

Review of the reasons for using Information System Strategic Planning at Higher Educations in Indonesia

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ABSTRACT:Research related to the reasons for using the Information System Strategic Planning in Higher Education in Indonesia is still ongoing. The use of the Strategic Planning Information System is felt to be very important for Higher Education because it can provide great benefits in its survival to be successful. The desired success of Higher Education is seen in the reasons why to use it. Some reasons for using this Information System Strategic Planning include seen in the desire to achieve a business strategy, the desire to make Information System Strategic Planning as the basis for developing information systems/information technology, the desire to achieve the realization of Information System Strategic Planning benefits, the desire to identify information system needs/information technology and the desire to prevent implementation failure due to lack or lack of good planning. Many research results related to this matter have been produced, but only a few of them discuss exploration related to the accumulation of details of the number of reasons for their use. This exploration activity is useful to get the facts and phenomena related to the reasons for using the Information System Strategic Planning. This study aims to review in the form of an exploration of the accumulation of reasons for using the Information System Strategic Planning in Higher Education in Indonesia using the Systematic Literature Review method in the period 2009 to 2019. The results of this study are in the form of a synthesis of the reasons for using the Information System Strategic Planning.

KEY WORD: Review, Reason for using, Information System Strategic Planning

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I. INTRODUCTION AND LITERATURE REVIEW

Higher Education as an organization has desires ranging from survival to success [1] even has advantages. This desire can be an organizational goal. Many goals are carried out to achieve these desires under the conditions of the resources owned. Organizations with good resource conditions will find it easier to achieve their desires than organizations with few resources. Efforts to achieve the desires of the organization one of which is to plan all the resources in its business activities to be able to set business strategies, information systems strategies, and information technology strategies [2]. All of these strategies are included in information systems strategic planning (ISSP).

Higher Educations using ISSP in their business activities always utilize all the resources they have for their business purposes, especially information system (IS) and information technology (IT) resources. ISSP is used by Higher Education to be able to achieve its business goals because it is felt that it can provide success [3][4]. There are many reasons why Higher Educations in Indonesia [5] use ISSP, including 5 main reasons, namely wanting to achieve business strategies, as a basis for developing information systems, identifying IS / IT needs, achieving IS / IT benefits realization [6], and failing to implement information systems. The reasons for using ISSP are so fundamental in wanting to achieve the business goals of the Higher Education based on the experience experienced or best practice from other universities.

Some hopes underlie the reasons for the use of ISSP in Higher Education in Indonesia. The reason for using ISSP in achieving business strategies is related to the desire in achieving organizational goals that are formulated in the vision and mission with the hope that it can capture business opportunities, provide benefits in achieving business targets, develop the quality of human resources, IS/IT investment planning that is more directed, improving services to internal and external organizations, and providing institutional guidance in the use of IS. The reason for using ISSP is that ISSP as the basis for IS development provides hope, namely improving business process quality, improving data analysis for better strategy formulation, integration of IS [7] with work units according to needs, and more comprehensive IS documentation. The reason for using ISSP to be

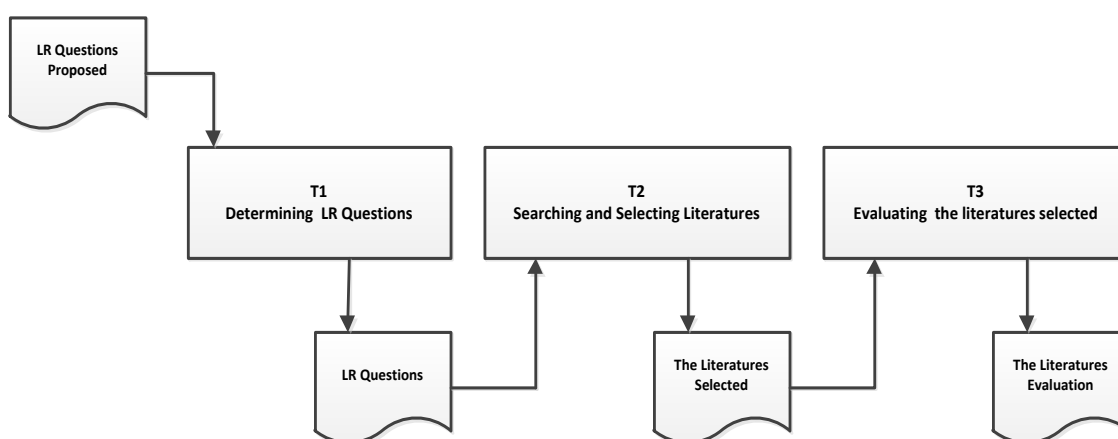
able to identify IS / IT needs provides hope, which is to make it easier in managing resources to produce accurate and needed information for all parties, as well as meeting the IS / IT needs for stakeholders. The reason for using ISSP in achieving IS / IT benefits is the hope of aligning the vision and mission of improving service efficiency and supporting organizational strategic planning, increasing competitive advantage in the face of increasingly competitive competition, improved performance, and improved quality. The reason for using ISSP is because of the failure of the implementation of information systems in the hope that there is good planning in the activities of information system implementation.

