Strategy Maps as a Communication Tool in Balanced Scorecard Implementation: Study of a Malaysian Utility Company

*Hazeline Ayoup, **Normah Hj Omar and ***Ibrahim Kamal Abdul Rahman
* College of Business, Universiti Utara Malaysia, Sintok, Malaysia
** Accounting Research Institute, Faculty of Accountancy, Universiti Teknologi Mara, Shah Alam, Malaysia
and ***Faculty of Accountancy, Universiti Teknologi Mara, Shah Alam, Malaysia
*: hazel@uum.edu.my

Abstract— **This paper presents an exploratory and qualitative analysis of the Balanced Scorecard [BSC] implementation of a utility company in Malaysia. The use of strategy map as proposed under the BSC methodology in communicating company's strategic vision and mission from the corporate to the individual managerial level is explored. Although the BSC has been developed for almost 20 years, BSC implementation is still an issue. One of the underexplored issues is communication. It is critical for successful BSC implementation, but very little evidence is observed in the literature. Using qualitative research approach, this paper highlights a company experience in using the BSC strategy maps to facilitate strategy communication to managers.**

Keywords- Balanced Scorecard; Strategy map; Strategy communication; Case study; Performance Measurement.

I.   INTRODUCTION

Balanced Scorecard has received extensive attention from the practitioners and researchers since its introduction and implementation by the US companies. The framework was developed based on performance management practices of companies by Kaplan and Norton [1]. Its simplicity and practicality has driven many companies from other parts of the world to adopt this methodology into their system to manage the company's performance and to sustain its competitive advantages.

After more than a decade of development, many studies have empirically observed the implication of BSC implementation towards organizational performances. Previous literatures have shown mixed results of its implementation from performance improvement to its implementation issues. Survey on management tools conducted by Bain and Company [2] highlighted that though BSC is ranked top ten among popular management tool used worldwide its satisfaction rate is below average. Despite this result, BSC still remain number six in the ranking reported by similar study by Bain and Company [3].

Strategy Map is a crucial element for successful BSC implementation as stressed by its founder Kaplan and Norton [4]. One of the advantages of implementing the BSC suggested is that it facilitates strategy communication by providing a language for company's management team to discuss its future directions and priorities. Its four perspectives can be viewed as a series of cause-and-effect linkages among objectives in the four BSC perspectives which provide a better representation tool to communicate strategic objectives at every managerial level. However, to date very few studies provide detail discussion on the use of strategy maps in BSC implementation. To fill this gap, this study aims at exploring this issue to provide evidence on the use of strategy map as a communication tool in a Malaysian company.

The current study is part of a larger research carried out on a large utility conglomerate in Malaysia. Specifically this paper highlights the observational assessment made by the researcher during her recent three month internship with the company. Hence the objectives of this study are to [1] describe the used of strategy maps in the case company [2] describe the factors affecting effective use of the strategy maps and [3] explain the effect of the use of strategy maps in the company. Though the result is basically exploratory in nature, it certainly provides sufficient foundation and direction for a more comprehensive case study of the company in future.

II.   BSC IN PRACTICE

Study by Bain and Company [2] in the US has revealed that 66% of the sample companies which include companies from US and Canada, Europe, Asia-Pacific, Latin America and other countries used BSC. BSC is initially developed as a performance measurement tool, therefore BSC successful implementation relies on many aspects. Kaplan and Norton [5] have highlighted those aspects as leader's capability to mobilize organizational change, effective strategy maps, BSC, target and initiatives translation processes, ability to align corporate, business units, support units, external partners and boards with the strategy, high employee motivation towards

48

the initiatives and good governance management and practices.

Besides, Kaplan and Norton, Roest [6] also highlighted that in implementing the BSC, there are no standard rules. BSC must be developed according to the business. BSC implementation should also be supported by the top management, starts with the company strategy, comprises of optimum number of objectives and measures, continuously improve, utilized top down and bottom up approach, aware of the effects of KPIs on employees' behavior and acknowledge the facts that not all measures can be quantify.

BSC has been implemented in companies for various purposes from performance measurement and management tools to strategic management tools. For example, Cronje and Vermaak [7] looked at BSC as an instrument for strategic planning and performance improvement for universities in South Africa and Australia, Milis and Mercken [8] have investigated how the BSC is used in evaluating information and communication technology projects performance, Crawford and Sealetta [9] have highlighted how the BSC could help aligning corporate social responsibility and business performance, Craig and Moores [10] have illustrated how the BSC can be applied to manage performance of family firms, and Osama [11] has explored the used of BSC in Research and Development [R&D]. The BSC are also used as a tool to create strategic fit as pointed by Kettunen [12], Witcher and Chau [13] and Bloomquist and Yearger [14].

