



GLOBAL JOURNAL OF COMPUTER SCIENCE AND TECHNOLOGY
Volume 11 Issue 11 Version 1.0 July 2011
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 0975-4172 & Print ISSN: 0975-4350

The Effectiveness of IT STRATEGIC Plans in Small and Medium Enterprises (SMEs)

By Hamza Adamu Fanda, Md Saiful Islam

University of Malaya.

Abstracts - Strategic planning has been identified as one of the key and important concept that reshapes and strengthens modern businesses toward achieving their targeted goal. It has been proven in theoretical and empirical researches that it helps in attaining business goals in most of large corporations that implemented the concept. Though it is working for large corporations, the same conclusion cannot be said for Small and Medium Enterprises (SMEs) due to so many factors that differentiated the two categories. In this paper we investigated the effectiveness of the strategic plan on the SMEs and based on the data collected from our survey, it shows that the concept is also working in the SMEs but our finding cannot be generalized due to the small number of firms we investigated.

GJCST Classification : K.6.1



Strictly as per the compliance and regulations of:



The Effectiveness of IT STRATEGIC Plans in Small and Medium Enterprises (SMEs)

Hamza Adamu Fanda^α, Md Saiful Islam^Ω

Abstract - Strategic planning has been identified as one of the key and important concept that reshapes and strengthens modern businesses toward achieving their targeted goal. It has been proven in theoretical and empirical researches that it helps in attaining business goals in most of large corporations that implemented the concept. Though it is working for large corporations, the same conclusion cannot be said for Small and Medium Enterprises (SMEs) due to so many factors that differentiated the two categories. In this paper we investigated the effectiveness of the strategic plan on the SMEs and based on the data collected from our survey, it shows that the concept is also working in the SMEs but our finding cannot be generalized due to the small number of firms we investigated.

I. INTRODUCTION

Information system has changed the pattern of rivalry and has motivated many new and existing commercial enterprises. The large enterprise have for a long time adopted the information system in their organizations. According to researchers, the integration of business planning and information system planning is working well for most of the large scale organization that were investigated. The efficiency of IT/IS in small and medium enterprises has not been investigated fully. IT has reshuffle the entire system of business by introducing applications that are easier to use, more efficient, cost effective, easier to manage and control, and produces a better service. In the technological world of today, no business whether small, medium or large can achieve or attain its objectives without having and aligning its business strategies with IT strategies. According to one of the researchers, the efficiency of the IS planning depends on the type of IS function, the organization features, and the methods adopted in planning[1]. According to [1], for any business organization to received higher return in investment in this 21st century, it must embrace IT. In this paper, our focus is to investigate how effective IT planning is to small and medium IT related enterprises.

The importance of IT to any business cannot be undermined as the technology has made it easier for firm to interact at all time with their customers when the proper IT tools were used. As organization grows and level of complexity and ambiguity increases, more information is needed in order to make a better

decision[2]. There are criteria's involved before using IT infrastructures and the kind of IT adopted must be aligned with the business objectives for the organization to achieve its defined target. A lot of small and medium companies lose out of market because of improper business planning. Any organization that fails to plan well has already plan to fail. Though every organization has different settings and way of operating their business, there are standard defined for making a better strategic plan for any organization. Environmental scanning (External and internal) is one of the key things that needs to be done before adopting any business plan. A proper planning is formed by individuals who understand how the organization operates and where the organization is hoping to reached. The type of planning adopted by an organization depends on the nature of organization's business and culture being practice in its region. It should also be noted that a strategic plan that works in a particular organization might not necessarily work for another.

Background

Previous researchers have tried to investigate how small and medium organizations consider the importance of IT in their businesses. [1] stated that organizational context which may be central, formal have an effect on the effectiveness of IS planning. They also made mentioned that the level to which CEO is engaged, the planning scope, complexity of the process are also elements of IS planning. The benefits gained form IT is solely depend on how strongly they are connected with business plan[2-3]. Five types of planning were identified by[3]. They are no planning, either one of IS or business plan exists, sequential planning in which IT/IS plan only support business plan but not merged as one, linked planning in which the business plan and IT plan are connected together and finally the integrated planning that unite both IS and business plan to act as one process[3]. Planning that organization follows may falls within one of these strategies hold, build, divest or harvest strategies as suggested by [2].

The firms that adopted build strategy make use of IT widely than those that adopted other strategy types. Build strategy lay emphasis on customer profitability and sales variance analysis. Hold strategy is more applied in budgeting for measuring key performance indicators.

