further analysis (B.1.2).

Inclusion and Exclusion Criteria:

Inclusion and exclusion criteria were used to ensure that only relevant and quality studies were included in the review. Inclusion criteria included:

a) Studies published within the last 10 years (2015-2024).
b) Studies that addressed "IT strategic planning ", or "Information system strategic planning",
c) Studies published in indexed journals and trusted academic platforms, such as Google Scholar, ScienceDirect, Connected Papers, elicit.

Exclusion criteria included articles that were not fully accessible, articles that were not relevant to IT planning, and articles that were of low methodological quality. After stage (B1.1), the next stage identifies the articles to be retrieved and read in full by counting how many articles are eligible to be read (B.2.1). The stage (B.2.2) is related to collecting articles that cannot be accessed, although it has been searched which can be due to the article being paid and not available access, not available online, not found in full form.

Each selected article was evaluated based on the quality of the methodology used. Evaluation criteria included the relevance of the study to IT strategic planning, the clarity of the methodology used, and its contribution to the understanding of

the factors that influence IT strategic planning. Articles that did not meet certain quality standards were excluded from the review. The step after (B.2.1), was to report the results of the accessible articles and then assess their eligibility based on stricter inclusion (B.3.1) and exclusion criteria. (B.3.2).

3. Stage C: Included

This is the final stage in conducting a systematic literature review, where articles eligible for review are collected and summarised for analysis (C.1.1). Data from the selected studies were extracted and analysed to identify emerging themes and patterns. The analysis was conducted by grouping the findings based on the application of the categorisation of institutions/organisations in implementing IT strategic planning, institutions/organisations implementing IT strategic planning, frameworks used in IT strategic planning. This analysis aims to provide a comprehensive picture of the organisations that implement IT strategic planning and the frameworks used in IT strategic planning. After the stage (C.1.1) is done, the next stage is to do the summation for the analysed articles (C.1.2). After that, the existing articles from various studies were synthesised to provide a comprehensive overview of IT strategic planning. Drawing conclusions is done by summarising what frameworks are used in the preparation of IT strategic planning, factors that affect the success of IT strategic planning found in the literature and identifying research gaps that need to be studied further. after that a report on the articles to be reviewed is made (C.1.3). Approaches used in IT Strategic Planning Literature. The approaches used in the IT strategic planning literature are as follows:

1) Conceptual / Theoretical Approach

Many studies use a conceptual approach to build a theoretical framework for how IT strategic planning can support business goals. This approach often utilises models such as the Strategic Alignment Model (SAM) (Henderson & Venkatraman) or frameworks such as Enterprise Architecture (EA).

2) Framework-Based Approach

Studies in the literature widely adopt and evaluate popular frameworks such as:

a. TOGAF: used in the context of enterprise architecture to support comprehensive IT planning.
b. Zachman: a framework used to provide a structured way of viewing, defining, and managing complex information about an enterprise, similar to how building architects design a building.
c. Enterprise Architecture Planning: a methodology or structured approach used to define an organisation's information systems architecture in the context of business strategy.
d. Ward & Peppard: a framework used to develop an IS/TI strategy.
e. COBIT 5 and COBIT 2019: used to evaluate IT governance and IT-business strategy alignment.

3) Case Study Approach

This approach is used to explore implementations related to the execution of IT strategy planning in specific organisations, such as universities, government agencies, or multinational companies. The study generates empirical insights into the challenges, success factors, and context of the IT environment. Each included study was coded according to the Klasifikasi Baku Lapangan Usaha Indonesia (KBLI) to contextualize the ITSP implementation across business sectors.

4) Empirical-Quantitative Approach

Some studies use surveys and statistical analysis to measure the influence of factors such as management roles, organisational culture, IT capabilities, or digital integration on IT strategy effectiveness.

5) Qualitative Methodological Approaches in IT Strategic Planning Studies

Most of the research discussed in this review uses qualitative approaches, such as case studies, content analysis, to explore how organisations strategically plan and manage IT. This methodology allows researchers to understand the context and internal dynamics that influence IT strategic planning decisions in organisations (Peppard & Ward, 2016).

6) Data Extraction and Synthesis

Data extraction was conducted systematically to ensure the consistency and completeness of information retrieved from all selected studies. A structured extraction form was developed and tested during the pilot phase. The following data items were extracted from each article:

1. Research design — specifying whether the study used qualitative, quantitative, or mixed methods.
2. KBLI sector classification — determining the corresponding *Klasifikasi Baku Lapangan*

Accredited Rank 2 (Sinta 2) based on the Decree of the Dirjen Penguatan RisBang Kemenristekdikti No.225/E/KPT/2022, December 07, 2022. Published by LPPM Universitas Nusa Mandiri

VOL. 11. NO. 3 FEBRUARI 2026
P-ISSN: 2685-8223 | E-ISSN: 2527-4864
DOI: 10.33480/jitk.v11i3.7068

Usaha Indonesia (KBLI) category based on the organizational domain described in the study (e.g., education, health, finance, manufacturing, ICT services, or public administration).

3. Frameworks, methods, and principles — identifying the strategic IT planning approach used, such as Ward & Peppard, TOGAF, COBIT 2019, Enterprise Architecture, or Balanced Scorecard.
4. Enablers or success factors — such as leadership commitment, organizational capability, resource readiness, and governance maturity.
5. Outcomes or benefits — including alignment between business and IT, performance improvement, innovation enablement, and digital transformation impact.

RESULTS AND DISCUSSION

Discussion of SLR with the PRISMA method

Discussion of PRISMA Systematic Literature Review. The results and discussion in the literature review of the articles collected are as follows (table 1).

