

Balanced Scorecard Performance Measurement Practices in Australian Government Departments: Some Preliminary Results

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Abstract

The purpose of this study is to document the incidence of “modern” strategic performance measurement practices, popularly known as Balanced Scorecards, within state and federal government departments in Australia. A mail out survey approach has been adopted within government departments. The study seeks to develop answers to the following major questions: How do government departments appraise their performance in the ‘new’ public sector environment? How is departmental performance measured and reported? What are the key elements of performance measurement and reporting? The findings revealed a number of observations. First, the performance measures utilised to a great extent in the subject departments and agencies who participated were in the areas of cost efficiency and quality measures and for learning and growth measures. Secondly, the most common performance measures used were to satisfy community expectations and legislative requirements. These exploratory findings will have some value to both public sector managers and policy makers.

1. Introduction

In recent years, there has been increasing pressure on all levels of Governments globally to improve performance. In Australia, this has been reflected in the increased numbers of government programs, particularly in the areas of health, employment, social welfare, education, and defense (Codd, 1991; Parker and Guthrie, 1993; Clark and Corbett, 1999; O’Faircheallaigh et al., 1999; Hoque and Moll, 2001). For several decades, performance measurement has been used as an internal informational tool to evaluate departmental operations and make program and budgetary decisions (Ho and Ni, 2005). In the public sector, interest in performance measures has grown

enormously as evidenced by the large literature on New Public Management (NPM), benchmarking and balanced scorecards. NPM is the most recent paradigm change in how the public sector is to be governed (Lane, 2000). In contrast to the long-standing importance of rule compliance, NPM emphasizes managing for outcomes (Hood, 1995; Kaboolian, 1998; Lapsley, 1999). The increased attention on performance evaluation by public sector managers, consultants and academics reflects the increased pressure on public sector organizations to improve performance to remain viable in today's competitive and global operating environment. In this study, we attempt to shed some light on how government departments in Australia responded to such an increased pressure. More specifically, the study attempts to achieve the following objectives:

1. To what extent do Australian government departments implement the Balanced Scorecard (BSC) approach to their performance measurement systems?
2. To what extent do Australian government departments make use of the BSC in their operations and decision making processes?
3. Who are the users of the performance reports?

There were several reasons for undertaking this study. First, to our knowledge, to date little progress has been made on studying the design and choice of the balanced scorecard type performance management systems within government departments. Investigating this will help develop an understanding of how performance measurement systems operate as part of the organizational control system in government departments. Second, we were motivated to conduct this study in the Australian context by a study of the use and effect of using performance measures by state and local governments by the Government Accounting Standards Board and National Academy of Public Administration in the U.S.A in 1997.

Government departments in Australia and overseas will benefit from the knowledge that will be gained in terms of the detailed description and analysis of the workings and further potential of their performance management systems. The study may result in a better understanding of the system and, possibly, an appreciation of how the systems can be improved, either in their design, implementation or both.

The findings of the study will help both academics and practitioners to find out the extent to which performance management in public sector organizations has changed or should change.

2. Method and data sources

This research used a mail-out questionnaire survey approach. The questionnaire was developed using previously published research, including the monographs published by the Government Accounting Standards Board of the U.S.A in 2002.¹

The field study is a vast one compared with the time and resources at the disposal of this research. Consequently, it was decided to conduct the study within government departments only. The government departments (federal, state and territory) were chosen for two reasons. First, the use of performance measurement systems in this public sector is generally common. Second, the government departments have greater diversity and complexity in many areas such as funding models, new competitive environments, information technologies, and cost structure (in particular, the proportion and complexity of the overheads). As part of the University Research Ethics policy, the research has not disclosed the names of the respondents who completed the survey, nor it has identified the department names.

