

**Balanced Scorecard Implementation in Australian Companies: An
Exploratory Study of Current Corporate Practice and Strategic
Intent**

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ABSTRACT

This paper investigates the current state of corporate Australia's balanced scorecard practices and the plan to implement it in near future. An investigation of top 50 Australian companies surveyed revealed that only 33 percent companies have implemented balanced scorecard (BSC) and 25 percent companies are planning to implement it in future. The results indicate that management of Australian companies has not yet taken holistic approach to BSC implementation but the results show that Australian companies are likely to adopt a strategic posture of intention to implement BSC in near future. However, corporate management strongly believe that BSC is a strategic and valuable performance measurement system and pressure from the stakeholders will results in its implementation in Australian companies

Key Words: Balanced scorecard, Australian Companies, Implementation

Balanced Scorecard Implementation in Australian Companies: An Exploratory Study of Current Corporate Practice and Strategic Intent.

Introduction

The focus of this paper is an investigation on the implementation of the Balanced Scorecard (BSC) in Australian corporations. In recent times 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 BSC measurement with the companies using traditional financial measurement. The authors found that BSC users distinguish themselves from the traditional financial measure over the balancing financial and non-financial measures, linking strategic measure to operational performance, and clearly communicating measures and progress to all employees (Clarke and Tyler 2000). Understanding the importance of BSC by the managers has led companies to develop a variety of corporate scorecards. Many recent research reveals that a large number of institutional investors are making their decisions based on non-financial performance measures (Daly 1996). Daly (1996) also argues that analysts who stressed the importance of non-financial issues have increased accuracy in their earning estimates and a strong correlation was found with growth expectations. BSC is regarded as the most influential business performance measure philosophy developed in the past 75 years, and some groups predict that within five years at least 40 percent of all Fortune 1000 companies will use BSC software. (Harper, D 2001). BSC methodology is primarily built on previous ideas such as Total Quality Management (TQM).

Up-till now, little research has been published in Australia on the implementation of the Balanced Scorecard (BSC). The proposed research topic entitled “Balanced Scorecard Implementation in Australian Companies: An Exploratory Study” is an important research topic worthy of investigation in the Australian context. There are very few significant research studies on the implementation of balanced scorecards in Australia. This study will fulfil the gap of knowledge on the topic area and the topic needs an immediate investigation in Australian context. Balanced Scorecard (BSC) as a strategic tool for performance measurement systems is now well established (Kaplan and Norton 1992, 1996a, 2000, and 2001). There is a growing interest among

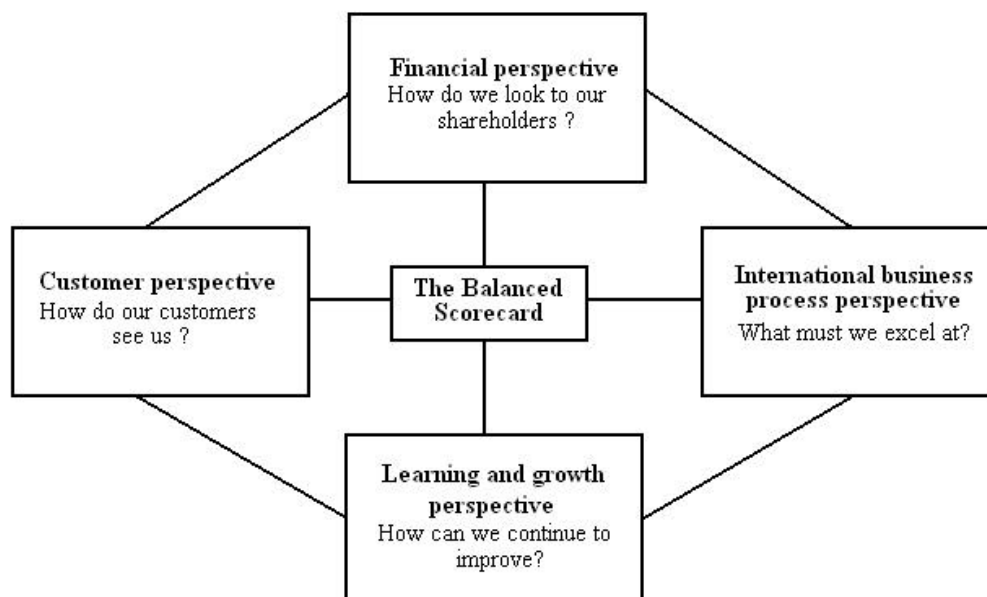
both academics and practitioners for the implementation of BSC in various organisations.

The paper is divided into several sections. The next part presents a literature review on the development of conceptual model of balanced scorecard and related research materials to place this exploratory study in context. The following section outlines aims and hypotheses development along with the development of a survey instrument. The next section is devoted to research methods and procedures. The findings and results of the study, hypotheses tests are presented in section four. Finally section five discusses conclusions, limitations, and implications.

