PERFORMANCE REPORTING IN THE MALAYSIAN GOVERNMENT

Maria Anna Mucciarone1* and John Neilson2

1Murdoch Business School, Murdoch University, 90 South Street Murdoch, Western Australia 6150, Australia
2School of Accounting, Curtin University of Technology, GPO Box U1987 Perth, Western Australia 6056, Australia

*Corresponding author: m.mucciarone@murdoch.edu.au

ABSTRACT

During the late 1980s, government agencies in many countries began to implement public sector management reforms to improve their efficiency and effectiveness. Many of these reforms were prompted by demands placed on governments for improved uses of public funds. In 2005, the Malaysian government and the Manpower Planning and Modernising Unit (MAMPU) circular 2/2005 introduced the concept of Key Performance Indicators (KPIs) for the public sector. Few studies have analysed these reforms in Malaysia. Based on a survey of Federal and State governments in Malaysia, this paper examines performance indicators and accountability practices and explains the hypothesised relationships between oversight bodies, political visibility and the accounting abilities of bureaucrats. Institutional theory was used to develop the theories and interpretive techniques used in this research. Multiple regression analysis was used to analyse the hypothesised relationships. This research provides an understanding of factors that influence the use of performance measures, which, in turn, could be used to formulate future government policy.

Keywords: Malaysia public sector reporting, performance indicators, performance indicator disclosure

INTRODUCTION

Performance measurements have been widely promoted by the Malaysian government for more than twenty years for the express purpose of increasing management focus on achieving results (Winston, 1999). The areas of performance included accountability and transparency education. The Malaysian government recognised the need for public sector entities to improve their efficiency and effectiveness in the provision of services and to provide better accountability and transparency, and they implemented the New Public
Management (NPM) model (Winston, 1999; Hood, 1991, 1995). This model is based on the fundamental concept that public sector organisations can and should borrow management strategies from the private sector. A worldwide trend toward this type of governmental management resulted in public sector changes in the 1980s and 1990s. Organisations transitioned away from decentralisation and privatisation to the development of goal-driven and client-orientated strategies (Nichol & Taylor, 2001). During this transition, management techniques from the private sector were introduced to many public sector organisations. Many governmental entities in developed countries, such as Australia, U.K., U.S and Canada, have introduced elements of NPM (Ter Bogt, 2004). As a logical consequence of globalisation in the beginning of the reform era in 1999, the Malaysian government introduced NPM programs, such as performance measurement reporting, to respond to public demands for productivity, transparency and accountability. This response to public demand followed trends initiated in developed countries across the world, where performance measurement has become the core of management reform to enhance accountability (de Lancer Julnes, 2006).

In Malaysia, at the end of the Mahathir regime, citizens have been pushing for improvements in the performance of the public sector and the Manpower, Planning and the Modernising Unit (MAMPU) of the current Prime Minister (Dato’ Sri Mohd Najib Tun Abdul Razak). Decentralisation as a strategy for economic and social development and for nation building is now accepted around the world. Most developing and transition nations have adopted some type of decentralised program (Nichol & Taylor, 2001). Decentralisation could be the appropriate policy for Malaysia because it moves government decisions closer to the people, an essential aspect of governance in a large and diverse country (Nichol & Taylor, 2001). Decentralisation could also lead to better public services, better public servants and more participation. Thus, decentralisation could strengthen, stabilise and further democratise Malaysia (Nichol & Taylor, 2001).

The concepts of NPM and public sector corporate governance are closely related. Accountability is an important component of corporate governance and performance measurement. Performance measurement, in turn, is an important element of NPM and is viewed as a means to discharge accountability. Therefore, this study focused on accountability and performance measurement. Over the last two decades, the idea of performance measurement has received a considerable amount of attention from both academics and practitioners (Neely, 1999). Originally, this type of research mainly considered performance measurement in the private sector (Johnson & Kaplan, 1987; Kaplan, 1983). However, the number of studies addressing performance measurement in the public sector has been steadily increasing (Brignall & Modell, 2000; Lapsley, 1996; Hood, James,
Performance Reporting in Malaysia

Jones, Scott, & Travers, 1998). Public sector organisations, particularly governments in Western countries such as Australia, U.K., U.S. and Canada, use performance measurement to improve management strategies and to provide the most value to taxpayers. In Malaysia, interest in performance measurement began when former Prime Minister Tun Abdullah Ahmad Badawi introduced the concept of key performance indicators (KPIs) for the public sector in MAMPU circular 2/2005. The programme established KPI to measure the performance of officials and agencies and National Key Result Areas to define goals for specific areas of public policy. The prime minister also introduced a new cabinet position to support the Unity and Performance Minister in implementing the KPI system (Prime Minister Office of Malaysia, 2010).