¹ The study was conducted by Julia E. Melkers, Katherine G. Willoughby, Brian James, Jay Fountain and Wilson Campbell, sponsored by the Alfred P. Sloan Foundation. For further details, see http://www.seagov.org/sea_gasb_project/survey_results.shtml

We sent questionnaires to 109 departments at two government levels - State/Territory and Federal. The questionnaire with a cover letter and a postage-paid, self-addressed return envelope was mailed to the selected manager of each department. These managers were considered to be the person most likely to provide accurate and useful data concerning the department's operating environment, management processes including budgets and performance management systems. The names of the participants were obtained by making telephone calls. Forty-two of the 109 questionnaires sent out in the first mailing were returned. A follow-up letter four weeks after the initial mail-out yielded a further nine returned questionnaires. Ten departments declined to complete the questionnaire, citing reasons such as contravening departmental policy and staffing constraints. Consequently, a total of 51 completed questionnaires, which represented a response rate of 46.8 per cent. Table 1 briefly summarises the overall survey response patterns, and Table 2 provides the profile of respondents who completed the survey.

Table 1 Profile of the participating departments

Government	Questionnaires sent	Responses received	Response rate
Australian Federal	13	7	53.8%
Australian Capital Territory	9	4	44.4%
Northern Territory	7	2	28.6%
New South Wales	16	6	37.5%
Queensland	18	11	61.1%
South Australia	5	2	40.0%
Tasmania	9	5	55.6%
Victoria	10	3	30.0%
Western Australia	22	11	50.0%
Total	109	51	46.8%

Table 2 Profile of the respondents (N = 51)

Length of service within government departments	Year	Frequency
	Below 2	11
	2 – 5	13
	5 – 8	5
	8 – 11	10
	11 or over	12
Age	Age group	Frequency
	20 – 29	2
	30- 39	13
	40 – 49	22
	50 or over	14
Education level	Degree	Frequency
	Diploma	17
	Bachelor/Postgraduate	28
	Other	6
Gender		
	Male	31
	Female	19

3. Findings

Measuring performance is a fundamental part of every organization, whether it is run by a private sector or a government sector. A performance measurement system highlights if the organisation is on track in achieving its desired goals (Lynch and Cross, 1991; Kaplan and Norton, 1996; Simons, 2000). Further, it has been suggested that in today's competitive environment organisations need to be masters at anticipating customers' needs, devising radical new product and service offerings, and rapidly deploying new production technologies into operating and service delivery processes (Kaplan and Norton, 1996). Pressure to perform and be effective in today's changing world is now not only an issue for organisations in the private sector, but also for government departments. The changing socio-political, economic, and technological environment is shaping a common future for the public sector globally and there is a shift away from the traditional forms of accountability concern of Parliament to accountability for sustainable performance in government service provisions (Funnell and Cooper, 1998; Common, 1998; Ryan and Walsh, 2004). In an attempt to adapt to this changing environment, the government sector worldwide has embarked on a series of financial management and accounting reforms that include accrual accounting and reporting, output-based budgeting, full-cost pricing, and performance management (Broadbent and Guthrie, 1992; Funnell and Cooper, 1998; Guthrie et al., 1999; Hoque and Moll, 2001).

Further we now witness a new government sector where organizational operations are invariably connected to multiple internal and external stakeholders or constituencies such as government, media, community, politicians and employees. Government organisations attempt to measure and report their performance to satisfy

these multiple parties. In addition to this, performance measurement is also crucial and relevant in today's government organizations facing a significant reduction in government funding with increased community demand for quality services.

3.1 Implementation of the BSC approach

To explore the extent to which Australian government departments employed the BSC dimensions we posed the following three questions to our participants:

1. Have you heard of a balanced scorecard (BSC) approach?
2. Does your organisation formally employ the BSC approach?
3. Does your organisation employ corporate BSC? Or are there cascading scorecards?

Forty-six (90.3%) of the fifty-one departments that responded to the survey, reported having developed and used some form of performance measures in decision making and management for a substantial number of programs at divisional or departmental levels.