Kaplan and Norton [1], [4], [5], [15], [16] emphasized that BSC would improve firm performance. For example, the measures used by executives in the BSC companies help articulate the company's business strategy, communicate the strategy to different managerial levels and facilitates alignment between organizational, divisional, cross-departmental and individual initiatives to achieve common goal. The BSC is used as a communication, information and learning system. The benefits of implementing BSC are *a)* it help managers to clearly identify the measures which could clearly represent organization's long term strategy; *b)* facilitates leaders to mobilize organizational change towards performance improvement; *c)* provide comprehensive framework for managers to translate companies' mission and vision into a coherent and link set of performance measures; *d)* improve firm ability to align its corporate, business units, support units, external partners and its board with the strategy; *e)* increase employee motivations towards; *f)* the measures can be used as a communication, information and learning system to articulate companies business strategy, communicate the strategy throughout the organization and help align individuals, departments and organizational to strive for a common goals; *g)* measures used provide balance between desired outcomes and the drivers of the outcomes; hard [objectives] and soft [subjective] measures; and *h)* BSC can be used to make explicit financial strategy of a business unit and how to customize financial objectives and measures to business unit strategy. Bloomquist and Yeager [14]

highlighted that BSC facilitates strategy communication among managers from the top to the lower level hence help aligning different organizational parts in achieving the corporate performance.

Many studies have assessed BSC implementations. Malina and Selto [17] have assessed the effectiveness of BSC as a control and communication tools. Their findings indicated that the BSC can be an effective tool for controlling corporate strategy. However as a communication tool, BSC can de-motivate employees if not carefully design and implemented.

Davis and Albright [18] compared the differences between banks branches BSC-implementers and non implementers. Their study revealed that there are significant differences in financial performance of the implementers as well as non-implementers. Meanwhile Braam and Nijssen [19] studied the performance effects of using the BSC in Dutch companies. Their study affirmed that the used of the BSC does not automatically improve firm performance. The used of BSC should be related to a firm's corporate strategy, while BSC uses which are not related to strategy may decrease firm performance. A study by Greatbanks and Tapp [20] showed that the used of BSC within a public service city council in New Zealand has enabled employees to clearly appreciate their role and focus on delivery of performance-related measures which support the organizational strategy.

However, recent study by Atkinson [21] highlighted that only 30% of BSC implementers enjoyed the benefits of its implementation. Even a survey by Rigby [22] also revealed that the satisfaction rate of BSC implementers is below average. Therefore it is important to identify BSC implementation issues for this will further improve the process in practice as Ahn [23] mention that *".....more strategies failures are the result of poor implementation than any other aspects of strategic management"*.

Developing strategy map is vital in the BSC implementation process. Kaplan and Norton [4] explained that strategy map provides the visual framework for integrating the organization's objectives in the four BSC perspectives. It illustrates the cause-and-effect relationships which link the critical learning and growth and internal business process to the desired outcomes in the customer and financial perspectives. Thus Scholey [24] contended that strategy map is a part of the solution to better strategy formulation and execution. However, study on the application of strategy map is very limited especially in Asian company. For example; Chan [25] studied the application of strategy map in healthcare sector in Canada while Quezada, Cordova, Palominos, Godoy and Ross [26] described BSC as a tool to identify strategic objectives in developing strategy maps in Chile. Another study on strategy map was conducted by Buytendijk, Hatch and Micheli [27] who proposed that scenario analysis could facilitate the process of building strategy map.

Thus, using a case study approach, this study attempts to investigate BSC implementation, focusing particularly on the application of strategy maps as a tool to communicate strategy at every level in a large Malaysian Corporation.

III. RESEARCH DESIGN

Many platforms can be exercised to explore the used of strategy map in BSC implementation. This study has adopted the qualitative case study approach and has utilized specifically the observation and interview methods as the data gathering strategy. Specifically, this study hopes to provide detailed narration on how the case company used strategy maps to communicate its strategic direction to lower managerial levels and cross-departmental.