Table 1. Recapitulation of literature review of IT Strategic Planning articles using the PRISMA method

No	Referensi Artikel	(A)Fase Identification					(B)Fase Screening						(C)Fase Included		
		A	A0	A1	A2	A3	B11	B12	B21	B22	B31	B32	C11	C12	C21
1	Elicit. com	208	45	0	0	163		17							
2	Google Scholar	142	19	1	0	122	114	2	81	10	71	9	62	62	62
3	Science Direct	500	2	0	0	498		0							
4	Conntectedpaper	130	48	2	0	80		14							
	Total	980	114			863		33							

Source : (Research Results, 2025)

Table 1. above can be explained as follows the reference articles used as a whole totalled 980 articles related to the keywords "information technology strategic planning, strategic planning of information technology, information system strategic planning, IT Strategic Planning, Information System Strategic Planning" in the period 2015 - 2024, the details are as follows: Articles from Elicit.com database (208 articles), Google Scholar database (142 Articles), ScienceDirect database (500 articles), Connected Papers database (130).

Table 2. (A) Identification phase

No	Column	Explanation
1	A	Articles from Elicit.com database (208 articles), Google Scholar database (142 Articles), ScienceDirect database (500 articles), Connected Papers database (130).
2	A.1	Duplicate articles were found, with details on Connected Papers (2 articles), Google scholar (1 article).
3	A.2	Articles that are not eligible based on analysis tools (mendeley), resulted in 0 / not found)
4	A.3	Articles deleted based on reasons such as not matching the search category, not relevant to the research topic, in this case related to IT strategic planning obtained results, elicit.com (163 articles), Google Scholar (122 articles), ScienceDirect (498 articles), Connected Papers (80 articles).

Source : (Research Results, 2025)

Table 3. (B) Screening Phase

No	Column	Explanation
1	B.1.1	The number of articles examined by title, abstract that met the initial inclusion criteria was 114 articles.
2	B.1.2	The number of articles that were excluded after the screening stage (B.1.1), because they did not meet the inclusion criteria based on the title and abstract, including ellicit (17 articles), Connected Papers (14 articles), google scholar (2 articles), ScienceDirect (0).
3	B.2.1	The total number of articles (full text) identified for retrieval and full reading, after passing the initial screening stage (B.1.1) was 81 articles.
4	B.2.2	The number of articles (full text) that could not be accessed despite searching was 10 articles
5	B.3.1	The number of articles (full text) that were successfully accessed and then assessed for eligibility based on strict inclusion and exclusion criteria totalled 71 articles
6	B.3.2	The number of articles (full text) that have been read, partially rejected because they do not meet the inclusion criteria is 9 articles.

Source : (Research Results, 2025)

Table 4. (C) Included phase

No	Column	Explanation
1	C.1.1	The number of articles included in the literature review was 62.
2	C.1.2	The total number of articles included in the literature review was 62 articles.
3	C.2.1	The total number of articles included in the literature review report is 62 articles.

Source : (Research Results, 2025)

Systematic Literature Review (SLR) on IT Strategic Planning

The Systematic Literature Review (SLR) conducted related to IT strategic planning identifies several factors related to the components of the Research Object, the Framework used and the use of methods in the discussion / implementation.

1. Review of the application of IT strategic planning based on the field of business (KBLI)

The SLR based on the business field (KBLI) related to IT strategic planning, is described in the form of the following summary table:

Table 5. Number of Business Fields based on KBLI related to IT strategic planning

No	KBLI code	Reference	Number
1	Agriculture, Forestry and Fisheries	[7] [17][29]	3
2	Mining and Quarrying,	[38]	1
3	Processing Industry	[62]	1
4	Electricity, Gas, Steam/Hot Water and Cold Air Procurement		0
5	Water Treatment, Waste Treatment, Material and Activity Recovery		0
6	Construction	[8]	1
7	Wholesale & Retail Trade; Repair and Maintenance of Automobiles and Motorcycles,		0
8	Transport and Warehousing	[36] [44]	2
9	Accommodation and Food & Beverage Provision		0
10	Information and Communication	[22] [53]	2
11	Financial and Insurance Activities,	[33] [48] [57] [61]	4
12	Real Estate	[59]	1
13	Professional, Scientific and Technical Activities	[14]	1
14	Rental and Leasing without Option Rights, Employment, Travel Agencies, Business Support,	[49]	1
15	Public Administration, Defence and Compulsory Social Security,	[2] [29] [30] [31] [41] [43] [53] [59]	0
16	Education	[2] [3] [4] [6] [12] [16] [17] [19] [20] [23] [25] [26] [27] [28] [29] [32] [39] [40] [45] [46] [52] [53] [58]	23
17	Human Health and Social Activities	[5] [9] [13] [29] [42] [47] [51] [53] [60]	9
18	Arts, Entertainment, and Recreation	[11] [55] [56]	3
19	Other Service Activities	[1] [10] [18] [21] [24]	5
20	Activities of Households as Employers; Production Activities by Households for Own Consumption,	[50]	1
21	Activities of International and Extra-International Bodies	[34]	1

Source : (Research Results, 2025)

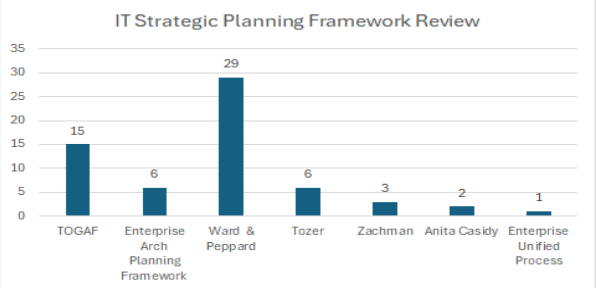
An analysis of the object or context of the organisation's business field classification, based on KBLI (Indonesian Standard Industrial Classification), which is the focus of the research shows a wide variety of sectors:

a. The Education sector is the most frequently studied object, with 23 articles. This indicates the increasing attention of educational institutions towards strengthening IT strategic planning.
b. The Human health and social activities sector is in second place, with 9 articles, followed by the other services sector in third place, with 5 articles.
c. The public/government sector also received special attention, reflected in the number of 8 articles.

