

701 E. Chocolate Avenue, Suite 200, Hershey PA 17033-1240, USA Tel: 717/533-8845; Fax 717/533-8661; URL-http://www.idea-group.com

ITP5048

An Investigation into Balanced Scorecard Implementation in Australian Companies

Monir Zaman

Senior Lecturer in Accounting and Finance, Faculty of Business and Law, Central Queensland University, North Rockhampton 4702, Email: m.zaman@cqu.edu.au, Phone: 61+ (07) 4930 9660 (Off.), Phone: 61+ (07) 4926 8761 (Home), Fax: 61+ (07) 4930 9700

ABSTRACT

This paper investigates the current state of corporate Australia's balanced scorecard practices, and plans to implement it in the near future. Among top 50 Australian companies only 33 percent have implemented balanced scorecard (BSC) and another 25 percent of companies are planning to implement it in the future. It seems that Australian managers have not yet taken a holistic approach to BSC implementation, but some intend to do so in near future. It is clear that corporate managers strongly believe that BSC is a valuable, strategic performance measurement system and implementation will result from stakeholders' demands.

(1) INTRODUCTION

This paper investigates the implementation of the Balanced Scorecard (BSC) in Australian corporations. The importance of a holistic performance measurement system has been borne out by various research studies. For example, in the U.S., Lingle and Schiemann (1996) compared business results between companies using a BSC measurement with companies using traditional financial measurements.

Understanding the importance of BSC has led companies to develop a variety of corporate scorecards.

BSC is regarded by Fortune 100 Companies as the most influential business performance measure developed in the past 75 years ((Harper, Doug. 2001).

Up till now, little research has been published in Australia on the implementation of the Balanced Scorecard (BSC). The proposed research topic is an important research topic worthy of investigation in the Australian context. Hoque and James (2000) conducted a survey of 66 Australian manufacturing companies linking BSC measures to size and market factors. The results found that larger firms with a higher proportion of new products made more use of BSC.

The balanced scorecard as a strategic tool for performance measurement systems is now well established (Kaplan and Norton1992, 1996a, 2000, and 2001). There is growing support among both academics and practitioners for its implementation in various organisations.

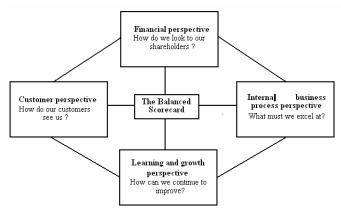
1.1 The Balanced Scorecard Framework

Balanced Scorecard defined: Balanced Scorecard consists of a set of superior combinations of financial and non-financial measures that provide a comprehensive view of a business to guide strategy development, implementation and communication. It can provide reliable feedback for management control and performance.

Kaplan and Norton's model of BSC translates an organisation's mission and strategies into objectives and performance measures that reflect the following four perspectives:

 Financial perspective, including cost and profit measures, ROI, cash flow, and shareholders value

Figure 1 The Balanced Scorecard



Source: Kaplan & Norton (1996a)

- Customer perspective, including customer satisfaction, customer profitability, market share and the number of new customers
- Internal business processes, including on-time delivery, the number of new products launched and product defects
- Learning and growth, including the improvement of employee satisfaction, and development of employee technical skills

1.2 Challenge to traditional financial performance measurement

Traditional financial performance measurement systems are inadequate (Medori, 1998) and fail to provide managers with strategic information to be competitive.

The BSC is a new philosophy for strategic management accounting, which incorporates non-financial measures and overcomes the limitations of traditional financial measures of performance.

Black and Porter (1995) also stress the importance of measuring employee performance and customer satisfaction, thus emphasising the need for non-financial measures.

1.3 The Balanced Scorecard Methodology

Strategic performance measurement system should find solutions to questions such as:

- Is the organisation healthy, balanced, efficient and effective?
- Does it provide service to its customers and employees? And
- Does it put value on results?

1.4 Aims of the paper

- To identify the number of companies (samples) in Australia using a balanced scorecard and the number planning to implement it in the near future.
- To determine the extent to which chief executives and chief accounting and financial mangers believe the BSC to be a valuable measurement system to evaluate the performance of an organisation.
- To determine the extent to which corporate managers believe that the BSC identifies the major constituents of the organisation such as shareholders, customers, suppliers, employees, debtholders, government and the community.

