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Performance measurement and adoption of balanced scorecards

A survey of municipal governments in the USA and Canada

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Abstract To deal with financial constraints and increasing demand on accountability, government administrators have begun implementing modern management tools in their organizations. The balanced scorecard, a performance and strategic management system, has been adopted in for-profit organizations with success and its application in the government sector is explored in this study. Results of a survey of municipal governments in the USA and Canada show that there is limited use of the balanced scorecard. Most municipal governments, however, have developed measures to assess their organizations' financial, customer satisfaction, operating efficiency, innovation and change, and employee performance. Respondent administrators, in general, have confidence in the quality of the performance measures and about half reported that these measures were used to support various management functions. The respondent administrators also have a good understanding of the balanced scorecard and the implementers are positive about their experience.

Due to slow economic growth, reduced federal funding and the reluctance of citizens to pass new taxes, local governments have been working with limited resources for years. Taxpayers and provincial/state governments are also demanding greater accountability and results for their tax dollars and funds provided to municipal governments. This prompts municipal administrators to operate more like a business and adopt management tools from for-profit sector.

As early as 1994, the Governmental Accounting Standards Board (GASB) in the USA issued Concepts Statement No. 2, Service Efforts and Accomplishments Reporting (SEA) (Governmental Accounting Standards Board, 1994) to encourage state and local governments to report both financial and non-financial performance information in annual reports to assist users to assess the economy, efficiency and effectiveness of service provided. The reporting recommendation has not been well received by local governments, since only one third of local governments are found to do SEA reporting (O'Toole, 2001). In Canada, the Ministry of Municipal Affairs and Housing in Ontario introduced the Municipal Performance Measurement Program (MPMP) in 2000 and municipal governments are required to report financial and non-financial information on 35 performance measures in nine core areas of services.

In addition to adopting reporting guidelines, municipal administrators have tried to enhance accountability through refinement of their organization's own performance measurement system (Poister and Streib, 1999). They have also adopted other modern management tools from the for-profit sector to strengthen their organization's capacity, including strategic management processes (Vinzant and Vinzant, 1996), quality



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management programs and process reengineering (Hyde, 1995), and benchmarking exercises (Keechley *et al.*, 1997). Even though these management initiatives and improvement programs have been successful at varying degrees in the government sector, they are often fragmented, disconnected and short-lived. In fact, a fundamental rethinking of the management process is needed to assist municipal administrators to manage their limited organizational resources effectively.

The balanced scorecard, a performance measurement and strategic management system proposed by Kaplan and Norton (1996, 2001), can be an invaluable tool to municipal administrators in transforming their organizations. The balanced scorecard is a customer-based planning and process improvement system, with its primary focus on driving an organization's change process by identifying and evaluating pertinent performance measures. It is an integral part of the mission identification, strategy formulation and process execution, with an emphasis on translating strategy into a linked set of financial and non-financial measures. Thus far, anecdotal reports on balanced scorecard have been concentrated in the for-profit sector and many firms have found the balanced scorecard a useful tool for focusing and sustaining their continuous improvement efforts (see for example, Brewer, 2002; Gumbus and Lyron, 2002; Kershaw and Kershaw, 2001). The objective of this paper is to explore whether the balanced scorecard is adopted in municipal governments. The trend of performance measurement will be presented first, followed by a discussion of the implementation of the balanced scorecard in for-profit and not-for-profit organizations. The results of a survey of municipal administrators in USA and Canada about their organization's performance measurement system and the implementation of the balanced scorecard are reported next. Concluding remarks and limitations of the study are included in the final sections.

Trends in performance measurement

Performance measurement is an essential component of whatever change process is adopted. It can give feedback on the effectiveness of the plans and their implementation (Chow *et al.*, 1998). Both business managers and accountants are keenly aware of the important role performance measurement plays in an organization's planning and control system. Reporting on firms' past performance is one of the fundamental uses of performance measurement system.

Traditionally, the focus of performance measurement has been on financial measures such as sales growth, profits, return on investments and cash flows. There is, however, increasing concern among business managers on the over-reliance of financial measures in performance evaluation.