This finding shows that the implementation of IT strategy is still untouched in the implementation of IT strategic planning activities from 21 sectors, namely sectors that still occupy a value of 0, so that it has the opportunity to be implemented in IT strategic planning.

2. Review of the framework used

In the review of frameworks used in IT strategic planning, several framework approaches are seen, as shown in the figure below:



Source : (Research Results, 2025)

Figure 2. Review of IT strategic planning frameworks

From the analysis of the reviewed literature, it can be seen that several frameworks are predominantly used in developing IT strategic planning approaches. The Ward & Peppard framework emerged as the most frequently used

Accredited Rank 2 (Sinta 2) based on the Decree of the Dirjen Penguatan RisBang Kemenristekdikti No.225/E/KPT/2022, December 07, 2022. Published by LPPM Universitas Nusa Mandiri

VOL. 11. NO. 3 FEBRUARI 2026
P-ISSN: 2685-8223 | E-ISSN: 2527-4864
DOI: 10.33480/jitk.v11i3.7068

with 29/62 articles (47%), TOGAF was second, with 15/ 62 articles (24%), these two frameworks show their popularity in the context of IT strategic planning. In addition, some studies adopted other approaches such as Enterprise Architecture Planning Framework (EAPF) and Tozer with 6/62 articles eachs (10%), Zachman with 3/62 articles (5%), Anita Cassidy with 2/62 articles (3%), and Enterprise Unified Process with 1 article (2%).

3. Review of methods used

In the review of methods used in IT strategic planning, several method approaches were seen, as shown in the table below:

Table 6. Review of methods used in IT strategic planning

No	Method Name	Reference	Number
1	Strategic Management	[28] [37]	2
7	Critical Success Factor (CSF)	[2] [6] [13] [14] [15] [16] [17] [19] [21] [24] [26] [31] [42] [45] [46] [47] [51] [52] [59] [60] [61]	21
8	PEST	[5] [11] [13] [14] [15] [16] [17] [24] [26] [31] [32] [42] [43] [46] [47] [48] [49] [51] [52] [55] [56] [59] [60]	23
9	SWOT	[1] [2] [5] [6] [9] [11] [13] [16] [17] [18] [25] [26] [29] [31] [32] [36][37] [39] [42] [45] [46] [47] [48] [49] [50] [51] [52] [54] [55] [56] [59] [60] [61]	34
10	Porter's Five Forces	[11] [15] [31] [32] [42] [43] [47] [51] [56]	9
11	COBIT	[2] [16] [20] [41]	4
12	ITIL	[16]	1
13	BSC	[2] [5] [13] [15] [16] [17] [19] [29] [33] [45] [50] [58]	12
14	Mc Farlan Strategic Grid	[2] [5] [11] [13] [14] [21] [24] [26] [31] [32] [46] [47] [49] [51] [52] [55] [56] [59] [60] [61]	20
15	Value Chain	[9] [11] [13] [14] [16] [21] [23] [26] [27] [31] [36] [41] [42] [46] [47] [48] [49] [51] [52] [55] [56] [59] [60] [61]	24
16	PESTLE	[22] [24] [47]	3
17	Ansoff Matrix	[22]	1
18	CMMI	[16]	1
19	Gap Analysis	[17]	1
20	BPM (Busis Process Mgmnt)	[14] [18]	2
21	BPMM (Buss Process Mgmt Maturity)	[18]	1
22	Roadmapping	[9] [11] [45]	3

Source : (Research Results, 2025)

The analysis of the methods used in preparing IT strategic planning, which is the focus of the research, which shows a considerable variation in methods with a total of 22 methods, is analysed as follows:

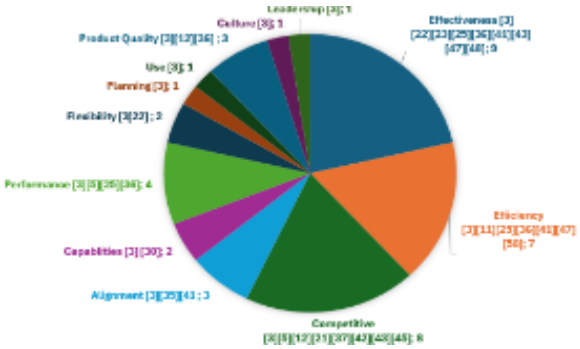
a. In the literature conducted from 62 articles, 34 articles are articles that implement IT strategic planning.
   1) A total of 34 articles use the SWOT method, the most widely used method.
   2) The value chain method is in second place, with 24 articles, followed by the PEST method in third place with 23 articles, the critical success factor (csf) method with 21 articles, the Mc. Farlan strategic grid method with 20 articles
   3) In addition to articles that discuss implementation, there are 15 articles that discuss systematic literature review (SLR).

b. Other methods used in IT strategic planning such as BSC (balanced score card) method with 12 articles, Porter's Five Forces method with 9 articles, survey method with 6 articles, design science research method with 5 articles, COBIT method with 4 articles, roadmapping method and PEST method with 3 articles each, BPM method and strategic management method with 2 articles each.

The findings also show that other methods are also used in IT strategic planning, where each method such as ansoft matrix, CMMI method, gap analysis method, BPMM method with a total of 1 article. so it has the opportunity to be implemented in IT strategic planning.