(2) LITERATURE REVIEW

2.1 Literature Review

Many of the world's leading organisations claim that balanced scorecard techniques are advantageous to objectively quantify and measure business performance (Figg, 2000). Sixty four percent of US controllers reported that their companies were experimenting with measuring, collecting and reporting non-financial data using a balanced scorecard (Earnst & Young, 1998). In response to dissatisfaction with traditional methods, a number of performance systems have recently been developed (Fisher; 1992, Hronec, 1993).

The Hilton Corporation implemented a balanced scorecard from 1995-1998 and achieved the following results:

Financial Perspective

- Significant increase in revenue compared to that of competitors during the period of implementation.
- Improvement in the value of properties in Hilton's franchise system, which implemented the value creation strategy one year later.

Non-financial Perspective

Customer Perspective

- Non-financial measures showed improvement in guest satisfaction and strong improvement in customer satisfaction in Hilton's company owned and managed hotels.
- The company improved value relationships, even with price increases for average rooms.
- · Hilton reinforced consistency in the business value culture.

2.3 Hypotheses Development

Relevant to the development of hypotheses, the discussions in the previous sections of this paper has argued that:

- (a) Australian corporations will not have developed a holistic approach to implementing BSC due to lack of pressure from stakeholders, government and professional accounting regulatory bodies.
- (b) In response to pressure from stakeholders, corporate managers are likely to implement BSC in their corporations.

Based on the preceding discussion and these questions, the following hypotheses were developed for this study:

- (H1a) The level of corporate managers' understanding of the balanced scorecard is related with its actual implementation in Australian companies.
- (H1b) The level of the corporate managers' understanding of the balanced scorecard is related to the intention to implement in Australian companies.
- (H2) The level of corporate managers' belief of BSC is a strategic performance measurement system and is related to implementation in Australian companies.
- (H3) The level of corporate managers' belief that BSC is a strategic performance measurement system is related to with their perception of BSC as a valuable performance measurement system.
- (H4) The level of corporate managers' belief that the BSC identifies

stakeholder's demands on management and is likely to related with their plans to implement it.

(3) RESEARCH METHODS AND PROCEDURES

3.1 Population

The population relevant to this research project consisted of the top 500 Australian companies published by Dun & Bradstreet (Australia) Pty Ltd on the basis of total sales revenue. The sampling frame consists of the list of elements from which a sample may be drawn: also called working population (Zikmund, 2000:344).

3.2 Sample Selection

The sample consisted of the top 125 companies out of the Australia's top 500 Companies

3.3 Participant Subjects

Participants included Chief Executive Officers, Chief Accountants/ Chief Cost & Management Accountants/ Chief Information Systems Managers/ Marketing and Customer Relationship Managers/ Purchase & Sales Managers

3.4 Survey instrument and procedures

A six-page questionnaire was developed as the survey instrument. The following questions were asked to respondents:

- 1. Why do organisations undertake the balanced scorecard?
- 2. Do you believe that the balanced scorecard (BSC) is a valuable measurement system for evaluating the performance of an organisation?
- 3. Do you believe that the balanced scorecard is a strategic performance measurement system?
- 4. Has your company implemented a balanced scorecard? If yes, how long has your company been using it?
- 5. If not implemented, do you have any plans to implement a balanced scorecard in the near future?
- 6. Do you believe that the BSC identifies the major constituents of the organisation such as shareholders, customers, suppliers, employees, debt-holders, government and the community?

The survey instrument was tested through a mail-out to 25 addresses in the random sample leaving approximately 100 firms for the final mail-out. In the pilot study involving 25 firms, 8 responses (32%) were received within four weeks. These replies fell short of the investigator's expectation in terms of number and information.

Out of 26 returned questionnaires, 2 were left blank resulting in a total of 24 valid replies out of 50. The response rate of 48% was a little short of expectation. A non-response analysis (at p>0.05) was conducted showing no significant differences between initial and subsequent respondents on all items included in the hypotheses testing.

Face to face interviews for the case studies were held with the Chief Financial Officer of TNT, General Manager, Finance of Kimberly-Clark Australia (KCA) Limited and the Group Commercial Manager of Forrester Kurts Properties (FKP) Ltd.