^{Author^{αΩ}}: Department of Information Science, Faculty of Computer Science and Information Technology, University of Malaya. 50603 Kuala Lumpur, Malaysia.
Email : fand2nd@yahoo.com, saiful_911@yahoo.com

II. MERGING BUSINESS PLAN WITH INFORMATION SYSTEM PLAN

Researchers have identified the techniques that should be used in integrating business plan and information system. Many are of the view that for attaining successful objectives of a company, both plans must be integrated. In [4], three major techniques for aligning business plan and IS/IT plan were proposed – personnel, content and timing. Personnel technique is concerned with whether people involved in business plan process also participated in strategic IS planning process and vice versa. Content technique emphasizes on uniformity between business plans and IS plans and the timing technique investigated on whether IS plans should be done earlier, after or concurrently with business plans. In another development, it has been investigated and proven based on research conducted by researchers that organizations that integrate business plans with IS plans performed to a greater extent than those who did not [3, 5]. Another researcher discovered that good integration reduces IS planning problems and increases IS organizational participations to organizational effectiveness. [3] Identified four kinds of integration that businesses practice – administrative integration, sequential integration, reciprocal integration and full integration. Administrative integration is hardly entertained because of the weaker linkage between business planning and IS planning. In sequential integration, the IS planning provides support for business planning and not vice versa. Reciprocal integration is a two way process, the IS planning support business plan and the business plan also support IS plan. Full integration merges both IS plan and business plan to the extent that one process cannot be distinguished from the other. There was strong argument among researchers; some are of the viewpoint that the four integration techniques discussed cannot be bypassed by organizations while others think otherwise. In any case, it should be noted that there is no rule on how organization should chose the technique; it all depends on the nature of the organization and how it decides to run it affairs. The integration types mentioned are not blueprint nor should they be considered to be followed hierarchically, it depends on the situations. However, another researcher conducted an interview with 20 IS decision-makers and discovered four reasons alignment of business planning with IS planning is problematic in some cases. The reasons identified were: 1. impractical expectations and absence of cleverness of operational managers. 2. Poor communication. 3. Inadequate IS management from business planning process. 4. Uncertain vision/mission, objectives, key strategies, action plans [4].

a) *IT in small and medium firms*

Small and medium organizations may align well

with IT due to the high level of interaction and multiple roles attached to individuals. As the complexity and size of the organization continue to grow, the need for formal planning processes are ratified to guarantee an integrated vision for IT [6-7]. It has also been discovered that the use of IT is significantly related with better performance. A research conducted by [7] in Canadian manufacturing SMEs shows that all the SMEs investigated uses internet-based technology; that means they have merged their business systems with the IT. Nevertheless, the results show the significance of environmental ambiguity and firms' size as vital contingency factors. Some of the identified features that make organization uses IT are listed below:

1. Information strength of the organization's products or services. Company whose products operations require information processing.
2. Information strength of the chain value. The degree to which information is used and importance attached to its accuracy is a significant factor in deciding to use IT
3. Support and influence of top management is an important factor for firms to use IT plan. The success of any IT/IS plan will depends mostly on the top management perception of IT with regards to spending as an investment, contribution of IT in achieving business goals, opportunity to lead the industry and many more.
4. IS competence. It is the ability of IS to deliver functionalities in terms of expertise and technological leadership in the industry. Reliability of IS services, IS linkages to business knowledge, IS plan for the business future are also among the important factor that makes firms decide on welcoming IT into their firms.

III. RESEARCH METHOD

The research data were collected from SMEs located in Nigeria and Malaysia. An electronic questionnaire was developed and sent to the firm's email addresses and they were informed to submit it when completed. Most of the questions asked were related to strategic planning and not directly on IT. This is because we consider strategic planning questions to be at least easier to answer than IT questions. So most of our discussions will be centred on strategic planning not comparing the IS plan and business plan as discussed in the literature review.

Luckily for us we communicated with each of the firm's representative before sending the questionnaire to avoid delay or unnecessary excuses. The tricks work out because majority of them submitted the filled questionnaire within three weeks. Though only ten (10) of the questionnaires were returned; 9 were

usable to us and the remaining one contains missing information. 60 percent of the investigated firms were small enterprises having less than 20 employees while the remaining are medium firms having 20 and above number of employees. The questionnaire was designed with the intention of getting to know from the top management and managers of the selected SMEs on whether they are aware of the importance of integrating IT/IS planning and business planning and also to know how they perceived its usefulness toward achieving their business objectives if at all they are yet implement it. The largest answerers to the questionnaires were managers followed by the directors and then CEO and Consultant.

The activities that are carried out during strategic plan were listed out and respondents were asked to identify the one that best described their organization and choose one out of the provided alternatives.

The organization's business planners were asked on how often they review company's strategic plan ranging from not at all to at least once a year. Question pertaining who make decision on the overall organization were also asked.

The respondents were also asked on the improvements they might want to do to enhance the current strategic plan; quite a number of them choose more than one answer from the given options. The respondents were asked to rate their strategic plan on whether it meets companies goal.

IV. RESPONSE ANALYSIS

The response rate was reasonable when compared to what was achieved in majority of previous surveys. This is shown by high management level of the respondents.