Based on a pilot study of interviews and a field survey of Federal and State Government Departments in Malaysia and using hypothesised relationships between independent and dependent variables, this research explores the use and disclosure of performance indicators. The independent variables include oversight bodies, political visibility, and the accounting abilities of bureaucrats. The Dependent variable includes the extent of the use of performance indicators. This study also examined the extent of disclosure of accountability information and the Senior Finance Officer's (SFO) perceptions of the disclosure of accountability information and the use of performance indicators.

Institutional theory was used to develop the theories and interpretive techniques used in this research. This research provides an understanding of factors that influence the development and use of performance measures, which, in turn, could be used to formulate future government policy. This paper begins within the framework on which this research is based. Then it describes the development of the hypotheses. The next section discusses the research method, presents the results, and conclusions.

INSTITUTIONAL THEORY

The institutional theory literature emphasises the tendency of organisational structure and processes to become isomorphic within the accepted norms of organisations of particular types (di Maggio & Powell, 1983). Institutional isomorphism is defined as a process of institutionalisation, whereby in a given social setting, a specific organisation is induced by specific factors relative to social institutions to assume initially extraneous features, to incorporate them, and then to take them for granted (Lippi, 2000). Studies of institutional isomorphism have described the adjustment of associative organisations and small firms to administrative bureaucracies and large companies, respectively. Recently, this concept has been widely employed in the social sciences to
formulate hypotheses for analysing similarities between the public sectors of different countries (Lippi, 2000).

Institutionalisation occurs in part because people conform to or take for granted certain behaviours and processes (di Maggio & Powell, 1983). Standardised behaviours enable people to focus on new problems and to rely on experience for issues that are not pressing (Eisenhardt, 1988). Eisenhardt (1988) also contends that organisational structures and processes become part of an integrated whole without unravelling the whole. Rather, the use of structures and processes that are legitimated by the environment can be sensible because this approach implies a reasonable management approach, pleases others external to the organisation, and avoids potential claims of negligence if something goes wrong (Meyer & Rowan, 1977).

Scott (1987, p. 496) defines Institutionalisation as "the social process by which individuals come to accept a shared definition of social reality—a conception whose validity is seen as independent of the actor's own views or actions but is taken for granted as defining the way things are and/or the way things are to be done." Institutionalisation occurs in part because people conform to or take for granted the ways of doing things. Such standard ways of doing things allows people to focus on new problems and to rely on experience for issues that are not pressing (Scott, 1987).

Accounting changes have been studied from an institutional perspective. Berry, Coad, Harris, Otley and Stringer (2009) argues that performance measurements in public sector organisations have changed from functionalist, behavioural, interpretive and critical perspectives to being influenced by institutional theories (Berry et al., 2009). Their study assumes that organisations compete not only for resources and customers but also for political power and institutional legitimacy. Berry et al. (2009) state that performance measurements are diffused throughout organisations by coercive and normative processes.

The institutional literature emphasises that organisational structure and processes tend to become isomorphic within the accepted norms for organisations of particular types (di Maggio & Powell, 1983). Di Maggio and Powell describe two types of isomorphism: (a) competitive isomorphism and (b) institutional isomorphism. The former is most relevant for open competition while the latter is defined as a process of institutionalisation whereby in a given social setting, an organisation is induced by factors relative to social institutions to assume initially extraneous features, to incorporate them, and then to take them for granted. Isomorphism is a useful concept in the modern organisational era in which politics and ceremony are embedded in organisational life. di Maggio and Powell (1983) identified three isomorphic forces. First, coercive isomorphism arises
from political influence and the problem of legitimacy. This pressure comes from both formal and informal pressures from other organisations, and normative isomorphism is usually associated with professionalism.

**Performance Measurement and Isomorphism**

Over the years, management control systems based largely on performance measurements have been studied from functionalist, behavioural, interpretative and critical perspectives (Pilcher, 2007).