In a survey on the quality, uses and perceived importance of various financial and non-financial measures, Lingle and Schiemann (1996) report wider disparities between the perceived quality and importance of non-financial measures as compared to financial measures. Perceived inadequacies in a traditional performance measurement system that focuses on financial measures have led many organizations to switch to and put greater emphasis on forward-looking non-financial measures such as customer satisfaction, employee learning and innovation (Ittner and Larcker, 1998). The Institute of Management Accountant (IMA) has long advocated the creation of a broad-based performance measurement system where:

... performance indicator systems must be forward-looking as well as historical, must focus on significant external relationships as well as internal functions or processes, and must track

Despite the growing interest in incorporating non-financial measures in an organization's performance measurement system, empirical evidence (Amir and Lev, 1996; Foster and Gupta, 1997) on the linkage of non-financial measures with share value and future financial performance is inconclusive.

It is important to note that performance measurement and performance management are not the same. Each segment in a large organization may develop highly specific performance measurement information for its own operations and this will allow that segment to operate effectively. However, while each manager strives to optimize the performance of his division, the overall performance of the organization may be sub-optimized (Rummer and Brache, 1995). Only a performance management system engenders strategic evolution and ensures goal congruence. As the balanced scorecard provides a comprehensive, top-down view of organizational performance with a strong focus on vision and strategy, performance management can be greatly facilitated through its use (Missroon, 2000). This study attempts to examine the use of the balanced scorecard as a performance management system in municipal governments and find out whether its implementation has been successful. What follows is a description of the balanced scorecard and its potential contribution to the management of municipal governments.

Balanced scorecard and municipal governments

The balanced scorecard is a performance measurement and strategic management system. It translates an organization's mission and strategy into a balanced set of integrated performance measures. It complements the traditional financial perspective with other non-financial perspectives such as customer satisfaction, internal business process as well as learning and growth. It also mixes outcome measures, the lagging indicator, with performance drivers, the leading indicator, because "outcome measures without performance drivers do not communicate how the outcomes are to be achieved" (Kaplan and Norton, 1996, p. 105). By selecting appropriate performance drivers and outcome measures to fit in the theory of business in a chain of cause and effect relationship, the organization will have a better idea of how to achieve its potential competitive advantage.

The balanced set of performance measures also tells a concise yet complete story about the achievement and performance of the organization toward its mission and goals. It provides a holistic view of what is happening in the organization. By tying these performance measures to rewards, the balanced scorecard ensures that employees will do what is best for the organization.

The first step in designing a balanced scorecard is the identification of strategic goals. Agreement on the strategic goals is needed before scorecard measures can be developed. The balanced scorecard is only as complete and competent as its designer. Otherwise, the scorecard measures might not reflect the organization's mission and strategies. As described by Kaplan and Norton (1996, p. 105), the implementation process can be divided into four stages:

- (1) translating the vision and gaining consensus;
- (2) communicating the objectives, setting goals and linking strategies;

- (3) setting targets, allocating resources and establishing milestones; and
- (4) providing feedback and learning.

As in other for-profit and service organizations, adoption of the balanced scorecard can assist municipal administrators in accomplishing the following strategic planning and control functions (Kaplan and Norton, 1996, p. 109):

- clarify and gain consensus about strategy;
- communicate strategy throughout the organization;
- align departmental and personal goals to the strategy;
- link strategic objectives to long-term targets and annual budgets;
- identify and align strategic initiatives;
- perform periodic and systematic strategic reviews; and
- obtain feedback to learn about and improve strategy.

In addition to anecdotal reports on the positive experience of implementing the balanced scorecard in the for-profit sector, there is growing evidence on its application in the not-for-profit sector, especially the government sector (see for example, Atkinson and McCrindell, 1997; Kloot and Martin, 2000; and Silk, 1998) where performance measurement and management has been an issue of concern among administrators (Foltin, 1999; and Poister and Streib, 1999).

Among the pioneers who have employed the balanced scorecard for strategic management, the West Mercia Constabulary (Silk, 1998), which provides policing services to the fourth largest police area of the UK, completed its Performance Indicator Management System in May 1997, based on the development of a balanced scorecard. In the constabulary, the balanced scorecard has been integrated into the management process. It provides management with a structure for performance review, helps management identify problems and improves performance.