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 the business to guide strategy development, implementation and communication and can provide reliable feedback for management control and performance.

Figure 1 *The balanced Scorecard*



Source: Kaplan & Norton (1996a)

BSC was popularised by Kaplan and Norton (1992,1993,1996, and 2001) and adopted widely around the world. Kaplan and Norton's model on 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, shareholders' value, and customer perspective, for example, customer satisfaction, customer profitability, market share and the number of new customers
- Internal business processes, for example, on-time delivery, the number of new products launched and product defects
- Learning and growth, for example, improving employee satisfaction, developing employees' technical skills (see Textbook, Langfield-Smith, et al, 2003 Exhibit 14.4 p. 678 details).

Challenge to traditional financial performance measurement VS BSC

Traditional financial performance measurement systems fail to provide managers with strategic information required measuring that will drive competitive advantage. In today's competitive environment traditional financial performance measurement system should be supplemented with strategic performance systems like balanced scorecard as described above. Traditional performance measurement systems have failed to provide information on strategic posture to corporate managers that are required to measure and manage the all types of competencies that drive competitive edge over competitors. An effective strategic measurement system is balanced, integrated, and designed. Financial performance measures are inadequate (Medori, 1998) and many organisations have realised its inadequacies in order to compete globally. On the other hand balanced scorecard presents a strategic performance measurement model to incorporate the company's critical input, output, and process variables resulting in value creation. It is a new philosophy for strategic management accounting incorporating non-financial measures and overcomes the limitations of the traditional financial measure of performance. In today's global economy and with the rise of severe competition total customer satisfaction is seen as one of the key indicators of competitive success by the academics and practitioners (Anderson and

Sullivan, 1994). Black and Porter (1995) also stressed the importance measuring performance of employee and customer satisfaction. There is an increasing demand for better customer service, and the non-financial measures are becoming increasingly important.

Table 2 *Which non-financial metrics are of most value?*

Most Valuable	Least Valuable
Strategy execution	Compensation ratios
Management credibility	Use of employee teams
Quality of strategy	Process quality awards
Innovations	Social policies
Ability to attract talented people	Published investor materials
Market share	Quality of customer service
Management experience	Organisation
Quality of executive compensation	Quality analyst guidance
Quality of major processes	Quality of investor relations
Research leadership	Number of customer complaints

Source: Ernst & Young (1998)

The balanced scorecard methodology

Literature argues that performance measures are strategic in nature and should relate to strategy for strategic objectives (Skinner, 1989). Therefore, a strategic performance measurement system should find solution to the questions such as:

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

Kaplan and Norton's BSC presents such a model incorporating all the questions for strategic performance measurement and management for high performance organisations. BSC links to short-term goals with long-term vision and strategy of the business and incorporate both non-financial and financial data to assist to find problems, improve processes and achieve organisational goals with a balance understanding by all level of management. It proves that a balanced scorecard is really balanced (Amaratunga, et al, 2002).

Aims of the paper

To identify the number of companies (samples) in Australia that are using Balanced Scorecard and how many are planning to implement Balanced Scorecard in the near future.

- The extent to which chief executives and chief accounting and financial managers believe that BSC is a valuable performance measurement system to evaluate the performance of an organisation.
- To determine the extent to which Chief executives and chief accounting and management accountants/finance managers believe that Balanced Scorecard is balanced, integrated, and designed to incorporate the company's critical input, output, and process variables resulting in value creation.
- To determine the extent the corporate management believe that the stakeholder scorecard identifies the major constituents of the organisation such as shareholders, customers, suppliers, employees, debt-holders, government and the community.
- To determine the extent corporate management believe that balanced scorecard techniques give them an edge in objectively quantifying and measuring business performance

Literature Review

In the article Kaplan & Norton (1992) discuss the BSC measures that drive performance. According to the authors BSC 'is like the dials in an airplane cockpit which give managers complex information at a glance'. The authors also state that BSC links performance measures with regard to four perspectives as follows:

- Customer perspective
- Internal perspective
- Innovation and learning perspective
- Financial perspective

BSC according to Kaplan & Norton (1996) introduces the following four management processes linking long-term strategic objectives with short-term actions:

- Translating the vision

- Communicating and linking
- Business planning
- Feedback and learning.

The perfection problem - Many managers believe that strategic performance measurement systems must be a total and perfect system, but perfection cannot be achieved overnight in strategic performance measurement systems. Only time, patience, and a willingness to experiment can lead to success (Vitale, et al. 1994).

Many of the world's leading organisations claim that balanced scorecard techniques give them an edge in objectively quantifying and measuring 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 Balanced Scorecard (Earnst & Young, 1998). In response to the dissatisfaction with traditional, a number of performance systems have recently been developed (Fisher; 1992, Hronec, 1993). The authors Sharma & Haque (2001 p.1) conducted a case study on the implementation of Balanced Scorecard (BSC) in the government housing authority of Fiji to provide affordable shelter and mortgage financing for middle-income earners and found that BSC was essential to the implementation of the new for profit-orientation of the Fiji Housing Authority (HA).