Studies of institutional isomorphism have described the adjustment of associative organisations and small firms to administrative bureaucracies and large companies, respectively. More recently, the concept has been widely employed in the social sciences to formulate hypotheses for analysing similarities between the public sectors of different countries (Lippi, 2000). Recent studies have been influenced by institutional theories (Berry et al., 2009). In studies that adopt these theories, organisations are assumed to compete not only for resources and customers but also for political power and institutional legitimacy. Therefore, from this perspective, the logistics of change in performance measurement systems (PMS) are institutionalised into organisations by coercive, mimetic and normative processes (di Maggio & Powell, 1983).

Because the study of performance measurement in government emerged as a result of public sector reform, it is appropriate to refer to the concept of institutional isomorphism (Pilcher, 2007). With regard to public sector reforms, Brignall and Modell (2000) argued that normative frameworks and studies of their applications are based on rational instrumentalism. Consequently, Brignall and Modell (2000) argue that power relationships and the conflicting interests between stakeholders in modern public sector organisations have been neglected. From an institutional theory point of view, they argued that the interests of key public sector stakeholders, including the state, professionals, and service purchasers, are often inconsistent.

Brignall and Modell (2000) observed that:

The use of a particular aspect of performance measures within a public sector organisation might depend on the power relationship between its constituents and itself. For example, it is very likely that when facing a more powerful central government, a local unit would have to conform to performance measures (e.g., financial targets) required to satisfy central government's interests (p. 295).
Brignall and Modell (2000) noted that performance measures may thus be used by managers to seek legitimacy from a coercive stakeholder, rather than to deliver managers to seek legitimacy from a coercive stakeholder, rather than to deliver organisational long term objectives. Institutional theory suggests that "organisations pursue 'legitimacy' by conforming to isomorphic pressure in their environment" (Ashworth, Boyne, & Delbridge, 2009, p. 1).

This study investigates the perceptions of Senior Finance Officers (SFOs) from Malaysian Federal and State Government Departments related to performance measurement within an institutional theory framework. SFOs were asked a series of questions on the use of performance measures in their department. The use of performance measurement within a government may depend on the power relationship between its constituents and itself. In a decentralised government such as Malaysia, the central authority normally has more coercive power over State and Local governments than other constituents (Brignall & Modell, 2000). Local Governments were considered to be outside the scope of this study.

**Coercive Isomorphism**

Coercive isomorphic pressures reflect the enforcement aspects of certain institutions (Granlund & Lukka, 1998). Human behaviour is controlled by rules and monitoring activities, with such controls being exerted by force, persuasion or invitations to join in collusion (Neilson, 2002). Coercive isomorphism is the result of pressures, both formal and informal, exerted on organisations by other organisations (di Maggio & Powell, 1983). Within Malaysia, federal and state governments use numerous forms of coercive isomorphic pressures, including both internal and external influences.

Institutional theory suggests that organisations should pursue "legitimacy" by conforming to isomorphic pressures in their environment (Ashworth et al., 2009). This study investigated the perceptions of SFOs from Malaysian Federal and State governments related to performance measurement within an institutional theory framework. A face-to-face survey instrument was used, and SFOs were asked a series of questions related to their perceptions of performance measurement practices in their department. The use of performance measurement within a government may depend on the power relationship between its constituents and itself. For example, when facing a more powerful government, a State government must conform to a performance measurement regime mandated by the Federal government. In a decentralised government such as Malaysia, the Federal government normally has more coercive power over State governments than other constituents (Brignall & Modell, 2000). The use of
performance measurements within a government may depend on the power relationship between its constituents and itself. In Malaysia, the central government, via the enactment of laws and regulations that affect state governments, is a potential source of isomorphic pressures. These regulations include MAMPU circular 2/2005, which requires all government agencies to report key performance indicators to appraise the performance of all government departments. This coercive pressure occurs because most state government departments are heavily dependent on the central government for their financial resources. Even though state government departments are required to submit performance reports to the central government, they are not required to use performance information in their day-to-day management practices. Therefore, an understanding of the factors that influence the development and use of performance measures is important. Knowledge of these factors could be used to evaluate and improve future government policy.