The City of Charlotte, North Carolina, the United Way of Southeastern New England and New Profit Inc., a venture capital philanthropic fund based in Boston, have used the balanced scorecard to redefine their strategic priority as well as to focus and create value for their customers (Kaplan, 2001). As in other not-for-profit organizations, these agencies have to focus their limited resources on specific objectives and constituents. They began the implementation by redefining their vision and strategy with an over-arching objective set at the top of the balanced scorecard. With high-level objectives defined for their customers and financials, the agencies then developed action plans that enable high-level objectives to be achieved. In these applications, the financial perspective does not have to be at the top of the hierarchy of organizational objectives as in for-profit organizations. The scorecard can be modified to include performance perspectives not incorporated in Kaplan and Norton's original balanced scorecard.

Kaplan (2001) concludes that the balanced scorecard, as a tool, is useful in the management of not-for-profit organizations in:

- bridging the gap between vague mission and strategy statements with day-to-day operational measures;
- facilitating a process by which an organization can achieve strategic focus;

- shifting the organization's focus from programs and initiatives to the outcomes the programs and initiatives are supposed to accomplish;
- helping organizations to avoid the illusion that they have a strategy because they are managing a diverse and non-cumulative set of programs and initiatives; and
- enabling organizations to align initiatives, departments and individuals to work in ways that reinforce each other so that dramatic performance improvements can be achieved.

With growing interest in improving performance management in the government sector, the balanced scorecard can be a valuable management tool that meets the need for improvement and change. What follows are the results of a survey of municipal administrators regarding their organization's experience with performance measurement system as well as the balanced scorecard.

Survey of municipal governments

We conducted a survey of a random sample of 451 local governments in the USA, and 467 municipal governments in Canada. The questionnaire was sent to the chief administrative officer of the organizations. Owing to the low response rate in the first mailing, a follow-up letter with the questionnaire was sent again and the survey was completed in February 2002. A total of 184 (132 from the USA and 52 from Canada) questionnaires were returned, representing a response rate of 20.0 percent. The lower response rate from the Canadian subsample (11.1 percent) than the American subsample (29.3 percent) may be attributed to the earlier adoption of performance reporting in the USA (SEA in 1994) than in Canada (MPMP in 2000).

Sample characteristics

Respondents are administrators of municipal governments with broad responsibilities. The majority are mayors, chief administrative officers, managers, city or council executives while some are controllers and treasurers. As shown in Figure 1, about one-third of the respondent municipal governments are from smaller communities with a serving population of 100,000 or less, while one-tenth are in larger cities with population over 1,000,000. These municipal governments are relatively small, where one-fifth has fewer than 100 employees working in the organizations. In sum, the respondents consist of smaller municipalities with fewer than 200,000 citizens in the community and less than 500 employees on the payroll. There are, however, some differences in the sample distribution between the Canadian and American subsamples. There are almost twice as many small Canadian municipal governments (serving population <100,000 and employees <100) as American municipal governments and the larger municipalities (population > 1,000,000) are dominated by the American subsample.

Over 40 percent of the respondent administrators have heard about the balanced scorecard. However, only 14 respondent municipal governments (7.5 percent) have implemented the balanced scorecard. Of these implementers, nine are urban centres and five are located in areas with population of over 500,000. Over two-thirds of these municipal governments have more than 500 employees on their payroll. Thus, this subsample of balanced scorecard implementers is composed of relatively large municipalities which are, in general, more responsive to adoption of new management