4. Review of Benefit Factors

The benefit factor obtained is an indicator of success in the implementation of IT strategic planning. Of the 62 articles carried out literature synthesis, the following results were obtained:



Source : (Research Results, 2025)

Figure 3. IT strategic planning benefit factors

Based on the results of this synthesis, it was found that there are 12 main benefit factors that contribute to the successful implementation of IT Strategic Planning, analysed as follows:

a) Effectiveness is the most mentioned factor in the literature with a total of 9 articles. Effectiveness reflects the level of success of the IT strategy in achieving the set goals.
b) Efficiency is also a major concern in the literature with 7 articles. Efficiency highlights the organisation's ability to manage IT resources-both infrastructure, budget, and manpower-optimally in strategy implementation.
c) Competitive Advantage, this factor shows the important role of IT strategy in increasing the competitiveness of the organisation with a total of 7 articles, strategically designed can support product, service, and process innovation.
d) Alignment, the concept of business-IT alignment is a key pillar in IT strategic planning with 3 articles. This may be due to the fact that most research focuses more on measuring results than the alignment process itself.
e) Capabilities, the ability of the organisation to implement the strategy, both in terms of infrastructure, human resources, and technology, was raised in 2 articles.
f) Performance, performance as an indicator of the success of IT strategy is reflected in articles that discuss the output and outcome of IT strategy both financially and operationally with a total of 4 articles.
g) Product Quality, related to the quality of IT results resulting from the impact of IT strategic planning with a total of 3 articles.
h) Flexibility, is the ability of the strategy to respond quickly and effectively to environmental changes with a total of 1 article.
i) Minor factors (Flexibility, Planning, Use, Culture, Leadership), the other five factors only appear in 1 article each. For example, flexibility, is the ability of the strategy to respond to environmental changes quickly and effectively, leadership is the role of leadership that determines the direction and success of the strategy, as well as culture related to organisational readiness has not been highlighted much in the literature.

5. Review of IT strategic planning principles factors

Principles in IT strategic planning are the basic rules, guiding values, or main rules used as a foundation in designing and implementing IT strategies to align with the needs an
d business objectives of the organisation [41]. From 62 articles conducted literature synthesis, the following results were obtained:

Tabel 7. Factors of IT strategic planning principles

No	Factor	Reference	Number
1	Outcome oriented	[41]	1
2	Measaurable	[41]	1
3	Efficient	[3] [35] [41]	3
4	Effective	[3] [41] [47] [48]	4
5	Realistic	[41]	1
6	Consistent	[41]	1
7	Synergic	[41]	1
8	Innovative	[41]	1
9	Compliance	[41] [5]	2
10	Monitored	[30] [35] [41] [58]	4
11	Strategic Objective	[35][41][58]	3

Source : (Research Results, 2025)

Based on the results of this synthesis, it was found that there are 11 main factors that contribute to the principles of IT strategic planning, analysed as follows:

a) Effective, is the most frequently mentioned factor with a total of 4 articles. It refers to the extent to which the IS/IT strategy is able to produce the expected outputs and outcomes according to organisational goals.
b) Monitored, is monitoring or monitoring is key in assessing the development and success of IT strategy implementation, mentioned with a total of 4 articles.
c) Efficient, emphasises that IT strategic planning should use resources optimally - in terms of budget, manpower, and time, referred to by the number of 3 articles.
d) Strategic Objective, this factor shows the importance of alignment between IT strategy and the overall strategic objectives of the organisation, referred to by the number of 3 articles.
e) Compliance, is compliance with standards and regulations such as ISO/IEC 27001, COBIT, or data protection regulations (UU PDP). Compliance keeps IT running according to law and ethics, especially in terms of data and information security, mentioned in 2 articles.
f) Factors with Low Frequency with a total of 1 article, such as: Outcome Oriented, which focuses on the end result, not just the process or output. Measurable, success indicators must be quantitatively measurable. Realistic, IT strategic planning must be rationally

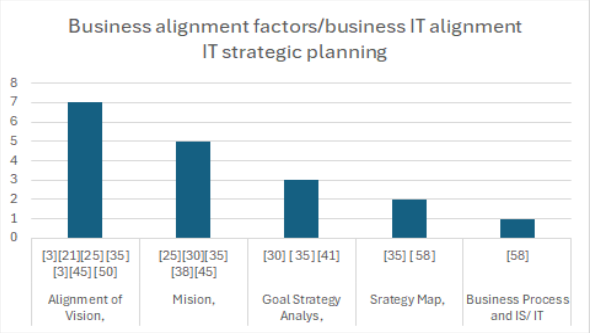
Accredited Rank 2 (Sinta 2) based on the Decree of the Dirjen Penguatan RisBang Kemenristekdikti No.225/E/KPT/2022, December 07, 2022. Published by LPPM Universitas Nusa Mandiri

VOL. 11. NO. 3 FEBRUARI 2026
P-ISSN: 2685-8223 | E-ISSN: 2527-4864
DOI: 10.33480/jitk.v11i3.7068

achievable based on organisational capabilities. Consistent, IT strategic planning must be consistent with overall organisational policy and direction. Synergic, synergy between the IT department and other business units. Innovative, IT strategic planning should encourage technological and process innovation.

6. Review of business alignment factors

The concept of business-IT alignment, is the compatibility between the goals, processes and strategies of the business organisation and the planning and implementation of information technology (IT). This alignment aims to ensure that IT investments and operations directly support the achievement of business objectives, improving operational efficiency, competitive advantage and organisational innovation. Some factors of business alignment, as seen in the table below:



Source : (Research Results, 2025)

Figure 4. Review of business and IT alignment factors

Based on the results of this synthesis, it was found that there are 5 main factors of business and IT alignment, which contribute to IT strategy planning, analysed as follows:

a) Alignment of Vision, this factor is the most dominant with a total of 7 articles, aligning the organisation's vision with the IT vision ensures that every technology initiative contributes directly to the long-term direction of the organisation. Without this alignment, IT strategic projects risk being irrelevant to the organisation's strategic goals.

b) Mission, the alignment of the organisation's mission with IT's role and direction is a fundamental stage in strategy. The mission describes the purpose of the organisation's existence, and IT needs to act as an enabler to realise the mission, this factor is referred to in 5 articles.

c) Goal Strategy Analysis, strategic goal analysis is an attempt to map the strategic needs of the business into IT solutions. The analysis helps organisations identify priority areas in IT development and avoid non-strategic investments, this factor is mentioned in 3 articles.

d) Strategy Map, a strategy map is a visualisation of the relationship between strategic objectives and how IT activity initiatives support the organisation. Strategy maps are useful for cross-unit communication, as well as monitoring and evaluating the overall IT strategy, this factor is mentioned in 2 articles.

e) Business Process and IS/IT, the strategic alignment of IT with business processes is a concrete form of shared vision and mission, including the integration of information systems with business workflows, automation, and digitalisation of processes, this factor is mentioned in 1 article.

