ICIBA 2014, the Third International Conference on
Information Technology and Business Applications
Palembang-Indonesia, 20-21 February 2014

Analysis of Business Strategy Alignment to IT Strategy of Bina Darma University Using IT Balanced Scorecard

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Abstract

Bina Darma University (BDU) use and implement information technology (IT) intensively to improve their business performance. The implementation of IT is governed by IT governance to align with business strategy. The objective of this research is to analyze the alignment of IT strategy of BDU to its business strategy. IT Balanced Scorecard framework is employed with gap analysis using quantitative descriptive approach. We use questionnaire in collecting primary data, and documentary research. As the result of analysis, we explore UBD business strategy map as well as IT strategy using balanced scorecard framework. Using gap analysis we found that there are several weaknesses in developing university business strategy that affect IT strategy. University should align its IT strategy and programs in order to achieve 2025 vision.

Keywords : *It Strategy, Balanced Scorecard*

1 INTRODUCTION

Balanced scorecard approach and model introduced by Kaplan and Norton [1] has been widely used and applied in the world of business and industry, including the aspects of Information Technology ([2],[3],[4]). Using balanced scorecard approach, we could measure customer satisfaction, internal processes and the company's ability to innovate that will ultimately improve business performance. From the perspective of management and internal user, the implementation of balanced scorecard concept to the functions of information technology and other IT processes could be used in measuring the contribution of IT in the organization's performance. In many cases, the concept is successful in improving the performance of IT processes and can be used for a future perspective [5].

In line with the above, organizations that use IT intensively also take into account the impact on the achievement of the organization's business performance. Epstein and Roy [6] stated that top management should really pay attention to aspects of IT governance that is in line with the business governance. IT governance is basically an organization's ability and

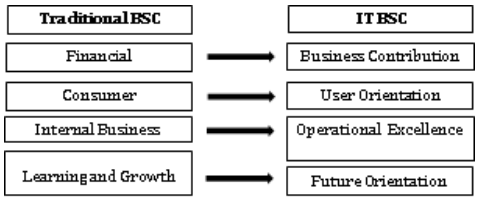

Figure 1: Traditional BSC and IT BSC Perspective Alignment (Grembergen, 2001)

capacity to control policy and implementation of the IT strategy. In this case, organizations need to implement the structures, processes and mechanisms of good governance in order to achieve compatibility between business processes and IT, such as the University of Bina Darma (UBD).

As a higher education institution, UBD has been using and implementing IT in the entire business process, both on the core function: education and research, as well as the support functions. IT strategy formulation and implementation is done by the Technical Implementation Unit Management Information System (UPT-SIM). UPT-SIM is responsible for all processes and information technology investments. Various systems and technology has been implemented, such as: e-learning, websites, web mail, academic information system, wifi in campus area, and others.

On the other hand, in an effort to improve the quality of business processes UBD must operate efficiently and effectively. For that needs to be studied with good levels of fit between business strategy and IT strategy at the university level, by analyzing and reviewing concepts and proper alignment techniques that can be implemented in UBD.

This paper aims to analyze the alignment of the Information Technology strategy and business strategy at the University of Bina Darma using IT Balanced Scorecard framework.

2 INFORMATION TECHNOLOGY BALANCED SCORECARD

After Kaplan and Norton introduced the Balanced Scorecard [1] to evaluate the strategy of a company or organization, it was introduced an IT Balanced Scorecard by Gold (1992) and Willcock (1994). Moreover, Van Win Grembergen [3] introduced the IT Balanced Scorecard concept that was implemented in the business enterprise and launched the book IT Balanced Scorecard in 1995.

2.1 Balanced Scorecard Perspective

Every organization needs a communication tool to explain their strategic plans to the entire staffs that will implement the plan. One of the means of communication by management to staffs is a balanced scorecard. Its use is also in line with the goals of the organization to improve the performance of the organisation. The concept of the balanced scorecard has an advantage because the business plan communicated in the form of specific measurements using performance indicators and targets are achieved.

Mulyadi [7] described the concept of balanced scorecard consists of two words: (1) scorecard and (2) balanced. Scorecard is card that is used to keep score of performance results, and to plan the score to be achieved in the future. Where the score to be realized in the

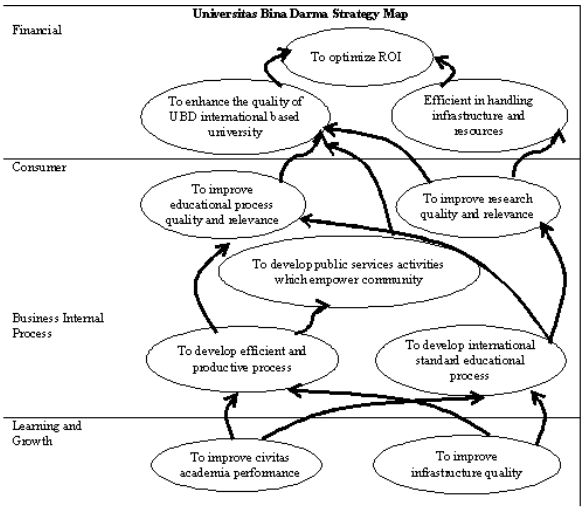

Figure 2: Business strategy map using balanced scorecard framework

future is compared to the achieved work. The word balance is intended to show that the performance obtained with equal force from the two aspects of both internal and external aspects, the short-term and long-term performance as well as financial and non-financial.