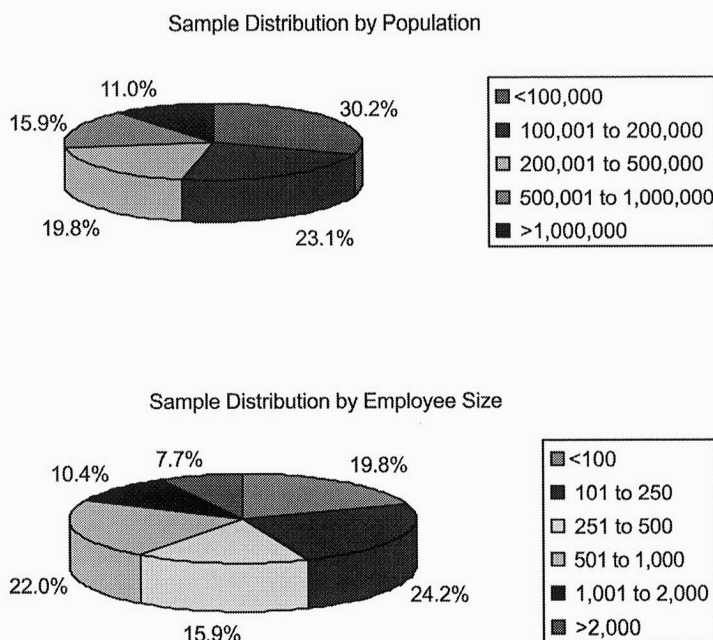


Figure 1.
Characteristics of
respondent municipal
governments

tools. Also, there are relatively more American ($11/132 = 8.3$ percent) than Canadian municipal governments ($3/52 = 5.8$ percent) that have developed a balanced scorecard. This may be attributed to the larger municipalities that made up the American subsample, which are more resourceful in implementing new management initiatives than the Canadian subsample.

Administrators' perception on organization's existing performance measurement system

In a study on assessing the state of practice of performance measurement in municipal governments, Poister and Streib (1999) conclude that many municipal governments are committed to the effective use of performance measures as they are striving to operate more like a business. Levetan (2000) also reports that outcome measures are more important than output measures, as the former provides insight on the ability of municipal governments to better serve their customers, which is the key success factor for for-profit businesses.

In the following analysis of the administrators' perception on their organization's performance measurement system, the focus is on the type of performance measures used, the perceived usefulness of these performance measures and their overall opinion on the system.

Types of performance measures used

As indicated in Table I, the majority of the respondent municipal governments have developed measures in all performance perspectives, except for innovation and change. It is not surprising to find that 80 percent of respondents' organizations have developed



measures for the financial performance perspective. The unexpected finding, however, is that almost one in five respondent municipal governments has yet to develop measures to evaluate the financial performance of their organization, despite reporting guidelines issued by GASB on SEA back in 1994 and Ontario government's initiative on MPMP in 2000. One would expect that even small municipal governments have to perform some kind of variance analysis to control cost overrun as well as to evaluate budgetary deficits and surpluses.

Contrary to the extensive development on financial performance measures, only one-third of the respondent municipal governments have developed performance measures on innovation and change, which is a fairly new development in performance measurement where substantial efforts and commitment are needed to develop these "softer" performance measures as compared to measures on financial performance and operating efficiency.

A greater number of municipal governments have developed output measures than outcome measures on financial performance, operating efficiency and employee performance, as output measures are objective and quantifiable whereas it is more difficult to define outcome measures on effectiveness. Conversely, for the performance perspectives of customer satisfaction and innovation and change, more outcome measures than output measures are developed, as these performance perspectives define the effectiveness (outcome) of the organization in satisfying its customers and achieving innovation and change.

The percentage of Canadian municipal governments that have developed output/outcome measures for the five performance perspectives is consistently lower than their American counterparts. This is especially true for innovation and change, where only one-sixth of the Canadian subsample have developed such performance measures. This implies performance measurement in American municipal governments is more advanced.

Perceived value, quality and uses of performance measures

As presented in Table II, the majority of the respondent administrators indicated that information on all performance perspectives, except for innovation and change, is highly valued. About 70 percent of the respondents indicated that financial performance measures are clearly defined and slightly less than half reported that their organizations have measures clearly defined in the customer satisfaction, operating

| Performance perspectives | Performance measures developed | | | Output measures developed ^a | | | Outcome measures developed ^a | | |
|---------------------------|--------------------------------|--------|------|--|--------|------|---|--------|------|
| | Total | Canada | USA | Total | Canada | USA | Total | Canada | USA |
| Financial performance (%) | 80.1 | 75.5 | 81.8 | 76.0 | 63.9 | 80.6 | 69.2 | 62.2 | 71.9 |
| Operating efficiency (%) | 71.2 | 57.1 | 76.6 | 77.0 | 68.6 | 79.4 | 62.0 | 53.6 | 64.4 |
| Customer satisfaction (%) | 67.8 | 57.1 | 71.9 | 56.6 | 40.0 | 61.6 | 63.9 | 45.7 | 69.4 |
| Employee performance (%) | 65.7 | 65.3 | 65.9 | 63.9 | 53.8 | 67.7 | 61.0 | 48.6 | 65.6 |
| Innovation/change (%) | 33.4 | 16.7 | 39.7 | 41.8 | 13.9 | 46.3 | 43.9 | 20.6 | 47.6 |