7. Review of Organisational capability factors

The Organisational Capability factor in IT Strategic Planning refers to the extent to which the organisation has the internal capabilities to support the successful implementation of the IT strategy. This factor includes the organisation's ability to manage IT resources, organisational structure, HR competencies, management processes, and technology readiness. Some of the organisational capability factors, among others, are as shown in the table below:

Table 8. Organisational / workplace capability factors of IT strategic planning

No	Factor	Reference	Number
1	Leadership	[30]	1
2	Competency	[30]	1
3	Resources	[30]	1
4	Change Management	[30]	1
5	Culture	[30]	1
6	Governance	[30] [41] [58]	3
7	Awareness	[30]	1
8	Strategy	[30] [35] [41] [58]	4
9	Infrastructure	[30] [41] [58]	3
10	Security	[30] [58]	3

Source : (Research Results, 2025)

Based on the results of this synthesis, it was found that there are 10 main factors of organisational capabilities that contribute to IT strategic planning, analytically found as follows:

a) Strategy, the strategy factor has the highest number of references with 4 articles, indicating that the clarity of IT strategy integrated with business strategy is a key pillar in the success of IT strategic planning. Without a clear strategic direction, organisations tend

to experience a gap between IT expectations and implementation.

b) Governance, IT governance emphasises decision-making structures, policies, and control mechanisms in managing investments and risks, referred to by the number of 3 articles.

c) Infrastructure, a strong IT infrastructure (network, hardware, software) is the backbone of IT strategy implementation. Without adequate infrastructure, the strategy will not run effectively, referred to by the number of 3 articles.

d) Security, information security is becoming an increasingly crucial aspect, especially in the digital age and cloud computing. IT strategy must consider security as an integral part, referred to by the number of 3 articles.

e) Low frequency factors with a total of 1 article, such as: Culture, organisational culture determines the level of acceptance and adaptation to IT changes. A culture that supports innovation will accelerate the success of IT strategy implementation. Change Management, the organisation's ability to manage change is key in implementing new strategies. Weak change management can lead to resistance and failure. Competency & Resources, employee competence and adequate resources (financial and human) greatly affect the quality of IT strategy planning and implementation. Leadership, the support and involvement of top leadership provides the direction, legitimacy, and resource allocation required in the IT strategy. Awareness, awareness of the importance of IT's role in the business determines the effectiveness of the strategy. Without awareness, IT investment can be considered a cost, not a strategic asset.

8. Review of component model factors

The component model in IT Strategic Planning describes the key elements that must be analysed and aligned to ensure that the IT strategy effectively supports the organisation's business goals and direction. In general, this model consists of several key components, as shown in the following table:

Table 9. Factors of the IT strategic planning component model

No	Factor	Reference	Number
1	IT Governance	[30] [58]	3
2	Technological gap	[35] [58]	2
3	Enterprise Architecture	[35] [58]	2
4	IT4 Management Model	[23][30] [58]	3
5	IT Strategy	[35] [58]	3
6	Quality Criteria	[3] [58]	2
7	ICT Service Management	[35] [58]	2
8	Data Centre Infrastructure	[35] [58]	2
9	Strategic/ Road Map	[23] [30] [35] [58]	4

Source : (Research Results, 2025)

Based on the results of this synthesis, it was found that there are 9 main factors of the component model that contribute to IT strategy planning, analysed as follows:

a) Strategic/Road Map, this factor appears the most with a total of 4 articles This shows that long-term planning and strategic roadmaps are very important in directing IT implementation to stay in sync with the organisation's business goals. Roadmaps provide clear timeframes, milestones, and priorities for digital transformation.

b) IT Governance, IT governance ensures that IT decision-making, oversight, and accountability are within a standardised and controlled framework, mentioned in 3 articles.

c) IT4 Management Model, management models such as IT4IT offer a structured approach to managing the IT service lifecycle. The presence of this model supports best practices in operational and strategic integration, referred to in 3 articles.

d) IT Strategy, IT strategy should outline how technology is used to support the overall business strategy, involving analysis of the needs, challenges and opportunities of new technologies, mentioned in 3 articles.

e) Enterprise Architecture, EA is the foundation for designing IT structures to support current and future business needs. This concept is closely related to system integration, standardisation, and interoperability, mentioned in 2 articles.

f) Technological Gap, identifying and addressing technological gaps is crucial to ensure the readiness of IT infrastructure and resources to support strategic initiatives, mentioned in 2 articles.

g) Quality Criteria, quality aspects in IT strategic planning include information-related criteria, such as: effectiveness, efficiency, reliability, security, and user satisfaction with IT systems, mentioned in 2 articles.

h) ICT Service Management, good IT service management ensures continuity, efficiency, and continuous improvement of IT services provided to users, mentioned in 2 articles.

Accredited Rank 2 (Sinta 2) based on the Decree of the Dirjen Penguatan RisBang Kemenristekdikti No.225/E/KPT/2022, December 07, 2022. Published by LPPM Universitas Nusa Mandiri

VOL. 11. NO. 3 FEBRUARI 2026
P-ISSN: 2685-8223 | E-ISSN: 2527-4864
DOI: 10.33480/jitk.v11i3.7068

i) Data Centre Infrastructure, Reliable data centre infrastructure supports data management efficiency and strategic IT operational continuity, mentioned in 2 articles.