An observation of the real implementation process in an organizational context is chosen as the data collection strategy following Creswell [28] to achieve the two objectives of this study that are to [1] describe the used of strategy maps in the case company and [2] described the factors affecting effective used of the strategy maps. The researcher was granted permission by the Chief Executive Officer [CEO] and the human resource division of the case company to undergo a three month attachment program as part of a "win-win" initiative. Observations and interviews have been identified as the most appropriate data gathering strategies due to their ability to capture a more realistic and true information direct from the sources itself. Moreover, this approach can mitigate the possibility of human biasness of providing information as compared to questionnaire survey see [28], [29]. The name of the company is kept confidential.

The attachment program was very timely as the company was just at the early stage of the BSC new cycle. The attachment session has enabled the researcher to take part as an observer in various management meetings related to BSC implementation including the development of company and divisional strategy maps. There were many different meetings that discussed on the development of departmental strategy maps & scorecard; the selection of performance measures; the development of detailed definitions of each measures; the aligning of different divisional objectives and measures. The researcher was also allowed to observe and participate in various in-house and other computer-based training sessions. In addition, the researcher was given the opportunity to review the BSC performance management system and how it was used for tracking, contracting and evaluating employees' performance. The observed events were recorded in a log book and interviews were taped and transcribed. Based on the observations and interviews, the BSC implementation and the application of strategy maps were analyzed. For the purpose of this paper, only the exploratory results are discussed and revealed.

IV. RESEARCH FINDINGS AND DISCUSSION

Findings and discussion are presented based on the objectives of the study.

A. How Strategy Maps are Developed in Lion Bhd and Its Uses

The case company strategy map basically consist of company's ultimate strategic objectives, strategic themes which apply the four BSC perspectives where the strategic objectives for each perspectives are tied to the strategic themes, and the ultimate company's strategic objectives. The company's main objective is shared and common for all strategy maps of the group such as corporate center, SBUs, departments and subsidiaries. This ensures that the company's vision and mission are communicated to every division, unit and individual in the organization.

The company main goal is the ultimate basis of developing each strategy map. Base on the four BSC perspectives, strategic themes relevant to that perspective is developed following the determination of appropriate strategic objectives that can best support the strategic themes and company main goal. In every strategy map development process these are the most commonly asked questions among managers:

a) What is the best objective for the given strategic theme?
b) Does the objective support the division upper level objectives?
c) Can the objectives be measured?
d) Can the measures be capture by the company's system?

Figure1 provide example of a division in Lion Berhad strategy map. Information in this figure has been change to keep the company anonymous.
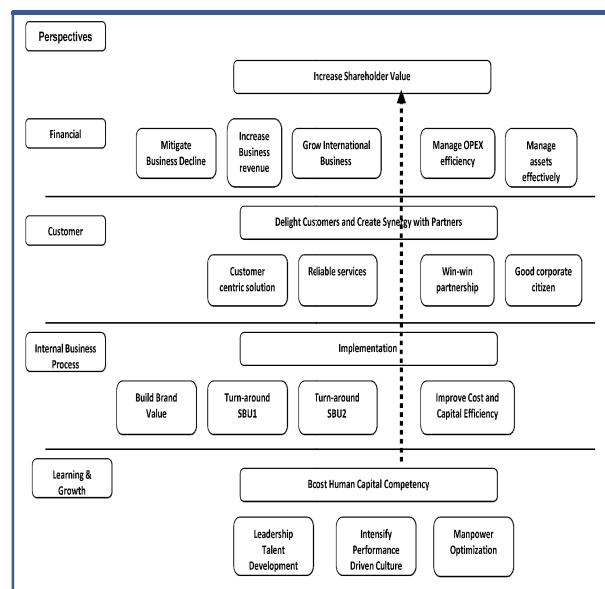

Figure1: Lion Berhad Divisional Strategy Map

Interviews and observations reveal that strategy map is used as the core for BSC implementation process in the company. Utilizing BSC methodology requires the company to initially create its vision, mission and strategy to ensure that company's vision and mission can be translated into objectives and measures. This is clearly presented through the company strategy map. It is very important at this stage for the top management to clarify the vision and mission to the middle managers who are responsible to implement the strategy.

Strategy map is used to communicate company's strategic objectives to the company's strategic business units and support units. After the determination of company's broad strategic direction [mission and vision], the next compulsory stage in BSC implementation process is the development of strategy map. It is noted that the company and every division [SBUs and support units] has its own strategy map. It is used as a formal way of communicating broad company vision and mission to the lower and the divisional levels. To ensure each and every manager [from the top to lower level] understand company's strategic objective, the BSC unit [hereafter named as Strategy Office] has defined all objectives and measures. Though definition of all company's and departmental objectives and measures are defined, its documentation system is not well managed. The definition database is kept in softcopy file which are only accessible to relevant managers. The initial aim of developing the database is to ensure effective communication of objectives to every level as its usage among managers is very limited.