Note: ^aThe percentage reported is based on the number of respondent administrators whose organizations have developed measures for the performance perspective

Table I.
Percentage of respondent municipal governments that have developed output and outcome measures on various performance perspectives

| | Financial performance | | Customer satisfaction | | Operating efficiency | | Innovation and change | | Employee performance | |
|---|-----------------------|-----|-----------------------|-----|----------------------|-----|-----------------------|-----|----------------------|-----|
| | Canada | USA | Canada | USA | Canada | USA | Canada | USA | Canada | USA |
| Information is highly valued | 79 | 90 | 74 | 78 | 71 | 72 | 31 | 56 | 66 | 72 |
| Measures are clearly defined in each performance area | 71 | 69 | 37 | 47 | 44 | 46 | 9 | 24 | 51 | 46 |
| Willing to bet job on quality of the information | 47 | 65 | 37 | 34 | 18 | 25 | 7 | 15 | 24 | 25 |
| Measures are reported for external users | 78 | 81 | 50 | 57 | 53 | 60 | 24 | 40 | 26 | 21 |
| Measures are used for program management and monitoring | 74 | 79 | 53 | 64 | 56 | 65 | 16 | 41 | 42 | 49 |
| Measures are used for strategic planning | 65 | 68 | 52 | 53 | 51 | 53 | 33 | 46 | 43 | 38 |
| Measures are used for regular management reviews | 62 | 68 | 47 | 54 | 44 | 53 | 23 | 32 | 67 | 57 |
| Measures are used for resource allocation | 61 | 65 | 47 | 44 | 44 | 51 | 23 | 35 | 39 | 26 |
| Measures are used to drive organizational change | 53 | 57 | 50 | 57 | 50 | 53 | 26 | 50 | 47 | 44 |
| Measures are linked to compensation | 8 | 22 | 6 | 22 | 8 | 17 | 0 | 14 | 25 | 44 |

Table II.
Perceived value, quality and uses of performance measures by respondent administrators (percentage of respondent administrators agreeing with statement)



efficiency and employee performance perspectives. However, only one-fifth of the respondent administrators' organizations have well-defined performance measures on innovation and change. The different stages of measure development may be attributed to the traditional training of municipal administrators on the value and use of financial information in management, while innovation and change is a fairly new performance perspective where measures are still under development in a number of organizations.

Despite the value placed on the performance measures, only about 60 percent of the respondent administrators are willing to bet their job on the quality of the financial information and less than one-third perceived information on customer satisfaction, operating efficiency and employee performance measures to be of good quality. As expected, over 85 percent of the respondent administrators did not perceive information on performance measures of innovation and change to be of good quality.

Since financial performance measures are reported for external users in 80 percent of the respondent administrators' organizations, they were used by the majority in program management and monitoring (78 percent), strategic planning (67 percent), regular management reviews (66 percent), resource allocation (64 percent) and drive organizational change (56 percent). Between 50 to 60 percent of the respondent administrators reported that performance measures on customer satisfaction and operating efficiency were used for similar purposes. Again, performance measures on innovation and change were rarely used in the respondents' organizations (30 to 40 percent) for various management functions. Thus, the majority of the respondent administrators felt more comfortable working with traditional financial and operating efficiency measures than the newer measures on innovation and change. There is also a growing use of customer satisfaction measures in managing municipal governments.

Despite the use of performance measures in supporting some management functions, the linkage of performance measures to compensation is uncommon among our sample of respondent municipal governments. Employee performance measures are linked to compensation in about 40 percent of the respondent municipal governments, whereas only one-fifth link financial and customer satisfaction performance measures to their employees' compensation. Thus, even if it is common to link performance measures to compensation in for-profit organizations, few municipal governments have adopted such practice.