CONCLUSION

This study systematically reviewed 62 selected articles on Information Technology Strategic Planning (ITSP) published between 2015–2024, following the PRISMA 2020 methodology. The synthesis integrates perspectives from multiple frameworks (TOGAF, COBIT, Ward & Peppard), organizational contexts (based on KBLI sectors), and key success factors.
The Ward & Peppard framework emerged as the most frequently used with 29/62 articles (47%), TOGAF was second, with 15/ 62 articles (24%), these two frameworks show their popularity in the context of IT strategic planning. The results of this study provide the main contribution in compiling a map of IT strategic literature across KBLI sectors that have not been studied much before, besides that it can also provide a theoretical and practical basis for researchers and practitioners who want to develop or evaluate IT strategies in organisations, especially there are still business sectors that have not seen the implementation of IT strategic planning. Future research is recommended to focus on sectors that are still untouched, as well as empirical testing of the integration of hybrid or adaptive frameworks in local organisations.

Limitations and Future Work, Despite its methodological rigor, this study has several limitations that should be acknowledged: Database Coverage and Time Window — The review was limited to publications indexed in Scopus, Web of Science, IEEE Xplore, ACM DL, ScienceDirect, and SpringerLink, within the 2015–2024 window. Studies outside this period or in non-indexed venues may contain relevant insights not captured here. Language Restriction — Only articles published in English and Indonesian were included. This may exclude high-quality studies published in other languages, potentially introducing language bias. Sectoral Scope and Depth While this study provides KBLI-based sectoral insights, deeper comparative analyses across industries (e.g., private vs. public, local vs. global organizations) remain limited. Future work should expand on these dimensions to strengthen contextual understanding.

REFERENCE

[1] A. Harits, R. Gernowo, and D. E. Suseno, "Adaptation of Information Systems Strategic Planning of Universities Using COBIT 2019 in Post Covid-19," *J. Sci. Technol.*, vol. 11, no. 2, pp. 339–350, 2022, doi: 10.23887/jstundiksha.v11i2.48365.

[2] M. R. Aziz, C. Rudianto, and H. P. Chernovita, "Information Systems / Information Technology Strategic Planning Using the Open Group Architecture Framework Development Method," vol. 7, pp. 59–70, 2023, [Online]. Available: https://doi.org/10.23887/ijnse.v7i1.55746

[3] E. Kamariotou and F. Kitsios, "Information Systems Strategy and Strategy-as-Practice: Planning Evaluation in SMEs," *J. Bus. Strateg. Technol.*, vol. 3, 2019, doi: 10.1002/jbst.2024.06.013.

[4] B. Suhartono, T. Sutikno, and I. Riadi, "Review Framework and Best Practise of COBIT 2019 Standard for IT Governance Implementation," *J. Inf. Syst.*, vol. 12, no. 1, 2025, doi: 10.30656/jsii.v12i1.9926.

[5] J. Luftman, "Assessing IT/Business Alignment and its Impact on IT Business Value," *J. Inf. Technol.*, vol. 32, no. 1, pp. 17–34, 2017, doi: 10.17705/1CAIS.00414.

[6] J. Peppard and J. Ward, "Mind the Gap: Diagnosing the Relationship between IT and Business," *J. Strateg. Inf. Syst.*, vol. 13, no. 2, pp. 157–180, 2016, doi: 10.1016/S0963-8687(99)00013-X.

[7] M. J. Page *et al.*, "The PRISMA 2020 statement: an updated guideline for reporting systematic reviews," *BMJ*, vol. 372, p. n71, 2021, doi: 10.1136/bmj.n71.

[8] A. Rai and V. Sambamurthy, "Digital Transformation and IT Strategy: The Influence of Emerging Technologies," *Inf. Syst. Res.*, vol. 30, no. 2, pp. 343–359, 2019.

[9] C. B. of S. (BPS), *Indonesian Standard Industrial Classification (KBLI)*. 2020. [Online]. Available: https://oss.go.id/informasi/kbli-berbasis-risiko

[10] M. F. Widianto and H. H. Solihin, "SYSTEMATIC LITERATURE REVIEW: PERENCANAAN STRATEGIS SISTEM INFORMASI DAN TEKNOLOGI INFORMASI PT. KEBERLANJUTAN STRATEGIS INDONESIA," in *Prosiding Seminar Sosial Politik, Bisnis, Akuntansi dan Teknik*, 2022, pp. 317–325.

[11] G. S. Bernadus, P. L. Sri, U. B. Alexius, and A.

R. Aedah, "Realization of the Benefits and Determinants of Information Systems Strategic Planning for Higher Educations in Indonesia using Systematic Literature Review.," *J. Adv. Res. Dyn. \& Control Syst.*, vol. 12, no. 6, pp. 2552–2563, 2020.

[12] G. S. Bernadus, A. R. Aedah, P. L. Sri, and U. B. Alexius, "Systematic review of the builder method and product of the information systems strategic planning at higher education institutions in Indonesia," *J. Adv. Res. Dyn. Control Syst.*, vol. 12, no. 06, 2020, [Online]. Available: http://ur.aeu.edu.my/767/1/JARDCSJune2020-2-10.pdf

[13] A. S. Nugroho, W. W. Winarno, and H. Al Fatta, "Strategic information systems planning and information technology for schools," *Widyagogik J. Prim. Sch. Educ. Learn.*, vol. 8, no. 1, pp. 1–7, 2020, doi: 10.21107/widyagogik.v8i1.8250.