Of the forty-six respondents forty-three (93.5%) were familiar with the BSC approach, and fourteen (30.4%) reported formally using this approach within their agency or department. Of these fourteen agencies or departments, eight (57.1%) reported using a corporate style BSC and only six (42.9%) reported used a cascading type.

3.2 Types of BSC measures implemented

To find out the adoption pattern of the types of BSC performance dimensions, we asked participants the following question:

A number of key BSC performance measures are listed below. Please indicate by placing a tick in the appropriate number what performance measures are being used in your agency/department when measuring performance and to what extent? Check one that applies or check all that apply using the following

scale: 5 = To a very great extent; 4 = To a large extent; 3 = To a moderate extent; 2 = To some extent; 1 = To a little or no extent.

Table 3 presents the results. These results indicate that the BSC performance measures utilised largely in the departments and agencies who participated were in the areas of output measures (63.0%; mean, 3.57); cost efficiency and quality measures (47.8%: mean, 3.26); and, measures of activities and processes (48.9%: mean, 3.22). On the other hand, the BSC performance measures most commonly used to little or no extent were learning and growth measures (65.2%; mean, 2.20), and for input measures (37.8%; mean, 2.89).

3.3 Use of the BSC performance measures

To assess the actual use of BSC performance measures in their departments we asked respondents to indicate the extent of which BSC measures were used in the stated operational activities, on a five point scale, where 1 = to a little extent and 5 = to a very great extent. The responses of the departmental managers are presented in Table 4. The data in this table show that performance measures were least often used for punishment or reward of staff (85.7%, mean, 1.50) or to follow others (88.1%, mean, 1.40). The most common performance measures used to a large or very great extent was to measure program performance (53.3%, mean, 3.53), to satisfy legislative requirements (58.7%, mean, 3.46) and manage an activity or programme (53.3%, mean, 3.36).

Our findings (not shown in a tabular form) also revealed that the majority of participants indicated that their performance measurement systems were adequate for most of their needs. Only six and a half percent recorded that their performance measurement systems were adequate for all of their needs and twenty-six percent

reported half of their needs being adequately meet by their current performance measurement system.

Table 3 Balanced scorecard (BSC) performance dimensions in practice

BSC dimension	Little or no extent	Moderate extent	Large and very great extent	Mean rank	Valid N	Missing N
Outputs (measures of the quantity of services provided)	6 (13.1%)	11 (23.9%)	29 (63.0%)	3.57	46	5
Cost/processes efficiency and quality measures	11 (23.9%)	13 (28.3%)	22 (47.8%)	3.26	46	5
Activity/process (measures of activities/processes)	10 (22.2%)	13 (28.9%)	22 (48.9%)	3.22	45	6
Customer/community satisfaction measures	14 (31.2%)	8 (17.8%)	23 (51.1%)	3.16	46	5
Outcomes (measures of the result that occur, at least in part, because of service provided)	16 (34.8%)	12 (26.1%)	18 (39.2%)	3.06	46	5
Inputs (activities planned)	17 (37.8%)	9 (20.0%)	19 (42.2%)	2.89	45	6
Learning and growth measures (employee satisfaction, employee turnover, employee training and education, employee absenteeism)	30 (65.2%)	9 (19.6%)	7 (15.2%)	2.20	46	5