Strategy map is also used to create vertical strategic alignment of strategies and objectives in the organization. To ensure the top level strategy is communicated to the lower level, the development of divisional strategy map must be based on the higher managerial level in the hierarchy. In the case company it is named as "Tier". The top tier strategy will flow down to the lower tier to the individual level through the strategy map. The linkages are then assessed by responsible head of division to ensure every objective exist in the map has its linkages to the upper level objectives.

B. Factors Affecting the Used of Strategy Maps

Observations and interviews have highlighted four factors affecting effective used of strategy maps as a communication tool. First, the divisional strategy maps are developed in isolation. This study speculates that this may explain the reasons for interdivisional strategy miscommunication. Though the development processes are carefully design and implemented, communication leakage still occurs between different divisions. For example, Division A and B have developed their own strategy map based on company strategy map. However, in providing services, there are interdependencies between divisions. It is highly observed that very limited communications [discussion] exist between the two divisions in the strategy map development process.

Second, though the top management has formally developed a very structured strategy maps development guide for its managers, the determination of strategic objectives is highly dependent on managers' judgment. The company has its own BSC implementation policy and guideline which is internally built by the strategic office. This guideline facilitates the strategy maps development process. It contains guideline on the suggested design of the strategy maps, how the strategic themes are created and used, the formulation of strategic objectives, ways to identify good performance indicators for the objectives and its interdependencies to other elements in the map. It also illustrates how managers should determine its strategic initiatives to ensure attainment of its objectives. Though policy and guideline has been developed, all these activities are highly dependent on managers' judgment based on managers' knowledge and experience in the business. Therefore, clarity of the themes and objectives is still subject to individual interpretation.

Through observation, it is very clear that the strategy map is the main BSC strategic objectives communication tool. It was regularly presented in most of the BSC briefing sessions. Their aim is to clarify company's strategic objectives to every manager involved. However, the interviews done have found that strategy map is only compulsory at the divisional levels. It is not translated up to the individual level. Therefore the linkages flow only at the top level which is the third factor that impede successful strategy communication process between top, middle and operational level managers.

Finally, the managers' perception towards BSC and its implementation has also affected the process. Though managers agree that BSC benefited their company in streamlining their objectives at every level, communicating of company's strategy through strategy map is not sufficient. Managers view strategy maps as a high level management tool which has little connection to them. Managers at the operational level show less interest on the strategy maps which hold back communication of strategy from top to the lower level.

C. Conclusion and Limitation

Applications of the strategy maps in communicating strategy to all level managers have been identified as a crucial process in BSC implementation. However, studies reported various means of using strategy map in BSC companies [4], [30], [25], and [27].

Strategy maps can be an effective way to communicate organization's strategy to managers if it is flexibly used and clear where formal definitions of objectives are made available to all managers. Companies should design an effective and efficient way of using the strategy maps not only as the top management tool but middle and operational managers should be encouraged to have their personal strategy maps which indirectly force them to understand their divisional and company objectives. However, using the

strategy maps as a communication tools requires managers to spend time and effort in its development stage. Thus managers must not be caught in the formal process as the business on the ground should be their main priorities. Future study may try to provide strategy maps usage guideline to ensure its full utilization in a BSC company.

REFERENCES

[1] R. S. Kaplan and D. P. Norton, "The Balanced Scorecard - Measures that Drive Performance." *Harvard Business Review*, 1992.

[2] Bain and Company, "Management Tools", 2007, available at: http://www.bain.com/management_tools/

[3] Bain and Company, "Management Tools", 2010, available at: http://www.bain.com/management_tools/

[4] R.S. Kaplan and D. P. Norton, "The Strategy Map: Guide to Aligning Intangible Assets." *Strategy and Leadership* vol. 32 no**.** 5, pp 10-17, 2004.

[5] R. S. Kaplan, and D. P. Norton, *The Balanced Scorecard: Translating Strategy into Action,* Boston Massachusetts, Harvard Business School Press. 1996.

[6] P. Roest, "The golden rules for implementing the Balanced Scorecard." *Information Management & Computer Security* vol. 5 no. 5, pp 163-165, 1997.

