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Strategic Information Planning: Alignment of IT Planning with Business Planning

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Abstract:- The lives of the human beings has affected by the information technology in their day-today lives, because of its progression. The technology has changed vastly, when time passes and so have the chances.
The demand of increase in IT/IS has made the top management of the more and more complex and difficult. Strategic information systems planning (SISP) is a real way of emerging and upholding the IS/IT systems that support the business operations.

The key aspect of SISP in the changing business scenario examined by the research. Main things for improved business performance are the alignment of the IS/IT plans and the business plans. We can find key aspects of the study in India by triangulation approach.

The Data sets included the questionnaire to the IT and business managers of the three companies. IT and Business Managers views are compared with the literature and the available business documents for consistency to answer the research question.

Questionnaires were sent to the respective IT and a business manager of the three companies. And other data was collected from the three companies.

There was similarity in terms of planning and implementation of the IS/IT and business processes. ERP, SCM and CRM applications are useful to support the business processes.
The Conclusion tells that there is no formal planning process in the three companies.

Keywords:- Strategic information systems planning, Enterprise Resource Planning, Supply Chain Management, Customer Relationship Management

I. INTRODUCTION

1 Introduction :

As in [10] theInformation Technology provides a sense of connectivity that was hard to visualise ten to fifteen years ago. For many years onwards Information Technology is increasingly becoming an integral part of everyone's working and personal life. Information technology has evolved swiftly over recent years providing major advances, providing organizations with various options and opportunities. Opportunities provided the businesses to integrate IT with the business activities.

As in [5]It is better to think that, Information Technology became an "increasingly important part of the ongoing, integral operations of the business".

The business or any type of organizations is not only looking at the use of information technology to support the existing business operations. They are also looking to create new opportunities that will provide a source of competitive advantage.

The use of Strategic Information Systems Planning (SISP) process can address the concerns related with the implementation of IS/IT systems and provide communication between the IS/IT and the business function.

This research appearances into the aspect of alignment of the Information Systems/Information Technology plans and the business plans to improve the business performance. The important feature of the study is to identify the degree of alignment (if any) in the companies based on the use of Information Systems/Information Technology in the company.

The judgment of the results obtained from a detailed questionnaire of the three Indian Software Companies with the available literature is offered as research results. Research results are used to answer the research questions in order to understand the real application of the planning and implementation of the IS/IT systems.

This report is divided into six chapter's namely-Introduction, Literature Review, Methodology [Proposed Solution], Solution Validation and Analysis of the Data, Results and Discussion, Conclusion and Recommendations. The answers to the research questions have been provided in the conclusion.

First chapter of introduction offerings the key terms and ideas in the field of information systems as they are applied in the business.Second Chapter literature review along with the plan of key terms, the position of Strategic Information System Planning and alignment of Information System/Information Technology.

And business planning and the use of applications to support the business objectives have been underlined.Third Chapter methodology [Proposed Solution] designates the methodology taken to conduct the study.

Fourth chapter debates the means of data collection and analysis. Fifth chapter presents the results found from the questionnaire and the published information of the selected three companies as case studies.

Sixth chapter of this paper provides a discussion about the summary of answers found from the analysis and proposals for further research on the topic. Questionnaire answers are presented as the troubled personnel responded them from the companies.

II. LITERTURE REVIEW

2.1 IS/ IT- Business Alignment

For an organization to achieve competitive advantage it is important that the business use IS/IT to support the main business processes and become dependent on IS/IT.

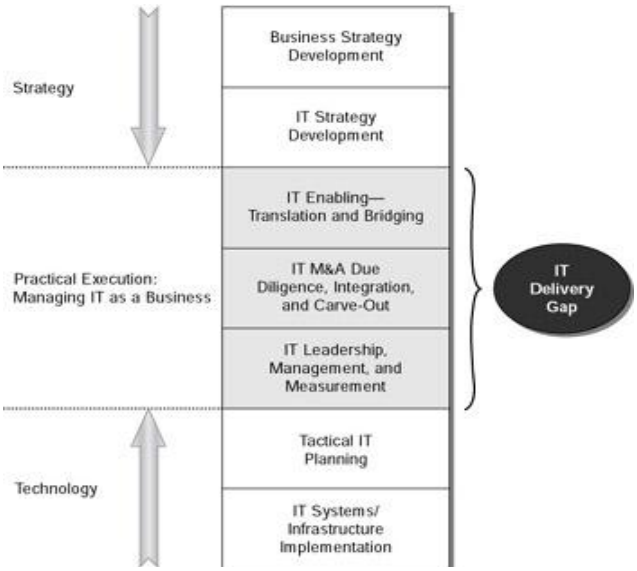

Figure 1: IT'S Delivery Spectrum

Source: Lutchen [2004]

2.2Gap in the research

There is a need for an effective approach to SISP that matches the current position of the organisations. There is a gap in the research reporting about the alignment of the plans to increase business performance. There is a need for more literature about SISP in India and the way organisations integrate their IT/business strategies.