Hilton Corporation implemented balanced scorecard during 1995-1998 and achieved the following results:

Financial Perspective

- Hilton's revenue increased significantly compared to the revenue of competitors during the period of implementation between 1995-1998.
- Properties in Hilton's franchise system, which implemented value creation strategy one year later, shows tremendous improvement and they captured more than their fair share value.

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 relationship, even with average room price increases.
- Hilton reinforced consistency in the business value culture.

Mitsubishi Australia in 1994 (Walsh, P.1995), developed a Balanced Scorecard at Mitsubishi Motors and found that BSC can be constructed in a variety of ways as followed by as shown below:

Step 1:

- Mitsubishi identified its key mission and every manager of Mitsubishi was issued with a card that stated the following key missions:
 - 1. A customer-oriented market driven company
 - 2. Fostering and rewarding initiative within a team environment
 - 3. Achieving customer satisfaction through total quality management
 - 4. Becoming a recognised good corporate citizen

Step 2:

Identifying the following six critical success factors at Mitsubishi:

- Quality
- Resource management
- Cost
- Innovation
- Customer responsiveness
- Flexibility

(Langfield-Smith, et al. 2003, pp 672-673).

Some other examples of organisations who adopted scorecards

The stakeholder scorecard identifies the major constituents of the organisation such as shareholders, customers, suppliers, employees, debt-holders, government and the community. The scorecard defines the organisation's goals for the different groups of stakeholders and develops an appropriate scorecard of measures and targets for them (Atkinson and Waterhouse 1997). For example, Sears built its initial scorecard around the following:

- 'a compelling place to shop'
- 'a compelling place to work'
- 'a compelling places to invest'.

Citicorp used a similar scorecard to that of Sears- 'a good place to work, to bank, and to invest'. AT&T developed an elaborate internal measurement system based on financial value-added, customer value-added, and people value-added. All these companies built their measurements around customers, shareholders and employees in order to ensure that these constituents felt that they were well served by the company.

Australian situation of balanced scorecard implementation

Balanced scorecard approach to performance evaluation has been implemented at a number of organisations in Australia. The examples are Citibank, Orica, CSR, Brisbane and Brimbank City Councils and RMIT University (Watty, K. 2001).

In Australia, Unilever Australia has adopted the balanced scorecard (Birch, Charles 2001). Colin Sharp, Action Project Manager of Unilever Australia says, "Before we adopted BSC, there was no explicit link between the things we asked our people to do and the business strategy, and this led to many great things being done well but may be not the right things. We became dissatisfied with our delivery of our plans."

Key Performance Indicator Scorecards

The use of Key Performance Indicator (KPI) scorecards is also common among companies. Consulting organisations sell and install large systems also offer KPI scorecards. For example, a financial service organisation used KPI and articulated 4Ps for its "Balanced Scorecard" as follows:

1. Profits
2. Portfolio (size of the loan volume)
3. Process (percent processes ISO certified)
4. People (meeting diversified goals in hiring).

KPI scorecards are most helpful for departments and teams when a strategy program already exists at a higher level.

Applying The BSC to Non-Profits and Government Organisations

The Balanced Scorecard has also been applied by Non-profit and Government Organisations (NPGOs) during the last five years. In Australia, BSC was adopted in City Coast Credit Union and in the Deakin University Library (Birch, Charles, 2001). City Coast Credit Union's Manager of Corporate Services, John Tancevski, says BSC was adopted at City Coast 'because of the constant de-regulation of Australian banking laws, increased competition for business posed by mortgage originators'. Deakin University Librarian, Sue McKnight, says BSC was adopted because 'We saw involving and engaging our clients and stakeholders in the process as a key issue' (Birch, C 2001, Australian CPA pp. 50-51).

Hypotheses Development

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

- (a) Due to the lack of pressure from stakeholders, government and professional accounting regulatory bodies like Chartered Institute of Management Accountants (ICMA) and Certified Practising Accountants (CPA) in Australia, and the lack of corporate culture and commitment, it is anticipated that Australian corporations will not have developed a holistic approach to implement BSC. This would suggest that the strategy to implement BSC by Australian companies would be contingent on the level of pressure from stakeholders, professional accounting regulatory bodies, government and the influence of corporate culture.
- (b) In response to stakeholders' requirements and pressure, BSC is likely to be implemented in Australian corporations by the corporate bosses.

- (c) Appreciation of BSC as a strategic performance system by the Australian corporate management and compliance within acceptable laws, regulations, and contract terms and conditions are contingent on implementation of BSC in Australian corporations.
- (d) The perceived key to success to implement BSC is the appropriateness and quality of the measures and that enable managers to exploit critical success factors for goal achievement and the clear cause and effect relationships and to create a balance among the different measures.

