Paper no.2
‘A model for adoption of Strategic Information Systems Planning process in global organization’

Abstract

Strategic information systems planning (SISP) has become a crucial issue in the top level of management. The level of integration between business strategies requires explanation of interrelationships, in order to achieve business goals with the available resources and markets conditions. This research is a holistic examination and evaluation of the SISP process in both ‘X’ Airlines and ‘Y’ bank. The research design involves qualitative method. It covers the literature on SISP, IS integration, a case study approach to understand ‘what’, ‘how’ and ‘why’ in using IS in ‘X’ and ‘Y’. The research discusses existing frameworks, both theoretical and practical, of SISP.

Keywords: SISP, Information systems, Integration, Case study.

1.0 Background of the research

Information Systems Planning (ISP) was defined as “the process of establishing objectives for organizational computing and identifying potential applications that the organization should implement” (Teo and King, 1997, p: 1). The SISP was described as “the analysis of a corporation’s information and processes using business information models together with the evaluation of risk, current needs and requirements” (Pant and HSU, 1999, p: 15). The importance of ISP comes from information systems (IS) as an organizational attempt to increase benefits by efficient applications, business processes reengineering and competitive advantage (Earl, 1996).

There are crucial dimensions to consider for IS strategic planning. These are strategic, organizational, managerial and technology. All these dimensions should be reviewed with attention to organization environment so as to be in parallel collaboration and to enable managing its resources effectively and efficiency. The value of the organization should be clear in order to match it with resource allocation. The strategic plan, which is the result of strategic planning process, needs to be reviewed
as an ongoing process. So is the case, because it is the focal base for implementation decisions. It is said that IS strategy must contain the corporate plan, the role of IS in the organization as management view and the stages of IS maturity and its management (Robson, 1997).

Strategic dimension as a research focus considers many issues such as:

1. Integration is the corporate level problem that needs a corporate strategy, because it meets only an average of 70% of the organization needs as explained by Markus (Mendoza et al, 2006). A study (1997) by CIO Communication Inc. of 301 IT executives ranked IT strategy as first important concern for CIOs (Turban et al, 1997). Nevertheless, a study by the National Computing Centre (NCC) on 420 firms (2003) showed that the number concerned with the strategic issues keeps IT / IS strategy aligned with the business strategy (Turban et al, 2005).

2. Many authors such as Egelhoff (1988), Galbraith (1973), Huber (1989) and Thompson (1967) have applied information processing models on global organization and they conducted that high information processing is important criteria for international business strategies (Earl, 1996).

It is reported that there are many reasons for IS failure; such as negligence of organizational aspect in the SISP frameworks which are more related to technical aspects and which are most of SISP studies; suffer from absence of examining the relationships between organizational aspects and effectiveness of SISP (Lee and Bai, 2003). Moreover, it is mentioned that development's duration, user politics, cost's
estimate, poor integration in planning governmental legislation and IS's groups could be also reasons for IS failure. It is suggested that the future research should focus on the level of analysis that needs to facilitate SISP implementation. Thus, the implementation stage is very important in SISP. So, there is a need to understand this issue in order to make a progress research (Hartono et al, 2003).

1.1 The current gap of the research

Because developing strategies for business or even for IS, as a business part, is difficult, managers look for ways to understand the IS strategy planning nature and ways to evaluate planning process in the current situation (Robson, 1997).

A study by Newkirk, Lederer and Srinivasan (2003) aiming to examine the relationship between comprehensiveness and effectiveness in SISP stages mentioned that too little SISP would be caused by incomplete understanding of external competitive environment, internal organizational environment and emerging information technology. This tends to produce no suitable strategy, because of the absence of the entire suitable alternative. In contrast, too much SISP causes much time spending in a plan. This may lead to planning without covering new changes in both external and internal organizational environments.

All these points of view are considered in an organization of national service, whereas a global organization faces more challenges such as geographical issue and central or de-central control issues. However, there are four issues to be brought together: the managing group of business units, business practices, legacy systems and managers
(Shore, 2006). The difficulty of adoption global IS comes from differences in cultural, localization, economics, political and legal of different countries (Turban et al, 2005).

So, there is potentially room for improvement in the area using empirical case studies to examine and evaluate the SISP process, and to explore the factors that support the implementation bearing in mind that implementation differs from one organization to another, for a variety of reasons, such as culture and business type.