Respondent's titles	Count(percentage)
CEO	10%
Director	30%
Consultant	10%
Manager	50%

Table 1 : showing Respondents response rate

The job titles of the business planners show that managers participated more than any of the remaining participants. In most of the firms involved in the survey, the company is either run by a director or manager. This might be due to small number of overall staff in those companies or other reasons that are not clear to us.

a) *Analysis of the activities performed during strategic plan*

Strategic planning is a method of shaping the vision, mission, and goals of an organization and the

strategies for achieving those goals. For an organization to be able to define its strategies clearly, it needs to do environmental scanning which involve both internal and external. Environmental scanning may be done using one of the following techniques: 1. SWOT analysis on which the strength, weaknesses, future opportunities and threat that may affect the organization are checked and analyzed. 2. Porter's five method that scan the industry in general and gives you an idea on how to tackle your current business situation and beyond. 3. PEST method helps in scanning the entire community where the business is located; Political, Economy, Social and Technology of the environment are studied in order to know how to plan for the future of the company. Strategic planning closes the gap between the present and future and it should be done in such a way that it will be difficult for competitors to imitate.

In our survey, we asked the respondents on the activities they involved in their business strategic planning. The table 2 shows the summary of the findings from the respondents.

Activities	Number of participant (n = 10)	statistics
Analysis of the company(SWOT, PERT, PEST,etc)	6	0.67
Vision / Mission	4	0.44
Objectives	4	0.44
Develop key strategies	4	0.44
Action plan(Target, resources, Timeline, etc)	5	0.56

Table 2 : showing activities in strategic plan

The table 2 shows that greater percentage of the respondents uses one of the environmental scanning methods to analyse their company. More than half of the respondents take action plans in order to meet business target. Most of the Small and Medium Enterprises do not give much priority to Vision/Mission, objectives and key strategies as shown in the table. In a nutshell, not given enough considerations and focus to company's vision/mission and objectives shows lack of commitment to business future plan.

On the questions of what they should do to improve the current strategic plan in their respective companies; 67% answered that they will improve methods to focus on core strategies, 33% says improving communications among business units will be one of their major concern for the business future.

When asked pertaining whether the strategic plan they adopted is working for businesses, 56% responded positively that it satisfied company's goals and quite a number says it promotes creativity in strategies adopted. Directors and CEOs make most of the decision making in the industries investigated and

that was proven when majority of them answered that board of directors plays the most significant role in strategic planning.

On the issue concerning reviewing of the strategic plan, most of them say they never review their strategic plan; close to that are those that admitted reviewing the plan every three months.

V. DISCUSSIONS

The data gathered during the survey is not enough to make a general conclusion on our investigation. Though questions related to IT were not included in the questionnaire, almost all of the firms investigated were using IT stuff in carrying out their business activities. We centred our findings on how efficient they make use of their strategic planning in attaining their respective business goals. Based on the answers supplied by the respondents, it is categorically clear that the strategic planning adopted by the SMEs is working for their businesses. What seems to be a contradiction on the issue is the fact that 40% of the respondents admitted not updating their strategic at all. In the modern business of today, it will be hard to believe that a business is achieving the set up target while not reviewing its initial strategic plan. Another research need to be carried out by other researchers to investigate the effectiveness of strategic plan in combination with IT plan in SMEs to verify the facts.

VI. CONCLUSION

We have investigated the effectiveness of strategic plan in SMEs and according to the data collected during the survey, the strategic plan adopted by most of the SMEs contributed positively to the development of their firms.

We have also seen how vital information system planning helps in achieving lots of business goals both in large and SMEs.

In our literature, we focus more on the integration of IS/IT plans with business plans and we have discussed various types of integration techniques and methods that can be used in achieving a better business goals.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Wang E. T. G., T.J.C.F., Factors affecting information systems planning effectiveness: Organizational contexts and planning systems dimensions. *Information & Management*, 2001. 40(2003): p. 287-303.
2. Duh R-R., C.C.W., & Chen H., Strategy, IT applications for planning and control, and firm performance: The impact of impediments to IT implementation. *Information & Management*, 2006. 43(2006): p. 939-949.
3. Teo T. S. H., K.W.R., Integration between Business Planning and Information Systems Planning: An Evolutionary-Contingency Perspective. *Management Information Systems*, 1997. 14(1997): p. 185-214.
4. Teo T. S. H., A.J.S.K., Critical success factors in the alignment of IS plans with business plans. *International Journal of Information Management*, 1998. 19(1999): p. 173-185.
5. Kearns G. S., L.A.L., The effect of strategic alignment on the use of IS-based resources for competitive advantage. *Strategic Information Systems*, 2000. 9(2000): p. 265-293.
6. Chan Y. E., R.B.H., IT alignment: What have we learned? *Journal of Information Technology*, 2007. 22(2007): p. 297-315.
7. Raymond L., B.F., Enabling the business strategy of SMEs through e-business capabilities: A strategic alignment perspective. *Industrial Management & Data Systems*, 2008. 108(2008): p. 577-595.