As in [6]It is easy to explore the views of executives with respect to business-IT alignment. The study uses a repertory grid to explore the "nature of social dimension of alignment". As in [6]We can suggests that for business-IT alignment, relationship between the people is more important rather than the strategy. The main purpose of [6] research was to introduce the method of repertory grid to IS researchers. The main purpose of this research is to focus on the strategy and the type of systems used to support the business objectives.

As in [4]Itleads the study on a suitable strategic design for the small and medium enterprises (SME) in India. They established an IT strategic plan for an electrical agreement company to search the application of theory in real life. The study conducted that the small and medium enterprise (SME) business operators don not

identify strategic planning as applicable today-to day running of business activities. Very little research has been conducted for the development of planning in SMEs.

The next section defines the method accepted to report the research question on the alignment of Information Systems/Information Technology plan and the business plans within Indian Software Companies. This is the research gap what i observed during my research.

III. METHODOLOGY [PROPOSED SOLUTION]

This section designates the methodology and the research design accepted for the completion of the research. This chapter of the study starts with the beginning of the research foremost to the research questions based on the research model that designates the purpose of Strategic Information System Planning.

3.1 Initiating the research

Main research question evolved from a series of interesting research questions, followed by sub questions that laid the foundation of this study. Research started with the selection of the area of research leading to the problem of whether there is an alignment between business plan and Information System/Information Technology plan. There has been a lot of research in the area of Strategic Information System Planning that relating to use of Information System for competitive advantage and implementation problems.

The importance of knowledge sharing. However, being unable to locate similar research related to the alignment of Information System/Information Technology. The business plans in the past and the keen interest in this topic led to the research.

3.2 Research Model

Focus on alignment ascends when businesses use IT in main processes and rely on them for survival. Research model describes the purpose of Strategic Information System Planning, which is the alignment of Information System/Information Technology plan and the Business plan. Extent of participation of Information Technology in company's planning process resulting in agreed goals, objectives and strategies.

3.3 Research design

The selected stakeholder's views (people involved in the Strategic Information System Planning) from the company are the emphasis of interest. The learning will be based on what is known about Strategic Information Systems planning connected to the need for alignment between Information System/Information Technology plan and business plan.

The Research design includes gathering and investigating the data and then reportage it consequently. The Examining study will be done using a survey to gather data to response the research question about the arrangement of Information System/Information Technology plans and business strategies.

3.4 Data Collection

Conferring to as in [1], "the data gathering steps contain (a) situation the limitations for the study, (b) gathering information through observations, meetings, forms, and graphic materials, and (c) founding the procedure for footage information."The research examined the usage of Strategic Information System Planning and the degree of arrangement among the Information Technology and business planning on business procedures in three Indian Software companies i.e. . 1) Tata Consultancy Services Ltd 2) Infosys Ltd and 3) Wipro Ltd. As stated above the study is based on what is known about Strategic Information System Planning, connected to the arrangement and investor's opinion from the company are the emphasis of interest.Thus, for the research, two main data gathering approaches have been used.

The first technique used to record the secondary data was from the current literature and that has been abridged and obtainable in the preceding chapter, representing, "what is already known". The primary data was composed by using questionnaires and from the company websites.

3.4.1 Participants

An invitation was sent to 9 Indian Software companies selected during a random search on the Internet. Out of 9 companies, three software companies agreed to take part in the research. The companies represent different sectors of the business community.

The selection of companies was based on the use of computer technology in the business activities. Indian Software companies can be categorized on the basis of the number of employees.

The classification can be made on the following basis.

Enterprise	Number of employees
Micro	Less than 5
Small	Less than 50
Medium	Less than 100
Large	More than 100

[Massey, 2004]

Table 3.1: Size of companies

The following table classifies the three companies selected in this research:

Company	Enterprise	Number of employees
A	Large	Around 16000
B	Large	Around 7000
C	Large	Around 7000

Table 3.2 Size of selected companies

3.5 Gathering existing literature

Collecting current literature is an important and major part of the data gathering process. The summarization and analysis of the current literature forms the basis of the research and provided the reader of the known facts about the research. The literature delivers different views and aspects in the field of Strategic Information System Planning and aligning Information Technology and business strategies.

The basis of gathering the literature was through the libraries, books, journal articles, and the Internet. The literature available provided concepts evolved over the years in the area of research and the views on what needs to be done to improve the teamwork of Information Technology and business.