Table 4 Use of the performance measures in operational activities

Activity	Little or no extent	Moderate extent	Large and very great extent	Mean rank	Valid N	Missing N
Measure program performance	10 (22.0 %)	11 (24.4 %)	24 (53.3 %)	3.53	45	6
Satisfy legislative requirements (law, ordinance, policy, etc)	12 (26.1 %)	7 (15.2%)	27 (58.7 %)	3.46	46	5
Manage an activity or program	11 (25.0 %)	10 (22.7 %)	23 (53.3 %)	3.36	44	7
Budget formulation	14 (35.6 %)	11 (24.4 %)	18 (40.0 %)	3.13	45	6
Taking actions based on the results	17 (38.6%)	8 (18.2 %)	19 (43.2 %)	3.06	44	7
Budget execution	15 (34.9 %)	11 (25.6 %)	17 (39.5 %)	3.05	43	8
Strategic planning	17 (38.6 %)	9 (20.5 %)	18 (47.8 %)	3.02	44	7
Satisfy community expectations	19 (42.2 %)	14 (31.1 %)	12 (26.7 %)	2.80	45	6
Social responsibility goals	22 (50.0 %)	10 (22.7 %)	12 (27.3 %)	2.66	42	9
Goals in relation to local community impacts	24 (54.5 %)	11 (25.0 %)	9 (20.4 %)	2.45	44	7
Environmental goals	30 (71.4 %)	8 (19.0 %)	4 (7.8 %)	1.97	42	9
Satisfy professional associations	31 (76.7%)	6 (14.0 %)	2 (4.8%)	1.77	43	8
Punish or reward staff	36 (85.7 %)	4 (9.5 %)	2 (4.8%)	1.50	42	9
Follow others	37 (88.1%)	5 (11.9 %)	0 (0.00%)	1.40	42	9

3.4 Important aspects of successful implementation of a performance measurement system

We were also interested in exploring the extent to which government departments placed emphasis on the listed ten aspects of successful implementation of the performance measurement process (see Table 5). To do so, we used a five point scale, where 1 = to a little extent and 5 = to a very great extent. The results of this exercise are summarised in Table 5. In Table 5 the top three aspects rated as being the most important aspects of successful implementation of a performance measurement system were in order of importance; regular use of performance measures by executive leadership (62.2%, mean 4.47), performance measures that help staff monitor progress toward intended program/ service results (59.1%, mean 4.41) and the adequacy of technology for collecting, analysing and reporting performance measures (47.8%, mean 4.28). It was most commonly agreed the least important aspects were citizen, client/customer, or stakeholder interest in government programs, additional or changed staffing for collecting, analysing, and reporting the performance measures and regular use of performance measures by elected officials.

Table 5 Important aspects of successful implementation of performance measurement system

Aspects	Not important	Important	Very important	Mean rank	Valid N	Missing N
Regular use of performance measures by executive leadership	3 (6.7%)	14 (31.1%)	28 (62.2%)	4.47	45	6
Performance measures that help staff monitor progress toward intended program/service results	3 (6.8%)	15 (34.1%)	26 (59.1%)	4.41	44	7
Adequacy of technology for collecting, analysing and reporting performance measures	5 (10.9%)	19 (41.3%)	22 (47.8%)	4.28	46	5
Communication of the purpose for using performance measurement to employees	4 (9.1%)	23 (52.3%)	17 (38.6%)	4.18	44	7
Staff participation in the process of developing performance measures	4 (8.9%)	24 (53.3%)	17 (37.8%)	4.15	45	6
Training for management and staff about performance measurement development and selection	4 (8.9%)	24 (53.3%)	17 (37.8%)	4.13	45	6
A link of performance measures to budget decisions	6 (13.6%)	17 (38.6%)	21 (47.8%)	4.07	44	7
Citizen, client/customer, or stakeholder interest in government program performance	10 (22.7%)	23 (52.3%)	11 (25.0%)	3.73	44	7
Additional or changed staffing for collecting, analysing, and reporting the performance measures	9 (20.0%)	18 (40.0%)	18 (40.0%)	3.60	45	6
Regular use of performance measures by elected officials	11 (24.4%)	21 (46.7%)	13 (28.9%)	3.53	45	6

3.5 Recording, reporting and communicating performance measures

To understand the recording, reporting and communicating patterns of performance measures by government departments, we asked a series of questions. These are discussed in turn.

3.5.1 Recipients of the performance report

The results (not shown in a tabular form) indicate that the majority of output measures are for the benefit of internal management (84.4%) and elected officials (80%), with only twenty seven participants (60%) reporting output measures for citizens and the media.