BSC helps organisations to identify their mission and strategy under four perspectives, such as financial, customer, internal business processes, and learning and growth. The respective related questions are how do we look to our shareholders, customers, how to improve and at what we must excel?

The following research questions were investigated:

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

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

- (H1a) The level of corporate management's understanding with Balanced Scorecard and its implementation are likely to be correlated in implementing Balanced Scorecard in Australian companies.
- (H1b) The level of understanding of the Australian corporate management on Balanced Scorecard and the plan to implement Balanced Scorecard is likely to be correlated.
- (H2) The level of Corporate management's believe with BSC as a strategic performance measurement system is likely to be associated with an intention to a future plan to implement Balanced Scorecard (BSC) as a strategic performance measurement system
- (H3) The level of corporate management's belief with BSC as a strategic performance measurement system is likely to be positively correlated with their perception to treat BSC as a valuable performance measurement system.
- (H4) The level of Corporate management's belief with BSC as a strategic performance measurement system is likely to be positively correlated with their perception to treat BSC as balanced, integrated, and designed to incorporate the company's critical input, output, and process variables resulting in value creation.
- (H5) The level of corporate management's belief with the BSC as a valuable performance measurement system and is likely to be positively correlated with their perception to treat BSC as balanced, integrated, and designed to incorporate the company's critical input, output, and process variables resulting in value creation.
- (H6) The level of belief of the corporate management's that the stakeholder scorecard identifies the major constituents of the organisation such as

shareholders, customers, suppliers, employees, debt-holders, government and the community and their demand and pressure on corporate management and the plan to implement BSC is correlated.

Development of the Survey Instrument

In developing the current practice of Balanced Scorecard implementation and its strategic intent, questions for the survey instrument for this study, consideration was given to “best practice” of balanced scorecard implementation in other countries, as it has been acknowledged that many Australian companies have not yet implemented or planned to implement Balanced Scorecard.

The scorecard defines the organisation’s goals for the different groups of stakeholders and develops an appropriate scorecard of measures and targets for them (Atkinson and Waterhouse 1997). For example, Sears built its initial scorecard around the following:

- ‘a compelling place to shop’
- ‘a compelling place to work’
- ‘a compelling places to invest’.

Citicorp used a similar scorecard to that of Sears- ‘a good place to work, to bank, and to invest’. AT&T developed an elaborate internal measurement system based on financial value-added, customer value-added, and people value-added. All these companies built their measurements around customers, shareholders and employees in order to ensure that these constituents felt that they were well served by the company.

Since the present study is just an exploratory study, the research instrument was designed to elicit responses relating to current implementation of Balanced Scorecard and the corporation’s strategic intent to implement it in near future and not to undertake any study on its actual implementation.

Research Methods and Procedures

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).

Sample Selection

The sample consisted of the top 125 companies out of the Australia's top 500 Companies 2000-2001 published by Dun & Bradstreet (Australia) Pty Ltd on the basis of total sales revenue. The sample was selected randomly.

Participant Subjects

Participants are the Chief Executive Officer, Chief Accountants/ Chief Cost & Management Accountants/ Chief Information Systems Managers/ Marketing and Customer Relationship Managers/ Purchase & Sales Managers

Survey instrument and procedures

A six page questionnaire was developed as the survey instrument incorporating general information on personal data of respondents, some general questions in the form of "yes" and "no" on implementation of Balanced Scorecard followed by questions specific to the use of Balanced Scorecard.

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 and the reply fell far short of the investigator's expectation in terms of percentage as well as some questions were left blank.

A number of measures were taken to enhance the response rate using reply paid envelopes, assuring participants that their responses will be treated as confidential and aggregate responses would be reported to them after the data analysis is completed.

Out of 26 questionnaires, 2 of the received were left blank resulting total 24 valid replies out of 50. The response rate was 48% little short of as expected. A non-response analysis (at $p > 0.05$) was conducted which showed no significant differences between initial and subsequent respondents on all items included in hypotheses testing. Face to face interviews with 3 agreed respondents were also conducted by visiting firms' site in Brisbane and Sydney as a means of case study and to minimise possible misinterpretation of some of the questionnaire items.

Face to face interviews were also conducted with three respondents. They were with the positions 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. First two were located in Sydney and the last one was located in Brisbane.

A case study type research methodology was also undertaken to investigate the results of Balanced Scorecard by visiting and interviewing concerned participants of some implementing companies' site on an agreed basis. Yin (1992) indicates that the selection of a particular case study can be based on prior contract.