This coercive pressure occurs because most state governments are heavily dependent on the Federal government for their financial resources. Even though state governments are required to submit performance reports to the federal government, they are not required to use performance information in their day-to-day management practices.

In Malaysia, the Government Transformation Programme (GTP) was developed in January 2001 in accordance with the principles of Malaysia, People First, Performance Now. In its entirety, the GTP is designed to provide all Malaysians with access to improved public services irrespective of race, religion and region.

The GTP has two objectives:

1. To improve the efficiency with which the government delivers services and the accountability of outcomes relevant to the Rakyat.
2. To encourage the development of Malaysia into an advanced, united, and just society with high standards of living for all.

These objectives are consistent with the national mission of achieving Vision 2020 and ensuring that Malaysia becomes a fully developed nation. Under the GTP, six key priority areas have been identified, and challenges within each area have been divided into short-term priorities and long-term issues. These areas of development, known as the National Key Results Areas (NKRAs), include the following: Reducing Crime, Fighting Corruption, Improving Student Outcomes, Raising Living Standards of Low-Income Households, Improving Rural Basic
Infrastructure and Improving Urban Public Transport. For these objectives, the Federal government exerts coercive pressure on state and other government agencies.

Although state government departments are required to submit performance reports to the federal government, they are not required to use performance information in their day-to-day management practices. Therefore, an understanding of the factors that influence the development and use of performance measures is important. Knowledge of these factors could be used to evaluate and improve future government policy. Coercive isomorphism is proxied by oversight bodies. Oversight bodies, such as the Accountants of the General Office and the Treasury Department, are regulatory agencies that help other State departments to conform to Federal rules and regulations. Therefore, oversight bodies can be proxied for coercive isomorphism to influence the types of PIs used by Malaysian Federal and State government departments. Oversight bodies are relevant to the success of reforms in government organisations (Brignall & Modell, 2000).

Coercive isomorphism is also proxied by a size measure. Size may influence the GRI Indicators used by Australian state government departments. The size of an organisation relates to the ability and capacity of the organisation to collect information, retain knowledge and use this knowledge in performance measurements. Larger organisations are better able to provide data, information and facts about performance measurement (Garengo, Biazzo, & Bititci, 2005). Small organisations are often hindered by limited resources, both financial and human, and weaker long-term planning (Rosair & Taylor, 2000; Gibson & Guthrie, 1995).

Lynch (2010, p. 36) noted that "Public Sector organisations would be expected to face greater pressure to disclose information than private sector organisations. This is due to their larger, more diverse group of stakeholders". Thus, the size of a government department can be a coercive pressure according to institutional theory. The size factor mirrors the political cost hypothesis of Watts and Zimmerman (1986), which states that entities subjected to a greater amount of scrutiny are more likely to disclose information than those subjected to less scrutiny. This result is supported by the results of Mucciarone (2010), which show a significant positive relationship between the size of Australian State government departments and the extent of performance indicator dissemination by those departments.

A large state government department may draw greater scrutiny from various constituent parties if it fails to voluntarily disclose accountability information (Mucciarone, 2010). Thus, the size of a state department is an
indicator of the relative impact of coercive isomorphism on the propensity of Australian state departments to disclose key performance indicators. Size is measured as the number of employees in a state department and the total revenue to minimise skewness, as with nearly all topics in this area. Thus, the presence of oversight bodies (Accountant–General office) and the size of government departments (the number of employees and the total revenue) are proxies for coercive isomorphism.

**Normative Isomorphism**

The second element of isomorphism is normative. Ryan and Purcell (2004, p. 10) define normative isomorphism as "shared norms of organisational members, that is, those values that may be unspoken, or expectations that have gained acceptance within organisations".

Because of the limited capacity of human resources in Federal and State government departments, in the last decade, more attention has been given to the education of government employees and officials. Malaysia has made enormous strides in its education system over the past 50 years. An adult literacy rate of 92% has been achieved; primary school enrolment has been made universal; and the growth rate of secondary school enrolment is among the highest in developing countries. Di Maggio and Powell (1983) argued that as the education level of the workforce improves, in terms of academic qualifications and participation in professional and trade associations, the extent to which an organisation resembles similar organisations will increase.