3.5.2 Reasons for generating reports

Table 6 shows that reports generated from performance measurement systems were equally used for external financial reporting and internal managerial control (71.7%). Over half of the participants also indicated that reports were used for budget preparation (58.7%) and legal requirements (50%).

3.5.3 Users of the report

When asked about the users of the performance reports, the respondents indicated, as shown in table 7, that the treasury office is the most likely to use performance measures to a great extent (mean, 3.36), followed secondly by program managers (mean, 3.21). Financial managers, budget analysts, operating managers, and human

resource managers are all equally likely to use performance measures to a little extent. Least likely to use performance measures to a great extent or very great extent are sustainability or environmental managers (mean, 2.06).

Table 6 Purposes of reports generated from performance measurement systems

Report purposes	Frequency		Percentage	
	Yes	No	Yes	No
External financial reporting	33	13	71.70	28.30
Internal managerial control	33	13	71.70	28.30
Budget preparation	27	19	58.70	41.30
Budget Execution	20	26	43.50	56.50
Legal requirements	23	23	50.00	50.00
Triple bottom line	12	34	26.10	73.90
Other	5	39	11.40	88.60

Table 7 Users of the performance report

Users	To little extent	Moderate extent	Great or very great extent	Mean rank	Valid N	Missing N
Treasury Office	6.7%	26.7%	66.6%	3.36	45	6
Program managers	14.3%	35.7%	50.0%	3.21	43	8
Parliament	13.3%	26.7%	60.0%	3.16	45	6
Elected officials	15.0%	20.0%	65.0%	2.98	40	11
Operating managers	19.0%	16.7	64.3%	2.90	42	9
Financial managers	22.0%	12.8%	65.2%	2.85	41	10
Budget analysts	20.5%	12.8%	66.7%	2.71	42	9
Citizens and media	27.5%	27.5	45.0%	2.40	40	11
Human resource managers	27.5%	13.7%	58.8%	2.20	35	16
Sustainability, environmental or social responsibility managers	41.9%	16.1	42.0%	2.06	31	20

4. Summary and conclusion

In recent years, the New Public Management (NPM) doctrines world-wide advocate private sector styled accounting and performance measurement practices for public sector organizations. However, the application of such practices varies in different organizational contexts. This report documents the incidence of performance measurement and reporting practices of 109 state/territory and federal government departments in Australia. To collect the data, a mail-out questionnaire survey approach was employed. A series of interrelated research questions were developed and addressed. The findings revealed several observations.

First, the performance measures utilised to a great extent in the subject departments were in the areas of cost efficiency and quality measures and for learning and growth measures. Secondly, the most common performance measures used was to satisfy community expectations and legislative requirements. We attempted to explore the extent to which government departments made use of the balanced scorecard (BSC) concept in measuring organisational performance. Our findings revealed considerable use of the BSC concept, which focuses such key dimensions as inputs, activities/ processes, output/outcomes and community satisfaction.

The findings suggest that the major rationale behind the use of multiple outcomes-based performance measurement practices was mainly the Australian government's recent reform policy regulation and 'working for outcome' framework. The results reported here have drawn attention to the importance of multiple performance indicators in measuring the effectiveness of an operation. In particular, it has led to a greater understanding of how BSC type performance measures play an

important role in improving the performance of a government department. These findings are consistent with the results reported in several private sector settings.

The above findings are, however, subject to the following limitations. Like all cross-sectional studies, this study is likely to suffer from subjective perceived measurements based on a survey methodology. Multiple case studies of similar government departments based on face-to-face interviews may shed light on the role of management control systems in the planned change in the public sector. Future research may wish to undertake an assessment of whether or not effectiveness or performance is a function of the 'fit' or match between the government departments' regulatory environment and use of the different combinations of BSC performance measures. The academic community largely supports claims that since BSC performance measures focus on a firm's long-term critical success they may lead to improved organizational performance.

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