Consequently, progress in this area of research may emerge by applying existing models in practice to identify factors that may support SISP process. The general models of strategic IS consider the whole view which regards business strategies, technologies, internal environments and external environments of an organization. The models of planning process of IS focus more on stages of process. As mentioned in the realistic view, the planning team should be aware of the factors in both types of models. Moreover, the planning team should be deeper in applying different techniques, tools and methodologies that support the planning process. So, the researcher of this dissertation contributes in two ways. Firstly, by developing a combination between two types of models (general, process) via combining benefits, requirements and drivers. Secondly, by developing the framework of IS planning techniques evaluation. This framework supports the planning team to have a wide view of the ability to apply different planning techniques regarding different situations. From these points of view the researcher considers the benefits, requirements, drivers, IS strategies, Business Systems Planning (BSP), techniques, methods and tools to be the conceptual model holders and this is the current research contribution.
1.2 Aim and objectives of the research

The research derives from the importance of IS strategic issues, which may affect the success or failure of a business strategy. By obtaining successful strategy, the organizations may provide with a competitive advantage or keep them to sustain competitive advantage. So the researcher should crucially improve the ability to measure IS/IT strategy fit as successful factor for business strategy. This means to overview the area of SISP. This considers planning, implementation and evaluation processes. Nevertheless, these processes affected by many factors. So, **the aim of this research is to investigate and evaluate the area of SISP and its factors in global organizations, where the study is applied.** The strategic question in the research is what are the factors that affect SISP process in global organizations?

The objectives of the research are:

1. To critically review the normative literature that results in a classification of SISP process, how the consequence of moving from stage of planning to another and what are the general factors that influence this moving.

2. To verify the constraints that influence decision making in SISP in global organizations. In other word, is SISP process exist in global organization, if not why it is not exist and what types of constraints are influencing for both cases exist or not exist of the process.

3. To implement the different approaches to verify and evaluate these factors in the
real life by using multi-methods of data collection in order to describe the situation of SISP process in global organizations and its impact factors.

4. To determine the important factors that impact on SISP process in global organizations, classify them and how they influence each other, and to express possible recommendations and questions for future research.

2.0 Methodology of the research

The case study protocol aims to increase the case research reliability and to control of data collection from single case study by investigator, even if the case is part from multiple-cases.

2.1 Field procedures of the research

With the case study strategy, the real life adoption is important to compare with the research data. Hence the action plan for data collection is crucial in case of change in the data collection environment. Such changes could affect the case quality. Interviewee behaviour and availability of documents from historical archive are examples of such changes. Therefore, this procedure explicit in the action plan of multi cases study. This action plan consists of:

- Identifying the interviewees: this research focusing on SISP which high level of management. So, the interviewees should be executives, planners and project managers. Therefore, IS/IT manager, IS planner, global project
manager, integration project manager, operational manager and marketing manager to be interviewed as major stakeholders in SISP process.

- Identifying data collection methods: as mentioned earlier the interview is primary data collection method. Nevertheless, archived documents, reports and organizational website are examples of other methods could be used. The researcher in this point should be aware of any change in data collection environment such as change in the interview time or cancellation of meeting. The researcher should also prepare timetable of data collection to organize the data collection process. This timetable contains dates, time, interview length and location.

- Ethical issues: in this point the researcher should be aware of the agreement with the interviewees as they return to the organization itself to publish or not the information. At the same time the suitable and full information to the researcher should be obtained to complete the research.

Different methods of data collection and similar questions to different interviewees increase the triangulation of data and avoiding bias in collecting data (Yin, 2003).

2.2 Questions of the case study

There are four levels of questions were developed in order to keep focusing on the data collection and explain the reasons for these questions. These questions work
as prompt to interviewer to be in the right data collection bath, so, they do not relate to interviewees. They also supports interviewer to prepare for interview in advance. Figure 2.1 summarised these questions.

<table>
<thead>
<tr>
<th>Question number</th>
<th>Question</th>
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<tbody>
<tr>
<td>1</td>
<td>What are the factors applied by the case organizations that affect the decision making process for evaluation the adoption of SISP process?</td>
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<tr>
<td>2</td>
<td>What are the factors that associated with SISP process?</td>
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<tr>
<td>3</td>
<td>What are the benefits, requirements and drivers with SISP process adoption?</td>
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<tr>
<td>4</td>
<td>What are the evaluation criteria used by the case organizations through the evaluation of SISP techniques?</td>
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**Figure 2.1: Questions of the research**

### 2.3 Output format of the research

The analysis and output format of empirical data will present after the data collected. Because enormous amounts of data would be collected through data collection process for case studies, the consideration of data output format and
analysis would be helpful. The researcher would parallel the collected data with
the research questions in order to avoid the confusion of organizing the huge of
collected data. This would be completed by connecting the interview questions
with the research questions. This strategy could increase the value of the research
yield.
References