Though, there was limited research found that see how the companies were using Information System/Information Technology to support the business processes. After inspecting the existing literature, the primary data needs to be collected.

Thefollowing section details the primary data collection process.

3.6 Primary data collection

Foremost records bases for the research are the survey, company websites and the yearly reports. The statistics composed from the company websites and the annual reports were expressive in nature and provided that company information. Greatest of the data composed originate on the websites were declarations. These comprised the assignment declarations, areas and objectives.

3.6.1 Data Collection issues

It became evident early in this research that gaining data about SISP was likely to be difficult. Fully developed SISP goes to the heart of business activities and competitiveness.

Attempts to gain interviews were unsuccessful. Hence, pre-prepared questionnaire was adopted as a less intrusive data-gathering tool. From this tool, responses were gained from two people in each of the three companies. Main research question:

IV. RESULTS

The previous chapter provided details of how the data has been collected to answer the research questions. This chapter presents the published company information and the responses by the IT and business managers from the three companies to the questionnaire in relation with the main research question:

What evidence is there that the IS/IT plan and business plans are aligned in the three Indian software companies?

This chapter has been divided in three parts- Information in public sources, Views of the IT personals and finally views of the business managers. All the three parts are subdivided company wise.

4.1 Information in public sources

This section outlines, for each company, its profile and strategy. The strategy includes the company's main goal, vision and objective.

4.2 Results from the questionnaire

This section has been sub-divided in two parts, the first presenting the responses from the IT managers of the three companies and the second presents the responses from the business managers.

4.2.1 Views of the IT managers

The questionnaire included 16 questions, which would give the views of the manager on the planning and implementation of IS/IT.

V. DISCUSSION

The analysis chapter of the research compared the findings from the data collected from the companies.

This chapter introduces the discussion about the summary of findings produced from the results of the questionnaires, published descriptions and the literature and the analysis of the results.

An important point to note in this study is that the views are totally based on the selected three companies.

The companies do not represent the industry overall, thus it would be improper to compare the results between the companies and their industry sector.

Even though, the three companies belong to different industry sectors, certain similarities among them can be observed.

5.1 Summary of findings

5.1.1 Role in planning and implementation of IS/IT systems

It was seen in all the three companies, the executive management was responsible for planning and the implementation of the information systems.

The IT managers had the overall responsibility for the planning and implementation of the IS/IT and the senior business operation managers who formed the executive committee provided them with the business directions and the opportunities.

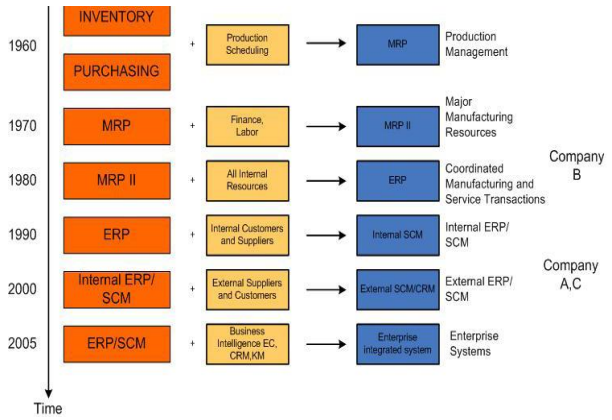

Figure 2: Evolution of Integrated systems and Position of companies on the use ofSystems
Source: Extended from [8]

5.1.2 Effects of implementation of IS/IT systems

When automating a business process, a change in the functioning is bound to happen. The change could be positive, negative, or mixed.

The planning for implementation and implementing the IS/IT system for the business process may be beneficial or may not be.

According to [8], there are certain drivers for the process of change. The drivers range from streamlining the supply chain, improving customer service, reducing costs and most important cost savings.

The three companies also experience the effects of IS/IT implementation. Most of the effects are positive and help companies achieve their business goals. The companies have improved their efficiency and effectiveness by the means of implementation. However,

Some of the effects are not so beneficial. The questionnaire responses from the IT and business managers from the two manufacturing concerns suggest, they redeploy or hire more staff during the implementation which takes resources out of the business processes.

The two large companies also experience resistance to change. With effective communication and training, they overcome this effect.

5.1.3 Alignment of IS/IT plan and Business plan

As in [7]It suggested that Information systems planning is becoming important as the "organizations attempt to leverage IS applications to improve efficiency, reengineer business processes, gain competitive advantage, and compete more effectively".

It was interesting to know that there was no particular strategy being used for the development of plans. Even though all three companies had different plans but the process they followed were similar. The business managers were consulted for IS/IT planning. It is an interesting fact that there was an alignment between the IT and business managers, in relation to the development and implementation of IS/IT systems in all three companies.