Responses from the Canadian and American subsamples are similar (see Table II) with respect to the administrators' perception on the value, quality and uses of performance measures, with a few differences. First, the percentage of Canadian respondent administrators agreeing with the statements specified in Table II is lower than those of their American counterparts in most cases. Second, a larger percentage of Canadian than American respondent administrators reported that their organizations used employee performance measures to support various management activities. Third, significantly lower percentage of Canadian than American respondent administrators indicated that their organizations have linked performance measures to compensation. Thus, one may conclude that Canadian municipal governments are experienced in using employee performance measures for various management functions but it is unlikely that performance-based compensation will be adopted.

Perception about the organization's current performance measurement system

As indicated in Table III, the respondent administrators strongly agreed that traditional financial measures included in their organization's performance measurement system are necessary but not sufficient for performance evaluation (mean response = 3.86). They felt that more non-financial measures describing their organization's current and potential effectiveness in achieving set objectives should be included in their organization's performance measurement system (mean response = 3.78). They concurred that financial measures describe past/current performance on operating efficiency but do not necessarily reflect their organization's effectiveness and potential in achieving set objectives (mean response = 3.72). The administrators' perception on whether their organization's performance measurement system relies too heavily on financial measures (mean response = 2.80) and whether it is an *ad hoc* collection of financial and non-financial measures (mean response = 3.07), however, is fairly neutral. Thus, despite their concern about the drawback of financial measures, the respondent administrators did not perceive their organization's performance measurement system to be too financially oriented and *ad hoc* in nature. Nevertheless, they would like to see more non-financial measures for operational effectiveness to be included in their organization's performance measurement system.

Again, responses between the Canadian and American subsamples are similar, except that Canadian municipal administrators felt strongly that their organization's performance measurement system relies too heavily on financial measures (mean response = 3.74 versus 2.44).

Administrators' perception on balanced scorecard

Administrators' understanding of balanced scorecard. Among the 80 respondent administrators who have heard about balanced scorecard, they have a good understanding of its characteristics. As presented in Table IV, the administrators perceived that the balanced scorecard complements the financial measures of past performance with operational measures that drive future performance and growth (mean response = 3.70) and it provides a link between the organization's mission and strategy with objective measures (mean response = 3.63). They agreed that the benefits of the balanced scorecard would outweigh its costs if it were implemented successfully (mean response = 3.44). In addition to viewing the balanced scorecard as a performance measurement system (mean response = 3.80), the administrators concurred that the balanced scorecard is a strategic management system (mean response = 3.73). They, however, did not think that the balanced scorecard is an *ad hoc* collection of financial and non-financial measures (mean response = 2.54) and disagreed that the balanced scorecard is a fad (mean response = 2.71). Between the two subsamples of Canadian and American respondent administrators, the opinions expressed are similar while those of the Canadian administrators are of a stronger magnitude.

Between the two groups of municipal governments that have and have not implemented the balanced scorecard, their administrators' understanding of the balanced scorecard are similar except for two areas. Implementers of the balanced scorecard strongly believed that it is not a fad (mean response of 2.14 versus 2.83) and that benefits will outweigh costs if the balanced scorecard were implemented successfully (mean response of 3.86 versus 3.36). The findings are consistent with the decision and action of municipal governments that have implemented the balanced scorecard.

Table III.
Perception of
administrators of
municipal governments
on their organization's
performance
measurement system

| | Canadian municipal governments ^a (n = 52) | American municipal governments (n = 132) | All municipal governments (n = 184) |
|--|--|--|---|
| Traditional financial measures are necessary but not sufficient for performance evaluation. | 3.61 | 3.95 | 3.86 |
| More non-financial measures describing your organization's current and potential effectiveness in achieving set objectives should be included. | 3.98 | 3.70 | 3.78 |
| Financial measures describe past/current performance on operating efficiency and do not necessarily reflect your organization's effectiveness and potential in achieving set objectives. | 3.82 | 3.67 | 3.71 |
| It is an <i>ad hoc</i> collection financial and non-financial measures. | 3.00 | 3.09 | 3.07 |
| The performance measures have been used effectively in integrating and executing the details of corporate strategy. | 2.66 | 2.88 | 2.82 |
| It relies too heavily on financial measures. | 3.74 ^b | 2.442 ^b | 2.80 |