An organisational factor that is expected to influence the use of performance indicators is bureaucratic experience (Cheng, 1992). In her model, Cheng (1992) included eleven theoretical variables that were deemed to directly or indirectly affect the decisions of bureaucrats in U.S. State governments on issues related to the provision of accounting information. The results show that the accounting abilities of bureaucrats have a significant positive effect on the quality of financial reporting (Cheng, 1992). Bureaucratic experience enables improvements in the ability of internal stakeholders to understand and use performance measurement systems and improves the use of performance indicators (de Lancer & Holzer, 2001). Therefore, the accounting abilities of bureaucrats may influence the disclosure of PIs. As a proxy for normative isomorphism, the accounting ability of a bureaucrat is measured by years of experience.
Accountability in the Public Sector

Accountability and the rendering of accounts in the public sector have received a considerable amount of attention in the public sector literature, where accountability is based on the presentation of accounts or performance in accounting terms (Tomkims, 1987).

The International Federation of Accountants Public Sector Committee (2000) defines accountability in the public sector as:

The process whereby public sector entities, and the individuals within them, are responsible for their decisions and actions, including their stewardship of public funds and all aspects of performance, and submit themselves to appropriate external scrutiny. It is achieved by all parties having a clear understanding of those responsibilities, and having clearly defined roles through a robust structure. In effect, accountability is the obligation to answer for a responsibility conferred (p. 137).

Accordingly, within the Westminster system of government, public expenditures and revenue decisions are made by an executive and are implemented through the administrative arm, the public service.

There are different definitions of accountability in the public sector accounting literature. Stewart (1984) defines accountability as a ladder that distinguishes between performance accountability and accountability for probity and legality. Stewart (1984) also discusses accountability information systems and notes that an accountability information system should report on all levels of accountability for which there is a need for a system that reports financial information, output and outcomes information. The information needs of user groups vary. For example, the citizenry may be interested in the results or effectiveness of a public sector entity whereas oversight and legislative bodies may be jointly focused on wider performance information, including efficiency and probity (Hyndman & Anderson, 1997).

An important aspect of accountability is reporting. Accountability is exchanged for trust or empowerment. By definition, it involves an obligation to explain an employee's actions and to justify these actions to those who have responsibility over them. It is an obligation to report, which is different from responsibility, the obligation to act (Taylor & Pincus, 1999). In this study, we examine two types of accountability—internal accountability and external accountability. Internal accountability includes Chief Finance Officers (CFO),
Management and Employees of an organisation. External accountability includes Parliament, Ministers and the citizens of Malaysia.

HYPOTHESES FORMULATION

Issues identified in previous studies were used to formulate the theoretical framework and research questions for this analysis. Figure 1 depicts the empirical schema tested. The hypothesised relationships between all constructs are discussed in the following subsections.

**Independent Variables**

- Oversight Bodies
- Political Visibility
- Bureaucrats Accounting Ability

**Dependent Variables**

- Extent of Use of Performance Indicator

![Figure 1. Empirical schema](image)

**Use of Performance Indicator Information**

A number of studies have focused on the use of performance measures in the public sector. Alijarde (1997) studied the perceived usefulness of information to users of local governmental financial reports, and Hyndman and Anderson (1995) examined the users of state and local government reports. To the best of our knowledge, the amount of research on performance measurement in Malaysia is limited. Nichol and Taylor (2001) examined changes in the extent of disclosures of various categories of accountability and performance information in the annual public accounts of the Malaysian government, its ministries and other public sector entities for the years from 1985 to 1995. The findings of the study indicate limited changes in the extent and quality of disclosures of accountability and performance information in these public sector reports. This finding suggests that the public's ability to assess the annual performance and discharge of accountability by federal government entities and the entire government remains limited in Malaysia. The aim of this research was to determine whether the accountability and performance reporting of Malaysian federal Ministries and
State government departments has improved since the introduction of MAMPU circular 2/2005 and whether public access to this information has improved.

In this study, the disclosure of accountability information and the use of performance indicators were assessed by asking respondents to answer a series of questions related to the development and adoption of different types of performance measures used by the organisation. Accountability in Federal and State governments is measured by financial and non-financial performance indicators. Performance indicators also have a significant role in managerial or internal controls because they ensure that organisations are managed in the best interests of all the stakeholders (Bullen, 2003). Performance information is paramount in discharging accountability, and a concentration on the provision of traditional financial accounting information may reduce accountability by focusing on unimportant details (Hyndman & Anderson, 1998).