The case study method is chosen for a number of reasons such as:

- The case study method is advised when the phenomenon of interest is not well understood and the goal of the research is exploratory (Yin 1994).
- 'Case studies are preferable when there is limited implementation of the phenomenon of interest, in order for relevant data to be gathered (Ellram, LM 2000 pp. 39-51).
- For an exploratory study on Balanced Scorecard implementation in Australian companies, the survey method might yield only a small percentage of respondents who actively participate in balanced scorecard survey.

Response data

Out of 125 questionnaires sent, approximately 75 declined to participate due to their other commitments, personal reasons and company policy not to participate in this sort of research survey thus reducing the sample to 50 only. Eight questionnaires

were received within four weeks and the rest (sixteen valid responses) were received after several courtesy telephone reminders. Face to face interviews and telephone interviews with 6 respondents were also conducted representing 25% of the respondents to minimise possible misinterpretation of some of the questionnaire items.

A Research Assistant monitored the receipts of completed questionnaires and contacted the respondents with a gentle reminder in case of delay. A preliminary study was conducted on the companies already using Balanced Scorecard. Another analysis was prepared on the companies planning to implement Balanced Scorecard in the near future.

Data Analysis:

Pearson Correlation Analysis was used to test the relationships to 'elicit' the "true" relationships between dependent and independent variables.

RESEARCH FINDINGS

Characteristics of the respondents

The Chief Executive Officers/ Chief Financial Managers/ Chief Commercial Managers and others of the 24 responding companies to the survey displayed a wide range of variability on the characteristics surveyed. Most of them were experienced accounting and financial managers and the ages of the respondents varied were 28 to 59 and the median age was 42. In response to a question on the highest level of academic qualifications most had formal accounting degrees, with even some possessing masters and MBA degrees. Most of them had professional qualifications with membership of the Institute of Chartered Accountants or the Australian Society of CPAs. The respondents described their position variously as "Chief Executive Officer", "Chief Financial Officers", "General Manager Finance", "Group Commercial Manager", "Financial Controller", "Management Accountant", "National Manager", and "Finance Manager". Out of 21 participants responding to gender question 20 were male and only one was female.

In reply to a question on Balanced Scorecard implementation, out of 24 responding companies 8 implemented Balanced Scorecard while 16 did not, but 6 out of 16 companies reported that they were planning to implement Balanced Scorecard in the near future. Findings reveal that 33.33% companies surveyed implemented Balanced Scorecard and 25% companies were planning to implement BSC in future. These findings are very encouraging that 58.33% have implemented and were planning to implement BSC in near future.

Summary of the three case study findings

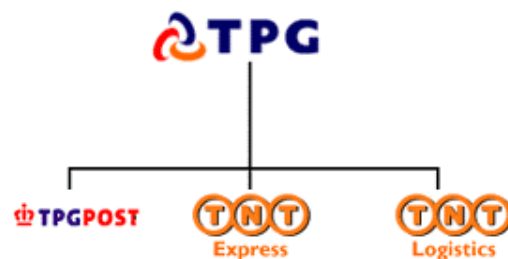
TNT

TNT Express has been meeting the need for time-sensitive, door-to-door delivery services for over half a century. Since establishment in Australia in 1946, TNT has grown to become one of the leading global freight integrators.

TNT Express employs 40 000 staff worldwide and is the first ever organisation to achieve global recognition as an Investor in People.

Today TNT is part of TPG, a global company providing premium mail, express and logistics services. TPG evolved from the 1996 combination of Royal PTT Post, the national postal service of the Netherlands, and TNT Limited, a worldwide transport and logistics company.

TPG provides services in more than 200 countries around the world, with company-owned operations in 59 countries. TNT delivers an average of 3.6 million documents, parcels and pieces of freight a week using its network of 878 hubs, depots and sortation centres that are serviced by more than 20,000 vehicles and 43 aircraft.



Source: www.tnt.com

Summary of interview with CFO

In an interview with the Chief Financial Officer (CFO) of TNT it was found that TNT implemented Balanced Scorecard just one year and was receiving very good results for the business. The CFO believes that the success of the BSC implementation depends on the selection of Key Performance Indicators (KPI's) to measure success and satisfaction of each stakeholder group. According to the CFO, "Implementation

of new measurements and cultural change that is required for balanced scorecard to succeed”. In reply to a question on the benefits and problems on implementation of BSC, the CFO replied, “1. there must be better coverage of key business areas, 2. there must be full and better understanding of business performance, 3. there is management reluctance to change, and 4. the challenge to existing systems and procedures”.

In reply to a question on Key Performance Indicators, he listed the following seven key performance indicators of TNT:

1. Building and retaining profitable customers.
2. Collecting and delivering mail online.
3. Issuing clear invoices.
4. Recruiting, developing, equipping and employing people.
5. Making safe and secured work environment.
6. Creating competitive advantage, and
7. Making money (a profitable organisation).

Results achieved by TNT on BSC Implementation are:

- Translated added value to the shareholders;
- Became good corporate citizen;
- Managed to reduce cost substantially;
- Became specialised in parcel; and
- Became front-runner in data completion.