Notes: ^aMean response of municipal governments completed the questionnaire. The higher the response, the stronger the administrator's agreement with the statement (response scale of 1 to 5 where 1 = strongly disagree, 3 = neutral and 5 = strongly agree); ^bThere is a significant difference in the mean response between administrators from Canadian and American municipal governments at $p < 0.01$

Reasons for unsuccessful or non-implementation of balanced scorecard

As indicated in Table V, there is no single dominating reason why the respondent municipal governments have decided not to implement the balanced scorecard or why their implementation has been unsuccessful.

Among the Canadian subsample, the respondent administrators regarded the lack of highly-developed information system to support the balanced scorecard (mean response = 3.89), inadequate executive sponsorship (mean response = 3.88) and management too busy solving short-term impending organizational problems (mean response = 3.84) as the principal reasons for not implementing the balanced scorecard.

Also, responses from administrators whose organizations have or have not implemented the balanced scorecard are similar, with the following exceptions. For municipal governments that have implemented the balanced scorecard, their administrators reported that the lack of linkage of the balanced scorecard to employees' rewards (mean response of 3.82 versus 2.99) and organizational resistance to change (mean response of 3.18 versus 2.60) are the important reasons why their organization's implementation has not been successful. Also, for municipal governments that have not implemented the balanced scorecard, they indicated the time required to develop the balance scorecard (mean response of 3.19 versus 2.53) has been an inhibiting factor in their organization's decision against implementing the balanced scorecard.

Experience of municipal governments that have implemented balanced scorecard

Owing to the relatively small number of municipal governments that have implemented the balanced scorecard (14), findings reported in the following sections could not be generalized but they do provide some interesting glimpses into the experience of this particular set of municipal governments in implementing the balanced scorecard.

These organizations have been involved in developing the balanced scorecard for an average of 2.6 years. Only two respondent administrators ranked their organizations as advanced users of the balanced scorecard. For the remaining 12, five ranked themselves as novice, four as beginners and three as intermediate users of the balanced scorecard. About two-thirds of the administrators reported that their organizations have been moderately successful in implementing the balanced scorecard. The most frequently cited factors necessary for its implementation to succeed include:

- top management commitment and leadership buy-in;
- departmental, middle-manager and employee participation and buy-in;
- culture of performance excellence;
- training and education;
- keeping it relatively simple, easy to use and understand;
- clarity of vision, strategy and outcome;
- link of balanced scorecard to incentive; and
- resources to implement system.

Thus, support from senior management and buy-in from employees are critical to implementing the balanced scorecard successfully. In addition, organizational strategy must be defined and tied to incentive for its implementation to succeed.

Table VI includes a number of performance measures developed by the municipal governments included in the study. Financial performance has the largest number of

Table VI.
Performance measures reported by municipal governments that have implemented balanced scorecard

| Financial performance | Customer perspective | Operation efficiency | Innovation and change | Employee performance |
|---|---|--|---|---|
| Cost per unit | Satisfaction rate | Productivity | Employee satisfaction index | Customer service ratings |
| Bond rating | Customer satisfaction index | Response time | Turnover rate | Employee suggestion data |
| Debt ratio | Customer service rating | Cycle time | Hours saved | Percentage of training dollar compared to base salaries |
| Debt management standards | Complaints | Cost per capita | Performance contract | Number of departments implementing annual training plans and completing goals |
| Property tax revenue as a percentage of total city revenues | Increase confidence in leadership | Cost per km of road maintenance | Number of neighbourhoods rated fragile, threatened, or stable in city's quality of life index | Increase retention of high quality employees |
| Increase assessable tax base | Service delivery rating by citizens as reported in the biennial citywide phone survey | Cost to treat water and sewage | Increase number of jobs in certain fire (sic) codes | Female representation as percentage of female workforce representation |
| Cost of municipal services as percentage of median household income | Ranking in national magazine/survey regarding best cities for business | Average ridership trips for all transit services | | Annual performance review/appraisal |
| Budget documents | Your city your choice survey | Increase awareness of city support programs and services | | |
| Financial trends | | Parks Bureau-Budget Document/Parks Bureau SEA Report | | |
| Office management and finance | | | | |

measures developed, using various ratios and costs. Measures on customer satisfaction are more subjective, focusing on customer satisfaction index and survey results. Productivity, cost and time are key measures of operating efficiency. Employee training and retention are the focus of employee performance measures. Finally, innovation and change looks at the well-being of communities served by the municipal governments. These scorecard measures may not apply to all municipal governments. Nevertheless, they are good references for municipal governments that are interested in adopting the balanced scorecard as their organization's strategic management system.