3.5 Response data

Out of 125 questionnaires sent, approximately 75 declined to participate due to various reasons thus reducing the sample to only 50.

3.6 Data Analysis:

Pearson Correlation Analysis was used to test the relationships between dependent and independent variables.

(4) RESEARCH FINDINGS

4.1 Characteristics of the respondents

The corporate executives of the 24 responding companies displayed a wide range of variability in the characteristics surveyed. Most of them were experienced in accounting and financial management, aged between 28 and 59. The median age was 42. Most of them had formal accounting qualifications along with professional qualifications with

696 2004 IRMA International Conference

membership of the Institute of Chartered Accountants or the Australian Society of Certified Practicing Accountants (CPAs).

Out of 21 participants who responded to the question on gender, 20 were male and only one was female.

Out of 24 responding companies, only 8 had implemented balanced scorecard while 16 did not. However 6 of those16 companies reported that they were planning to implement a balanced scorecard in the near future

Summary of interview with CFO TNT

In an interview with the Chief Financial Officer (CFO) of TNT it was found that the company had implemented a balanced scorecard just one year ago and was achieving very good results.

Results achieved by TNT on BSC Implementation include:

- Translating added value to the shareholders;
- Being a good corporate citizen;
- Managing to reduce cost substantially;
- Becoming specialized in parcels; and
- · Becoming a front-runner in data completion.

Kimberly-Clark Australia (KCA) Pty Limited

Interview with the general manager, finance.

According to the GM, finance KCA had implemented BSC over two years, but he was not sure about any improvements to performance measurement. In regard to impediments the GM replied that the main problem was identifying quantitative meaningful measurable metrics.

Forrester Kurts Properties (FKP) Limited.

FKP Limited is a public company specializing in construction and development of land and public home properties.

Although the company had not yet implemented a BSC, the GCM said that it planned to implement it within a year. In relation to a question associated with benefits and problems with implementation, the GCM indicated problems with fair and accurate measuring and obtaining cooperation from key internal personnel.

4.3 Descriptive statistics

To indirectly identify respondents' understanding of BSC and its correlation with effective implementation in their corporations, the following criteria (variables) are described in the Table1.

Table 1. Support for balanced scorecard implementation in Australian companies

BSC Criteria Support for implementation Scale 0-2= none, 2-3 = minor, 4-5= moderate, 6-7=strong								
Understanding of BSC	Median	Moderate	(3.88)					
BSC as Valuable performance measurement system		Moderate	(5.75)					
BSC as strategic performance measurement system		Moderate	(5.58)					
BSC use duration		Minor	(3.00)					
BSC as real balanced integrated		Moderate	(5.42)					
BSC implemented or not		Minor	(1.67)					
BSC plan to implement		Minor	(1.47)					
BSC as stakeholder's scorecard		Moderate	(5.54)					
Note: Figures in parentheses represent average response codes on the 1-7 scale								

Table 2. Results of Pearson and Spearman's correlation tests

Research Hypotheses	Pearson correlation	Significance	Support for hypothesis	Spearman's rho	Significance	Support for hypothesis
						Yes but
H1a	-0.477	0.019	Yes	-0.479	0.018	conditional
H1b	-0.182	0.515	No	-0.165	0.556	No
H2	-0.554	0.032	Yes	-0.504	0.012	Yes
Н3	0.778	0.000	Yes	0.626	0.001	Yes
						Yes but
H4	-0.434	0.034	Yes	-0.504	0.012	conditional

Table1. Support for balanced scorecard implementation in Australian companies

Table 2 shows that there is only minor support for the implementation of BSC and intention to implement respectively. However, the criterion of BSC as a valuable and strategic management system is moderately supported.

4.4 Hypotheses tests

In order to test the hypotheses developed earlier, Pearson Correlations were used as the data was in interval scale form. Table 3 summarizes the results of the tests.

4.5 Analysis of hypotheses related results

Although corporate managers have some understanding of BSC there is a lack of initiative to implement it in their corporations.

Corporate managers' believe that BSC is a **strategic and valuable** performance measurement system.

The results show a significant correlation coefficient suggesting strong support for H3. They also believe that top managers' understanding of BSC implementation was very important. Stakeholders' demand for BSC implementation is needed and there is a strong support for hypothesis H4.