On the question of opportunities and threat the CFO suggested to improve internal efficiency of TNT and TNT 's threat is TOLL. However, he informed that TNT competed by service and by price.

Kimberly-Clark Australia Pty Limited

Kimberly- Clark Australia (KCA) Pty Limited is known by its brand names and markets the different brands like Kleenex-facial tissues and Huggies -nappies, and Kotex-pads and pantyliners products. KCA produces and markets family care, health care, personal care and away from home products. The manufacturing facilities of

KCA are located in New South Wales and South Australia. KCA employs 1800 people and has annual sales revenue of \$600 million. KCA's origins go back to 1926 with the importing and sale through agents of Kotex napkins made in USA. In 1939, the company began local production of Kleenex facial tissue from material imported from US (KCA Profile, March 2000).

The author interviewed the General Manager, Finance of Kimberly –Clark Australia (KCA) Pty Limited in his North Sydney Office. In reply to a question he answered that KCA had implemented BSC over two years and he was not sure about improvements of performance measurement with the use of BSC. He said, “I think there is a confusion between the Key Performance Indicators (KPIs) and the benchmarking within the organisation and the biggest problem we got with so many KPIs that can't possibly be key because still many of them are not useable”. In reply to another question on the impediments in implementing BSC in KCA he replied that the main problem was the identifying quantitative meaningful measurable metrics.

He completed a survey questionnaire and mentioned that he had a very high understanding about BSC and he also agreed with research questions that BSC “is a strategic and a valuable performance measurement system and is balanced and integrated”. The General Manager agrees that BSC is a stakeholders scorecard and identifies the major constituents of the organisation such as shareholders, customers suppliers, employees, debt-holders, government and the community.

Forrester Kurts Properties(FKP) Limited.

FKP Limited is a public company and specialises in construction and development of land and public home properties. Forrester Parker Group and Peter Kurts Group merged in 1998 and renamed as FKP Limited in 2001. FKP Limited is a diversified property investment company with operations in all Australian states except Western Australia and Northern Territory. FKP is engaged in diverse range of activities including the development and construction of retirement, retail, industrial, and residential property, property financing, the ownership and management of retirement villages and commercial property management. The company's head office is located at its own multi-storied building at Edward Street in Brisbane. The annual sales revenue of FKP is about \$250 million. It is the largest property construction and

development company in Queensland as claimed by FKP's Group Commercial Manager (GCM) when interviewed. The company is also expanding in other states, as evidenced by its retirement villages, land subdivisions in the Hunter Region, moving into Victoria and some of the company's technical commercial complexes in New South Wales (FKP Shareholders' Report 2002).

He (GCM) completed a survey questionnaire and mentioned that he had a moderate understanding about BSC and he also agreed with research questions that BSC "is a strategic and a valuable performance measurement system and strongly agreed that it is balanced and integrated". The General manager strongly agrees that BSC is a stakeholders scorecard and identifies the major constituents of the organisation, such as shareholders, customers suppliers, employees, debt-holders, government and the community.

Interview with Group Commercial Manager of FKP Limited

The author interviewed the Group Commercial Manager who said that BSC was not implemented but the company has planned to implement it within one year. In reply to a question the GCM informed the main objectives to implement BSC is (1) to develop new competencies to support the business strategy, and (2) to improve the compensation/reward system. In reply to another question of key stakeholders the GCM of FKP Limited identified shareholders, workers/employees, customers and suppliers as the key stakeholders. GCM said, "we have financial perspective, customer perspective, staff learning perspective, and we have market profile, the performance of the company and to become good corporate citizen. So we have a box, in that box we have customers and we have marketing, a good corporate citizen".

In reply to another question on the impediments in implementing BSC in FKP Limited, he replied that the main problem would be some subjectivity to conclusion of results and it might prove difficult or impractical from time to time to gain supplier and customer's true feedback. In reply to another question on the benefits and problems that might arise on implementing BSC, he replied that BSC would benefit in order to bring good strategic and value creation focus and the major problems would be a fair and accurate measurement and obtaining cooperation from key internal personnel. The GCM concluded, "We are certainly starting to obtain and react to

some good financial information which we are using to formulate a smarter strategic focus which will lead to better market performance and reaction”.

Descriptive statistics

In response to the questions designed to indirectly identify the strategic posture and perception of the respondents and important role that Balanced Scorecard (BSC) can play on its effective implementation in their corporations under different criteria (variables) are described in the following Table 3

Table 3. 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)
<i>Note: Figures in parentheses represent average response codes on the 1-7 scale</i>			

The Table 3 shows that there are only minor support (1.67& 1.47) of companies on implementation of BSC and plan to implement it respectively. However, there is a moderate support on the understanding of BSC, and BSC as a valuable and strategic performance measurement system. There is a moderate support for respondents that BSC is real balanced integrated and as stakeholders' scorecard. However, it is established now that BSC is a strategic and valuable performance measurement system.