There exist two types of strategic alignment- IS plan and business plan (ISP-BP) and BPISP [2].

For the three companies it was seen that there is an existence of ISP-BP alignment as the IS/IT resources support the business objectives.

5.1.4 IS/IT growth model

As in [3] Wegave this model. He suggested that the organizations go through the six stages of the IS/IT growth.

Each stage has four active processes- application portfolio, user's role and awareness, IT resources and management planning.

The growth rate is compared with the expenditure**.**

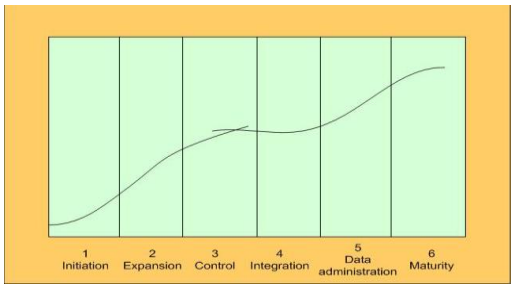

Figure 3: [3]

Six stages IT growth model
Source: [8]

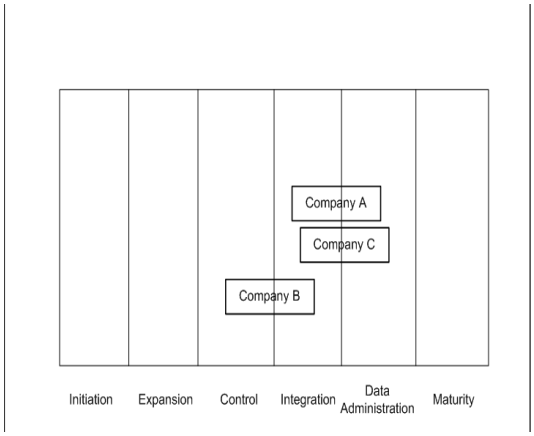

Figure 4: Position of companies in relation to the use of IS/IT

(Adapted from [3] six stages IT growth model)

The above figure 4 also indicates Indian software companies' progress towards using SISP and the alignment of IS/IT plan and business plan.

5.2 Further research

Even though there has a lot of research in the field of information systems, there is still scope to investigate other sub-areas under the field. The literature suggests that there is a need to align the IS/IT and business planning processes and vice-versa. This study focused on the extent of alignment of the plans to support the business process in three companies. Further studies have great potential to investigate the impacts and the extent of alignment across the industry sectors.

A comparison of the use of SISP and the alignment of IT and business in different industries could also be done. The research focused on the views of the Internal planners, what are their views on the alignment of

IS/IT plan and the business plan. The research could be extended to include the IS/IT and business consultants and look at how they perceive the whole process. Another area of research could be on the use of the integrated information systems and their purpose in the companies.

VI. CONCLUSION AND RECOMMENDATIONS:

The analysis of the questionnaires sent to the IT and business managers of three Indian Software Companies i.e. 1) Tata Consultancy Services Ltd 2) Infosys Ltd and 3) Wipro Ltd and thru review of available company documents have shown interesting aspects to the process of IS/IT and business planning.

From the questionnaire responses, it was interesting to note that irrespective of the size and the type of business, there were similar pattern of planning between the companies.

The review of the strategies, of the three companies highlighted the point of customer Satisfaction as a major business objective. All The companies also have an objective to Grow. However, the manufacturing organizations, want to be innovative and use state-of the art technology to provide customer satisfaction. According to [9], the innovation is a strategic decision and it is important to be competitive, "it reopens or exploits the window of opportunity".

None of the companies are using any particular theory for the development of IS/ITPlans and a study of the business requirements are done before planning. The IT managers consult with the business executives to identify the business process needs and direction for the planning and implementation of IS/IT plans.

The results of the IT related questionnaire viewed that IT is still an enabler to the business, rather than a transformer. IS/IT systems still act as support systems instead of being the business processes. On the other hand, the business managers, understand the importance of IS/IT systems, however, the review of company documents does not indicate direct influence of the use of IS/IT systems. The company documents such as the annual reports do not indicate the actual amount of expenses and the benefits realized from the investment in information technology. The overall benefits that the companies could get are the improved business processes, increased efficiency, accuracy and transparency of the business processes and increased customer satisfaction.

However, to realise the benefits, the business processes need to undergo certain changes and there have to be ways to adjust to the effects of the implementation process.

In the end, for the companies to realise full potential of the IS/IT systems, they need to Understand the importance of planning. Furthermore, IT and business need to understand each other and then it is up to the executive management to align and implement the IS/IT and business planning to improve the business performance and gain competitive advantage.

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