2.2 IT Balanced Scorecard Alignment Perspective

IT Balanced Scorecard is a modification or alignment of the traditional Balanced Scorecard (Figure 1). In line with the intensive use of IT in the organization, the IT unit that has main task to serve the internal company needs of IT services must implement the systems and technologies that support the achievement of the company's business strategy.

Keyes [8] identified several objectives of the organization in implementing IT Balanced Scorecard framework is implemented widely, including to: (a) align IT planning with business objectives and needs, (b) establish precise measurements in the evaluation of the effectiveness of IT, (c) align employee efforts to achieve IT objectives, (d) improve the performance of information technology, and (e) give or get a balanced result for the benefit of all stakeholders.

3 ANALYSIS AND DISCUSSION

Based on an analysis of the UBD 2009-2014 strategic plan, analysis and discussion conducted on four (4) groups of university strategy: strategy in the field of Tri Darma Universities, Education and Teaching, Research and Community Service, and strategies in the field of administration. Analysis and discussion is done by using the balanced scorecard framework.

3.1 Analysis of Strategy Map Alignment

From the analysis of the vision, mission and business strategy Bina Darma University, UBD Business strategies can be grouped into four perspectives of the Balanced Scorecard using a pattern of cause and effect relationships and strategic map (Figure 2). From the business strategy map we could see that there is a causal relationship arising from the various

perspectives of the UBD business balanced scorecard, starting from the perspective of learning and growth where the increased performance of the academics and the increased quality of work infrastructures will lead to improvement of the learning process so that the goals to improve the learning process of international standard can be achieved.

Then we analyze the internal business process perspective, we found that as a result of increasing the learning process as well as the international standard university management more efficient and productive will increase the quality and relevance of education and research so that the purpose of the university to develop a community service oriented and empowerment public welfare can be realized.

From customer perspective, with the increase of quality and relevance of education and research and the creation of development-oriented public service and welfare of the community empowerment will lead to the development and increasing the quality of the university with the management of resources, facilities and infrastructure more efficiently as expected according to the vision UBD become a university and the mission of international standard with the increasing growth in the number of students of UBD, and in the end along with the development and increasing the quality of the University and create efficiency in the management of facilities, infrastructure and resources of the university to optimize the value of Return on Investment or ROI.

3.2 Analysis of Strategy Gap

From gap analysis can be seen that the UBD IT strategy based on the perspective of business contribution is aligned with the business strategy based on financial perspective. However, the implementation of IS/IT is not well integrated. Where existing applications not been fully integrated which result not maximized application system services. This can result in reduced ability of universities in generating optimal business processes and quality. From the results of the satisfaction survey, 90% of respondents agreed the benefit of information systems in supporting user duties and tasks in UBD. Therefor, UBD should improve the quality of information system in enhancing the quality of UBD.

Based on user-oriented perspective, the strategies are aligned with the business objectives of the customer perspective university. However, from the results of analysis and observation shows that the use of e-learning system has not completely followed intensively with the quality control system and quality assurance. The level of availability of information technology is still relatively low in UBD lead all services are often interrupted. Similarly, the availability of bandwidth is not optimal based on the ratio of the total number of students so that the processes of e-learning systems often run into obstacles. Survey stated that there are 40 % of respondents Universitas Bina Darma service users felt that the quality of the internet connection and WIFI hotspot network is not good enough.

From the results of the gap analysis, the strategy of operational excellence perspective has been aligned with the objectives to be achieved in the internal business process perspective in UBD business strategy, which will increase the affectivity and efficiency of the system becomes operational backbone of the university that will create UBD operations management to become more efficient and effective. To create alignment strategy, the development of information systems architecture and framework that focused on improving the capacity and capability of e-learning systems that exist today, leading to the implementation of e-learning systems that support modern distance learning.

The last analysis is an analysis of the gap difference in strategy learning and growth perspective with a future-oriented perspective, where it can be stated that in the very long term UBD requires availability of infrastructure, quality of work, primarily to support the core business, namely tri dharma of UBD. It also needs the availability of human resources in terms of qualified academicians who will be authorized UBD in the development of institutional capacity.

4 CONCLUSION

From the analysis of information technology strategy alignment with business strategy at Universitas Bina Darma using IT Balanced Scorecard framework generated maps and assessment strategies business strategy and IT gap.

Based on the gap analysis there are some conclusions, which are: (a) the implementation of IS/IT is good but not yet fully integrated in generating optimal business processes and quality; (b) e-learning system is a strong foundation for achieving the vision of the university in 2025 which must be equipped with a system of quality control processes and systems to ensure its availability level; (c) the blueprints of information systems need to be aligned with the strategic needs of the institution to produce a modern UBD system towards the vision 2025; and (d) the term long successful implementation of the strategic plan UBD is largely determined by the availability of infrastructure and labor quality human resources to support the university 's core business, namely tri dharma of higher institution.

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