There has been a lot of research related to ISSP but there is still little research to review in the form of data accumulation exploration related to the reasons for using ISSP in Higher Education in Indonesia. Exploration of the reasons for the use of ISSP is important in providing information, for consideration of the decision making for Higher Education in achieving the success of its objectives. The purpose of this study is to explore the accumulation of data on the reasons for the use of ISSPs in Higher Education in Indonesia in the period 2009 to 2019 by utilizing the systematic literature review (SLR) method.

II. RESEARCH METHOD

In this study, the final goal is to produce a review of the synthesis of the results of exploration from much of the appropriate literature. To produce this synthesis, several stages of activities are carried out in Figure 1 using the SLR method [8].

Figure 1. SLR Method



This SLR method consists of 3 stages of activities namely stages T1, T2, and T3. Stage T1 is determining LR (Literature Review) questions that determine LR questions proposed to become LR questions. In the T2 stage, translation of LR questions into activities in searching and selecting literature and producing the literature selected. Phase T3 evaluates the literature selected and produces the literature evaluation.

At stage T1, the PICOC (population, intervention, comparison, outcome, and context) approach is used, which plays a very useful role in establishing a criterion and scope for the LR question. Following in table 1 are the criteria and scope of results from the PICOC approach[9] which will provide input in terms of determining LR questions, namely LRQ1: How to explore the reasons for using ISSP in Higher Education in Indonesia. LRQ2: What are the results of the exploration of the reasons for the use of the ISSP.

Table 1. Criteria and Scope of LR Questions

No	Criteria	Scope
1	Population	Some Higher Education in Indonesia
2	Intervention	Reasons for using ISSP
3	Comparison	Variation Reasons for using ISSP in several Higher Educations in Indonesia
4	Outcome	Some reasons for the use of ISSP in Higher Education in Indonesia
5	Context	Review studies related to the reasons for using ISSP in Higher Education in Indonesia

The selection of literature at the T2 stage, in the form of journal articles and proceedings in this study, was carried out using the Google Scholar search engine. The keywords entered are “SISP”, “ISSP” or “Information System Strategic Planning”. The literature search period starts from 2009 to 2019. At the beginning of the search and selection, 64 literature is found. After that, the T3 stage was carried out, which was an evaluation of the initial findings of this search, and produced 55 literature that was considered to meet the criteria of representing a Higher Education and having a clear reason for using ISSP.

III.FINDINGS AND DISCUSSION

In this study, the exploration of the reasons for the use of ISSPs in Higher Education in Indonesia begins with the establishment of 55 pieces of literature in the form of journal articles and proceedings that represent 55 Higher Educations in Indonesia that have clear reasons for using ISSP. The following in table 2 is a description of 55 research objects consisting of 16 provinces in Indonesia and representing 55 Higher Education.

Table 2. Research Objects of Reasons for Using ISSP

No.	Province	Number of Higher Educations	Number of articles
1	Banten	2	2
2	Jakarta	8	8
3	West Java	10	10
4	Central Java	8	8
5	East Java	6	6
6	Bali	2	2
7	West Nusa Tenggara	2	2
8	North Maluku	1	1
9	West Kalimantan	1	1
10	Central Kalimantan	1	1
11	East Kalimantan	3	3
12	Riau	4	4
13	Bengkulu	1	1
14	South Sumatera	2	2
15	Lampung	3	3
16	Jambi	1	1
Total	16	55	55

Table 3 shows the results of exploration in the form of mapping the literature under the 5 groups of reasons for the use of ISSP in Higher Education in Indonesia. Mapping the five reasons for the use of ISSP in the form of synthesis as follows wants to achieve business strategy 38.2%, as a foundation in the development of information systems 20%, can identify IS / IT needs 7.2%, achievement of IS / IT benefits realization 32.8%, and the failure of information system implementation 1.8%.

Table 3. Mapping the Reasons for Using ISSP in Higher Education in Indonesia

No	Reasons for Using ISSP	Reference	Number of articles
1	Want to achieve business strategy	[10][11][12][13][14][15][16][17][18][19][20][21][22][23][24][25][26][27][28][29][30]	21
2	As a foundation in the development of information systems	[31][32][33][34][35][36][37][38][39][40][41]	11
3	Can identify IS / IT needs	[42][43][44][45]	4
4	Achievement of IS / IT benefit realization	[46][47][48][49][50][51][52][53][54][55][56][57][58][59][60][61][62][63]	18
5	The failure of the implementation of information systems	[64]	1

The results of the mapping in Table 3 show that the biggest reason for using ISSP is to achieve business strategy and the smallest reason for using ISSP is the failure of information system implementation. Another reason for using ISSP that is quite large is the achievement of IS / IT benefits realization and as a foundation in the development of information systems. Another reason for using ISSP is that it can identify IS / IT needs.

IV.CONCLUSION

This study aims to review in the form of efforts to explore the reasons for the use of ISSP in Higher Education in Indonesia. The research method used is the SLR method which explores the literature that fits the criteria in the period 2009 to 2019 and produces a synthesis of 5 reasons for the use of ISSP with the greatest percentage value is the desire to achieve business strategies and the smallest is the failure of the implementation of information systems. The results of this exploration are important in helping provide information for decision making in determining the reasons for the use of ISSP in Higher Education.

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