[14] A. Ma'sum and Ernawan, "Preparation of an Information Technology Master Plan Using the TOGAF Enterprise Architecture Framework: Case Study of PT A, Wijaya Karya (Persero) Tbk," *Formosa J. Appl. Sci.*, vol. 1, no. 6, pp. 1137–1156, 2022, doi: 10.55927/fjas.v1i6.1849.

[15] M. Prianti and F. S. Papilaya, "Strategic planning of information systems at the GKJ Synod using the Enterprise Architecture Planning framework," *J. Inf. Syst. Informatics*, vol. 3, no. 2, pp. 142–154, 2021, doi: 10.33557/journalisi.v3i2.147.

[16] R. A. Teubner and J. Stockhinger, "Literature Review: Understanding Information Systems Strategy in the Digital Age," *J. Strateg. Inf. Syst.*, vol. 29, no. 3, p. 101642, 2020, doi: 10.1016/j.jsis.2020.101642.

[17] M. Ardiansyah and A. Wahyudi, "Strategic Information Systems Planning Analysis Using the Ward and Peppard Method: A Case Study," *J. Inf. Syst. Informatics*, vol. 6, no. 4, pp. 2745–2760, 2024.

[18] N. S. Meutia, E. Sulistiyani, R. P. N. Budiarti, and R. Sari, "Enterprise Architecture Framework in Higher Education: Systematic Literature Review," *Appl. Technol. Comput. Sci. J.*, vol. 5, no. 2, pp. 112–118, 2022, [Online]. Available: https://journal2.unusa.ac.id/index.php/ATCSJ/article/view/3751

[19] V. Dear, N. Dedi, A. S. Mardiani, and H. Nugroho, "Trends in IT Strategy Implementation: A Systematic Review Across Education and Industry (2000-2022)," *Int. J. Informatics Commun. Technol.*, vol. 28, no. 6, pp. 1643–1651, 2023, doi: 10.18280/isi.280622.

[20] R. A. Purawidjaja, G. Chudra, and A. Yohannis, "Comprehensive study of information technology strategy components in global ICT companies utilising PESTLE and Ansoff Matrix," *Synchronous J. Res. Informatics Eng.*, vol. 8, no. 4, pp. 2397–2409, 2024, doi: 10.59188/eduvest.v4i8.1737.

[21] I. N. A. P. Siboro, G. Chudra, A. Yohannis, and J. Siallagan, "A Systematic Literature Review of Information Technology Strategy Components in Higher Education Institutions," in *2023 International Conference on Networking, Electrical Engineering, Computer Science, and Technology (IConNECT)*, 2023, pp. 236–241. [Online]. Available: https://repository.pradita.ac.id/id/eprint/303/1/1570921276-Irene Nur Arta Purba Siboro.pdf

[22] S. Anardani, L. S. STT, and Y. Yunitasari, "Analysis of Information Systems Strategic Planning with Tozer Methodology at Sabisu Interior," *Bull. Comput. Sci. Res.*, vol. 3, no. 4, pp. 297–303, 2023, doi: 10.47065/bulletincsr.v3i4.269.

[23] S. Gunanto and N., "PREPARATION OF STRATEGIC PLAN OF INFORMATION SYSTEM AND INFORMATION TECHNOLOGY (SI/TI) BUSINESS ORGANISATION OF STKIP MUHAMMADIYAH KOTABUMI USING WARD PEPPARD," *J. Inform.*, vol. 19, no. 2, pp. 109–115, 2019, doi: 10.30873/ji.v19i2.1625.

[24] Tanto, R. Meilano, D. Stiawan, and R. F. Malik, "Strategic Planning for Polytechnic Information Systems with an Enterprise Architecture Planning Approach," *J. Phys. Conf. Ser.*, vol. 1845, no. 1, p. 12057, Mar. 2021, doi: 10.1088/1742-6596/1845/1/012057.

[25] C. Slamet, A. binti Abdul Rahman, and M. Ali Ramdhani, "Concepts of Strategic Management of Information Technology," *J. Phys. Conf. Ser.*, vol. 1175, p. 12264, 2019, doi: 10.1088/1742-6596/1175/1/012264.

[26] G. T. Pranoto, "IS/IT STRATEGY DEVELOPMENT IN VARIOUS BUSINESS FIELDS: STATE OF THE ART," *J. Inf. Syst. Sci. Technol.*, vol. 4, no. 2, 2022, doi: 10.31326/sistek.v4i2.1275.

[27] S. H. Lawu and H. Ali, "Strategic Planning of Information Systems and Information

Technology with a Model Approach: Enterprice Architecture, Ward And Peppard," *Indones. J. Comput. Sci.*, vol. 1, no. 1, pp. 53–60, 2022, doi: 10.31294/ijcs.v1i1.1162.

[28] L. Sugiarto and Widada, "Analysis of the Information System with Ward & Peppard Method for the Strategic Business Plan of the College," in *Proceedings of the 1st International Conference on Recent Innovations ICRI - Volume 1, 3036-3042, 2018 , Jakarta, Indonesia*, 2018, pp. 3036–3042. doi: 10.5220/0009946330363042.

[29] R. Aloysius Romein and G. Chudra, "A REVIEW ON IT STRATEGY THEMES OF ACCOUNTING FIRMS," *Eduvest - J. Univers. Stud.*, vol. 4, no. 8, pp. 7196–7206, Aug. 2024, doi: 10.59188/eduvest.v4i8.1737.

[30] Y. M. ; Maulana and D. Nincarean, "Business-IT Alignment through Enterprise Architecture in a Strategic Alignment Dimension: A Review," *Register*, vol. 9, no. 1, pp. 55–67, 2023, doi: 10.26594/register.v9i1.3084.

[31] L. Fitriani and H. Nugroho, "Information Technology Strategy for Micro, Small, and Medium Enterprises in the Era of Industry 4.0," *IJAIT (International J. Appl. Inf. Technol.*, vol. 6, no. 1, pp. 111–119, Jul. 2023, doi: 10.25124/ijait.v6i02.5975.