Hypotheses tests

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

Table 2. Results of Pearson and Spearman's correlation tests for testing research hypotheses.

Research Hypotheses	Pearson correlation	Significance	Support for hypothesis	Spearman's rho	Significance	Support for hypothesis
H1a	-0.477	0.019	Yes	-0.479	0.018	Yes but conditional
H1b	-0.182	0.515	No	-0.165	0.556	No
H2	-0.554	0.032	Yes	-0.504	0.012	Yes
H3	0.778	0.000	Yes	0.626	0.001	Yes but conditional
H4	0.807	0.000	Yes	0.587	0.003	Yes
H5	0.701	0.000	Yes	0.447	0.029	Yes
H6	-0.434	0.034	Yes	-0.504	0.012	Yes but conditional

Analysis of hypotheses related results

To test H1a, both Pearson and Spearman's rank correlation analysis were conducted to determine whether there was any relationship between corporate management understanding and support for Balanced Scorecard and its implementation decision. The significant correlation coefficient shows that the level of understanding and support of the corporate bosses are significant but negatively correlated with the implementation in Australian companies. This appears to indicate that although corporations' management has understanding of BSC but there are lack of initiative and plan to implement BSC in their corporations. As there is no similar research in Australia and other countries, it is very difficult to compare this result with other findings. Other country's examples show that BSC was successfully implemented in a number of transformation projects as a new strategic approach to identify linkages between the four key areas of BSC as defined that generate and perpetuate success (Hepworth, 1998).

To test H1b, both Pearson and Spearman's rank correlation analysis were conducted and results revealed that there is an insignificant correlation existing between the level of understanding and the plan to implement Balanced Scorecard. The findings

suggest that the hypothesis H1b is rejected. However, it must be acknowledged with caution about the generalisation of the results, as the number of respondents was limited.

To test H2, both Pearson and Spearman's rank correlation were conducted to determine whether there was any relationship between the corporate management's level of understanding of Balanced Scorecard as a strategic performance measurement system and the plan to implement BSC in near future. The significant negative correlation coefficient shows Australian companies treat BSC as a strategic performance measurement system but are unlikely to adopt it in any near future plan. However, it must be acknowledged with caution about the generalisation of the results, as the number of respondents was limited.

To test H3, both Pearson and Spearman's Rank Correlation Analysis revealed a significant relationship between Balanced Scorecard as a strategic performance measurement system with its perception to treat BSC as a valuable performance measurement system. The results show a significant correlation coefficient and the results suggest a strong support for H3. However, it must be acknowledged with caution about the generalisation of the results, as the number of respondents was limited. Nevertheless, follow-up-interviews with three respondents invariably supported BSC as a strategic and valuable performance measurement system. They also believe that the understanding and support of the top management on the issue of BSC implementation were very important. There is not exactly a similar research in Australia that can be compared with these results. Only some Australian companies use BSC such as Mitsubishi Motors Ltd in South Australia (Langfield-Smith et al. 2003, p.732). In Australia, BSC was adopted in City Coast Credit Union and in the Deakin University Library (Birch, Charles, 2001). Deakin University Librarian, Sue McKnight, says BSC was adopted because 'We saw involving and engaging our clients and stakeholders in the process as a key issue' (Birch, C.2001, Australian CPA pp. 50-51).

H4 predicted "The level of Corporate management believe with BSC as a strategic performance measurement system is likely to be positively correlated with their

perception to treat BSC as balanced, integrated, and designed to incorporate the company's critical input, output, and process variables resulting in value creation".

Table 3 shows a significant positive correlation coefficient using both Pearson Correlation and Spearman's Rank Correlation Analysis. The results suggest that H4 is supported strongly. As there is no similar research in Australia, it is difficult to compare the findings. However, the case of Unilever in Australia may be cited here. In Australia, Unilever Australia has adopted the balanced scorecard (Birch, Charles 2001). Colin Sharp, Action Project Manager of Unilever Australia says, "Before we adopted BSC, there was no explicit link between the things we asked our people to do and the business strategy, and this led to many great things being done well but may be not the right things. We became dissatisfied with our delivery of our plans."

To test H5, both Pearson and Spearman's rank correlation analysis were conducted to determine whether there was any relationship between corporate management belief that BSC is a valuable performance measurement system and the plan to implement BSC in Australian companies. The significant correlation coefficient shows Australian companies are likely to adopt a strategic posture of intention to plan to implement BSC. The results show a highly positive significant correlation exists between corporate management belief that BSC is a valuable performance measurement system and the plan to implement BSC in Australian companies in near future. So, there is a strong support for hypothesis H5.