Finally, close to 80 percent of the respondent administrators indicated that they expect their organization's use of the balanced scorecard to change somewhat and significantly more over the next five years. This implies that the respondents felt positive about their experience and the balanced scorecard is a management tool that they would continue to adopt in the future.

Concluding remarks and implications for practice

Most municipal governments have measures developed for various performance perspectives, with the greatest emphasis on financial performance and the least on innovation and change. Respondents perceived information on financial performance to be highly valued, well defined with good quality and they were used to support various management functions. Innovation and change, as perceived by our respondents, is the performance perspective with the fewest measures developed, lowest informational value and quality, and is used rarely to manage their organizations. About half of the respondent administrators reported that measures on customer satisfaction, operating efficiency and employee performance were used to support various management activities, despite their lack of confidence in the quality and informational value of these measures.

The respondent administrators did not perceive their organization's performance measurement system to have too much reliance on financial performance measures. They, however, would like to include more non-financial measures that describe the organization's effectiveness in achieving set objectives in the system.

Over 40 percent of the respondent administrators have heard about the balanced scorecard and they have a relatively good understanding of the tool. Among the administrators whose organizations have implemented the balanced scorecard, they have a stronger belief that the benefits of the balanced scorecard outweigh its costs. They also cited "the lack of linkage of balanced scorecard to employees' rewards" as critical to their organization's unsuccessful implementation. Inadequate executive sponsorship and management being too busy solving short-term impending organizational problems are other factors which impeded the adoption of the balanced scorecard and contributed to its unsuccessful implementation. Organizational preparedness for change is also key to implementing the balanced scorecard successfully.

Among the 14 municipal governments that have implemented the balanced scorecard, their administrators reported positively about their experience and felt that the balanced scorecard could be a useful management tool for their organizations. Despite their limited experience, performance measures on all five perspectives have been developed. Thus, for administrators who want to implement the balanced scorecard in their organizations, they should set their priorities and not be side-tracked by other impending organizational issues. They have to provide the leadership and support while at the same

time seeking participation and buy-in of management and employees. In fact, municipal administrators should consider the performance measures reported in Table IV if they are interested in implementing the balanced scorecard in their organizations.

Limitations of the study and further research opportunities

As in any mailed survey, limitations affecting the generalization of the study are related to the perception of the respondents and a potential of self-selection bias.

The survey instrument was designed to solicit respondents' understanding of their organization's performance measurement system and the balanced scorecard. It is, however, possible that the respondents may have a different interpretation of the question from that of the researchers. They may have mistaken their organization's performance measurement system with that of a true balanced scorecard, which has gained recognition in the management literature.

A response rate of 20 percent is comparable to other survey studies. It is, however, likely that administrators who have heard about the balanced scorecard and adopted the tool are more likely to respond to surveys such as this than administrators whose organizations have not developed the balanced scorecard. Thus, these factors should be assessed in generalizing the findings reported, especially with the small sample of municipal governments that have implemented the balanced scorecard.

The results reported here indicate that the balanced scorecard is a fairly new management tool in municipal governments and it may be premature to assess its usefulness in the management of municipal governments. More studies on the role of balanced scorecard in strategic planning, as well as its benefits on performance measurement and strategic management, are needed. Future studies conducted on examining implementation issues and evaluating balanced scorecards in municipal governments will provide better understanding and insights on the contribution of the balanced scorecard to municipal governments. Also, the assessment of communities on the effectiveness and efficiency of municipal governments which have and have not implemented the balanced scorecard represents another area of research into the contribution of the balanced scorecard to the management of municipal governments.

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Further reading

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