[32] M. Ibrohim and A. S. Girsang, "Designing IT Blueprint with TOGAF for Information Technology Development," *Int. J. Mech. Eng. Technol.*, vol. 10, no. 03, pp. 837–854, 2019, [Online]. Available: https://www.semanticscholar.org/paper/82cfef7b4b6037840000f216bbd09ce9dc8f5289

[33] N. D. Lynn and A. Emanuel, "Strategic Information Systems Planning for Higher Education in Uganda," *IOP Conf. Ser. Mater. Sci. Eng.*, vol. 1096, no. 012015, p. null, 2021, doi: 10.1088/1757-899X/1096/1/012015.

[34] M. R. Bintang, F. Samopa, and R. Ambarwati, "Strategic planning IS/IT TO improve business competitiveness in public hospital," vol. Vol. 6, no. No. 1, February, pp. 83–92, 2021, [Online]. Available: https://www.semanticscholar.org/paper/46aecd620fbc72ca1e08323a4859d93eb17e5360

[35] P. Widiadnyana and P. V. Andreyana, "Architectural Design of Academic Information Systems at XYZ School Using TOGAF ADM," *JITTER Sci. J. Technol. Comput.*, vol. 4, no. 3, 2023, doi: 10.24843/jtrti.2023.v04.i03.p05.

[36] R. Meilano *et al.*, "Strategic Planning for Polytechnic Information Systems with an Enterprise Architecture Planning Approach," *J. Phys. Conf. Ser.*, vol. 1845, p. null, 2021, doi: 10.1088/1742-6596/1845/1/012057.

[37] L. Y. Astri and F. Gaol, "Information System Strategic Planning with Enterprise Architecture Planning," *CommIT J. Commun. Inf. Technol.*, vol. 7, pp. 23–27, 2013, doi: 10.21512/COMMIT.V7I1.580.

[38] T. Widayanti and I. Zulkarnaen, "Information Systems Strategic Planning Using the Ward and Peppard Method," *ADI Internaltional Conf. Ser.*, vol. 4, pp. 52–57, 2022, doi: 10.34306/conferenceseries.v4i1.691.

[39] N. P. Desyana and M. N. Sitokdana, "Implementation of Ward and Peppard in Information Systems Strategic Planning (Case Study: Hotel Kartika Bandungan)," *J. Inf. Syst. Informatics*, vol. 4l, pp. 784–797, 2022, doi: 10.51519/journalisi.v4i3.284.

[40] N. Dharmayanti and E. Suryani, "Strategic Planning for System and Information Technology Using Anita Cassidy in PT. XYZ," *IPTEK J. Proc. Ser.*, vol. 5, pp. 559–568, 2019, doi: 10.12962/j23546026.y2019i5.6431.

[41] I. M. C. Girinata; and E. Suryani, "Strategic Planning for Systems & Information Technology of XYZ Hospital Using Ward and Peppard Method," *IPTEK J. Proc. Ser.*, vol. 5, pp. 452–459, 2019, doi: 10.12962/j23546026.y2019i5.6392.

[42] A. G. Bertaqwa, Sunardi, and U. Hasanah, "Optimizing University Plans through Information System Strategic Planning," *J. Comput. Sci. Informatics Eng.*, vol. 7, no. No. 1, June, pp. 22–30, 2023, doi: 10.29303/jcosine.v7i1.458.

[43] M. Rizky *et al.*, "Use Of The Ward And Peppard Method In Planning Strategic System Information: Systematic Literature Review," *Int. J. Ind. Innov. Mech. Eng.*, vol. 1, no. No. 4, pp. 42–53, 2024, doi: 10.61132/ijiime.v1i4.93.

[44] Y. A. Singgalen, "Strategic Planning of Morotai Tourism Village Information System (SIDEWITA) Using Ward and Peppard Method," *J. Inf. Syst. Informatics*, vol. 5, no. 1, pp. 134–149, 2023, doi: 10.51519/journalisi.v5i1.442.

[45] M. Faizal and H. P. Chernovita, "Strategic Planning of Information Systems with Ward and Peppard Method Case Study of Salatiga

City Youth and Sports Office," *J. Inf. Syst. Informatics*, vol. 4, no. 3, pp. 795–809, 2022, doi: 10.51519/journalisi.v4i3.281.

[46] Y. R. Kaho and A. R. Tanaamah, "Strategic Planning of Information Systems Using IT Balanced Scorecards on KSU Talenta," *J. Inf. Syst. Informatics*, vol. 4, no. 1, pp. 145–155, 2022, doi: 10.51519/journalisi.v4i1.231.

[47] M. I. Zabartih and W. Widhiarso, "Information Technology Strategic Plan for Hospital using Ward and Peppard Model," *J. Multidiscip. Acad. Pract. Stud.*, vol. 1, no. 4, pp. 353–367, 2023, doi: 10.35912/jomaps.v1i4.1791.

[48] C. Florentine and H. P. Chernovita, "Strategic Planning of Information Systems and Information Technology by applying the Tozer Methodology to The Lampung Betacom Pawnshop," *J. Inf. Syst. Informatics*, vol. 4, no. 1, pp. 77–91, 2022, doi: 10.51519/journalisi.v4i1.224.

[49] J. A. Hidayat, E. Utami, and A. D. Hartanto, "Maturity Level Analysis of Strategic Planning of Local Government Information Systems in Indonesia: Systematic Literature Review," *Syntax Lit. - Indones. Sci. J.*, 2021, [Online]. Available: https://doi.org/10.36418/syntax-literate.v6i6.2437

Accredited Rank 2 (Sinta 2) based on the Decree of the Dirjen Penguatan RisBang Kemenristekdikti No.225/E/KPT/2022, December 07, 2022. Published by LPPM Universitas Nusa Mandiri