As there is no similar research in Australia and in other countries, it is very difficult to compare this result with this finding. However, some research findings in other countries may be cited as an example. Amaratunga, et al. (2001), noted that scorecard should be seen not only as record of results achieved but also as an important tool to be used to indicate the planned results.

Hypothesis H6 predicted that "The level of believe of the corporate management that the stakeholder scorecard identifies the major constituents of the organisations such as shareholders, customers, suppliers, employees, debt-holders, government and the community and their demand and pressure on corporate management and the plan to implement BSC is correlated".

Table 3 shows a significant coefficient correlation. The hypothesis H6 is supported. As there is no similar research in Australia and other countries, it is very difficult to compare this result with this finding.

Conclusions, Limitations, and Implications

The results indicate that although management of Australian companies has understanding of BSC, there is lack of initiative and plan by the top corporate management to implement BSC in their corporations. Australian companies management treats BSC as a strategic performance measurement system but lack initiative and planning for the implementation of BSC.

The results also show that corporate management believes that BSC is a strategic and valuable performance measurement system. They also believe that the understanding and support of the top management on the issue of BSC implementation were very important.

Furthermore, There was strong support for hypothesis that Corporate management believe that BSC is a strategic performance measurement system and the BSC should be recognised as balanced, integrated, and designed to incorporate the company's critical input, output, and process variables resulting in value creation.

The results also show that the significant correlation coefficient shows Australian companies are likely to adopt a strategic posture of intention to plan to implement BSC. Finally there was some support that stakeholder scorecard identifies the major constituents of the organisations such as shareholders, customers, suppliers, employees, debt-holders, government and the community and their demand and pressure on corporate management and the plan to implement BSC is correlated. However, the results of negative correlation suggest that major stakeholders' demand and influence on companies are very weak in order to implement BSC.

Limitations of the study

The results of the study must be viewed in light of the limitations associated with costs and time and the low level of participation by the surveying companies. The sampling frame was limited to only 125 top Australian companies out of the top 500

companies published by Dun & Bradstreet (Australia) Pty Ltd (2000-2001) on the basis of total sales revenue. Out of the 125 sample firms, 75 companies declined to participate finally due to policy, lack of time etc reasons resulting the final sample size to 50 only. The valid response rate was 48% is comparatively better than previous survey research. There may be biases in survey type research due to the differences in perceptions of the respondents. However, some biases have been minimised by contacting each respondent over telephone and through direct interviewing many of the respondents who completed questionnaires.

In the light of my previous research findings the theoretical concepts on BSC was explained on the questionnaire and the respondents had no difficulty in understanding concepts. However, it was found that many of the respondents had little or no understanding before reading the concepts and the results of the H1a confirms the findings that level of understanding of BSC as strategic performance measurement system and lack of planning by the corporate management and the pressure and influence by different stakeholders and its implementation in Australian companies are strongly correlated. Thus it may be concluded that lack of initiative and planning by the Australian corporate management and the lack of influence and demand to implement BSC by the stakeholders have led to the poor implementation of BSC in Australian companies.

Policy implications

The findings relating to the strategic posture coupled with the lack of initiative and planning by the Australian corporate management and the lack of influence and demand to implement BSC by the stakeholders would suggest that the accounting bodies and educators need to emphasise them the importance of BSC implementation in Australian companies as a strategic and valuable performance measurement system in order to have a competitive edge over the competitors in the face of global competition. Future research should concentrate on the study of motivation of the corporate management in Australian companies for actual implementation of balanced scorecard.

Concluding remarks

The study has identified 33 percent of the Australian firms surveyed have implemented BSC and similar numbers have now realised the importance of BSC as a strategic and valuable performance measurement system and to implement it in the near future. With the increased demand from stakeholders, educators and professional bodies to implement BSC, other Australian companies that have not yet realized its importance will soon plan to implement it.

Appendix 1

Motivation to implement Balanced Scorecard

Why should a company want to implement BSC? There are various strategic benefits that a company may derive from implementing BSC, which include:

- Kaplan and Norton's (1996a) BSC presents such a model incorporating all the questions for strategic performance measurement and management for high performance organisations.
- BSC links to short-term goals with long-term vision and strategy of the business and incorporate both non-financial and financial data to assist to find problems, improve processes and achieve organisational goals with a balance understanding by all level of management. It proves that a balanced scorecard is really balanced (Amaratunga, et al, 2002).

BSC finds solution to the questions such as:

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

Glossary of terms

Life Cycle Assessment (LCA) – A method in which all environmental impacts are identified with a product throughout its lifetime from raw material acquisition to disposal

Life Cycle Costing (LCC) – A method in which all costs are identified with a product (process or activity) throughout its lifetime from raw material acquisition to disposal

Value Chain Analysis (VCA) – The process of identifying how internal performance drivers within the stages of the product life -cycle can contribute in the development of competitive strategies

(Adapted from Schaltegger et al, 1996)

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