(5) SUMMARY AND CONCLUSIONS

The results indicate that although managers in Australian companies have an understanding of BSC there is lack of initiative and planning to implement BSC in their corporations. Furthermore, there was a strong correlation between corporate managers' belief in BSC as a strategic and valuable performance measurement system and will create value. However, the results of negative correlation suggest that there is little demand by stakeholders to implement BSC

Thus it may be concluded that lack of initiative and planning by Australian corporate managers and lack of demand by stakeholders have led to the poor implementation of BSC in Australian companies.

REFERENCES

Black, S and Porter, LJ 1995, 'An empirical model for total quality management', *Total Quality Management*, vol. 6, no. 2

Dun & Bradstreet (Australia) Pty Ltd (2000-2001), Australian top 500 companies.

Earnst & Young LLP 1998, *Measures that matter*, Earnst & Young Centre for Business Innovation, Cambridge, MA.

Figg, J 2000, 'Balanced scorecards receive high marks', *The Internal Auditor*, vol. 57, iss. 2, p. 16.

Harper, D 2001, "Introducing BSC software", *Industrial distribution; New York*, edn March, pp. 94-96.

Hoque, J. and James, W. 2000, 'Linking Balanced Scorecard Measures to Size and Market Factors: Impact on Organizational Performance, Journal of Management Accounting Research, pp.1-14.

Hornec, SM 1993, Vital signs, using quality, time and cost performance measurements to chart your company's future, Amacom, New York, NY

Kaplan, RS & Norton, DP 1992, 'The balanced scorecard-measures that drive Performance'. *Harvard Business Review*, vol. 70, no. 1, pp. 71, 70

_____ RS & Norton, DP 1993, 'Putting the balanced scorecard to work', *Harvard Business Review*, Sept/Oct edn, pp.134-147

RS & Norton, DP 2001, 'Transforming the balanced scorecard from performance measurement to strategic management: part 1', Accounting Horizons, vol. 15, no. 1, pp. 87-104.

Lingle, JH & Schiemann, WA 1996 'From balanced scorecard to strategic gauges: is measurement worth it?' Management Review, vol. 85, pp. 56-61.

Medori, D 1998, 'The development and implementation of an integrated performance measurement framework', paper presented at the Business Performance measurement Conference, Cambridge.

Zikmund, WG 2000, Business Research Methods, 6th edn, Dryden Press, Sydney.

0 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/proceeding-paper/investigation-into-balanced-scorecard-implementation/32458

Related Content

Design and Implementation of an Intelligent Moving Target Robot System for Shooting Training

Junming Zhaoand Qiang Wang (2023). *International Journal of Information Technologies and Systems Approach (pp. 1-19).*

www.irma-international.org/article/design-and-implementation-of-an-intelligent-moving-target-robot-system-for-shooting-training/320512

A QoS-Enhanced Model for Inter-Site Backup Operations in Cloud SDN

Ammar AlSousand Jorge Marx Gómez (2019). *International Journal of Information Technologies and Systems Approach (pp. 20-36).*

www.irma-international.org/article/a-qos-enhanced-model-for-inter-site-backup-operations-in-cloud-sdn/218856

PolyGlot Persistence for Microservices-Based Applications

Harshul Singhal, Arpit Saxena, Nitesh Mittal, Chetna Dabasand Parmeet Kaur (2021). *International Journal of Information Technologies and Systems Approach (pp. 17-32).*

 $\underline{www.irma-international.org/article/polyglot-persistence-for-microservices-based-applications/272757}$

Agile Scrum

Kenneth R. Walshand Sathiadev Mahesh (2015). *Encyclopedia of Information Science and Technology, Third Edition (pp. 7018-7025).*

www.irma-international.org/chapter/agile-scrum/112400

An Objective Compliance Analysis of Project Management Process in Main Agile Methodologies with the ISO/IEC 29110 Entry Profile

Sergio Galvan-Cruz, Manuel Mora, Rory V. O'Connor, Francisco Acostaand Francisco Álvarez (2017). *International Journal of Information Technologies and Systems Approach (pp. 75-106).*

www.irma-international.org/article/an-objective-compliance-analysis-of-project-management-process-in-main-agile-methodologies-with-the-isoiec-29110-entry-profile/169769