[7] C. J. Cronje and F. N. S. Vermaak, "The Balanced Scorecard as a Potential Instrument for Supporting Planning and Improvement in Accounting Education: Comparative Survey Findings." *SAJEMS NS* vol. 7 no. 3, pp 480-491, 2004.

[8] K. Milis and R. Mercken, "The used of the balanced scorecard for the evaluation of information and communication technology projects", *Industrial Journal of Project Management, v*ol. 22, pp. 87-97, 2004.

[9] D. Crawford and T. Scaletta, "The balanced scorecard and corporate social: aligning values", *CMA Management,* vol. 79 no. 6, pp 20-27, 2005

[10] J. Craig and K. Moores, "Balanced scorecard to drive the strategic planning of family firms", *Family Business Review, v*ol. 18 no. 2, pp. 105-122, 2005.

[11] A. Osama, "Designing Strategy and Measuring Performance in R&D: The Case of Balanced Scorecards", unpublished PhD Dissertation, Fredrick S. Pardee-RAND Graduate School, Santa Monica., 2006

[12] J. Kettunen, "Strategies for the cooperation of educational institutions and companies in mechanical engineering", *Industrial Journal of Educational Management, v*ol. 20, pp. 19-28, 2006

[13] B.J. Witcher and V.S Chau, "Balanced scorecard and Honshin Kanri: Dynamic capabilities for managing strategic fit", *Management Decision, v*ol. 45 no. 3, pp. 518-538, 2007

[14] P. Bloomquist and J. Yeager, "Using balanced scorecards to align organizational strategies", *Healthcare Executive,* vol. 23. no. 1, pp. 24-28, 2008.

[15] R.S. Kaplan and D. P. Norton, *The Strategy Focused Organization: How Balanced Scorecard Companies Strive in the New Business Environment,* Massacchuset, Harvard Business School Press, 2001.

[16] R.S. Kaplan and D.P. Norton, *Alignment: Using the Balanced Scorecard to Create Corporate Synergies* vol. 1, Boston Massachusetts, Harvard Business School Press, 2006

[17] M. A. Malina and F.H. Selto, "Communicating and controlling strategy: An empirical study of the effectiveness of the balanced scorecard", 2001, Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=278939&rec=1&srcabs=400120

[18] S. Davis and T. Albright, "An investigation of the effect of balanced scorecard implementation on financial performance", *Management Accounting Research, v*ol. 15, pp. 135-153, 2004.

[19] G. J. Braam and E. J. Nijssen, "Performance effects of using the balanced scorecard: a note on the Dutch experience", *Long Range Planning,* vol. 37, pp. 335-349, 2004.

[20] R. Greatbanks and D. Tapp, "The impact of balanced scorecards in a public sector environment: Empirical evidence from Dunedin City Council, New Zealand", *Industrial Journal of Operations and Production Management,* vol. 27, no 8, pp. 846-873, 2007.

[21] H. Atkinson, "Strategy implementation: a role for the balanced scorecard?", *Management Decision,* vol. 44 no. 10, pp. 1441-1460, 2006.

[22] D. Rigby, *Management Tools and Trends.* Bain & Company, 2007. Available at : http://www.bain.com/management_tools/home.asp.

[23] H. Ahn, "Applying the Balanced Scorecard Concept: An Experience Report", *Long Range Planning*, Vol 34, pp. 441-461, 2001.

[24] C. Scholey, "Strategy maps: a step-by-step fuide to measuring, managing and communicating the plan." *Journal of Business Strategy*, vol 26, no3, pp 12-19, 2005.

[25] Y.C.L. Chan, "How strategy map works for Ontario's health system." *International Journal of Public Sector Management*, vol 22, no 4, pp 349-363.2009.

[26] L.E.Quezada, F.M. Cordova, P. Palominos, K. Godoy and J. Ross, "Method for identifying strategic objectives in strategy maps." *International Journal of Production Economics,* vol 122, pp 492-500. 2009.

[27] F.T. Buytendijk, T. Hatch and P. Micheli, "Scenario-based strategy maps." *Business Horizons,* vol 53, pp 335-347. 2010.

[28] J.W. Creswell, *Qualitative Inquiry and Research Design: Choosing Among Five Approach*. London, Sage Publication. 2007.

[29] R.K. Yin, *Case Study Research: Design and Methods.* D. S. Foster. London, SAGE Publications, 1998.

[30] M. Kunc, "Using systems thinking to enchance strategy maps." *Management Decision,* vol 46 , no 5, pp 761-778. 2008.

[31]