Martinez-Gonzalez and Marti (2006) argue that accountability and the rendering of accounts are interrelated concepts. They claim that without the delegation of power or a certain capacity to do things, accountability cannot be required, and accountability is manifested, justified, and delivered through a suitable rendering of accounts. This rendering of accounts involves disclosing performance results and explaining achievements.

Accountability and the rendering of accounts in the public sector have received a considerable amount of attention in the public sector literature, where accountability is based on the presentation of accounts or performance in accounting terms (Tomkims, 1987). However, following the adoption of public sector reforms in many developed countries, researchers have criticised this approach. For example, Humphrey, Miller and Scapens (1993) argue that "the scope of accountability should be expanded beyond the typical accounting justification" (p. 24).

Martinez-Gonzalez and Marti (2006) argue that accountability and the rendering of accounts are difficult to achieve in the public sector because of the nature of public resources. In the public sector, resources cannot be measured, and indicators that can provide immediate and direct information on performance cannot be calculated because of the absence of profit. Thus, accountability is considered to be more important in the public sector than in the private sector.

Questions in our survey (see Appendix) refer to both the disclosure of internal and external accountability information and the use of performance indicators.
Performance Reporting in Malaysia

Oversight Bodies

Institutional theory suggests that regulatory requirements or oversight bodies are relevant organisational factors of the success of reform implementation in government organisations (Brignall & Modell, 2000). Furthermore, in institutional environments, such as Malaysian state governments, which depend primarily on external organisations and centralised government departments such as the Accountant-General Department for financial support and secondarily on actual performance, external bodies have the authority to impose organisational practices on subordinate units. Consequently, when subordinate organisations implement the required practices, the actual results tend to be superficial (Scott, 1987).

In 1990, three accounting standards specifically related to financial reporting by government organisations were introduced into public sector accounting practices in Malaysia (Nichol & Taylor, 2001). The aim of introducing these practices was to increase the focus on managerial accountability. With this shift in emphasis, the Malaysian Government required public sector entities to capture efficiency and effectiveness reporting in their annual reports (Taylor & Pincus, 1999).

In Malaysia, Nichol and Taylor (2001) studied the extent of disclosure of the various categories of performance information by groups of ministries and other public sector entities. They performed a content analysis on a selection of public sector accounts from 1985 to 1995. Their analysis found that performance indicators were seriously lacking in public accounts and that the disclosure of efficiency and effectiveness performance indicators had declined to only 6 instances in 1995, of which only 2 were justified. The authors found no efficiency indicators in the 1995 reports.

A possible explanation for the poor results above is provided by Nichol and Taylor (2001):

There has been no proper and specified mechanism for measuring performance information. Furthermore, the deficiency in reporting of effectiveness indicators was possibly due to the non-mandatory status of effectiveness audits (p. 43).

From this perspective, coercive mechanisms as suggested by di Maggio and Powell (1983) may take place in practice.
Based on the above discussion, hypothesis 1 is as follows:

H1: A positive relationship exists between the influence of oversight bodies and the use of performance indicators in the Annual Reports of Malaysian government departments.

Political Visibility

The implementation of public measurement systems (PMSs) in governments requires changes in the operation, personnel, structure and culture of government. Such changes are likely to create resistance within an organisation. Therefore, to ensure success in the development and use of performance indicators, internal support in the form of management commitments is important. de Lancer, Julnes and Holzer (2001) stated that changes can only occur if the top level of management has committed to adopting and implementing a PMS.

Some research has been conducted in the private sector in Malaysia. Pham, Gray and Morris (2003) studied corporate financial reporting transparency in Malaysia before and after the Asian financial crisis of 1997/1998. They measured transparency in terms of compliance with Malaysian Accounting Standards (MASBs) and the voluntary adoption of International Accounting Standards (IASs) and the US GAAP program, which cover a range of financial reporting issues. The authors hypothesised that as the size of Malaysian firms increased, the transparency of their financial reports would also increase. The results of their study show that in both 1996 and 2001, all mandatory and voluntary transparency indexes were significantly positively associated with firm size.

Lim and Mckinnon (1993) defined an entity as politically visible if it attracted a disproportionate share of scrutiny by politicians, the general public or other accountants, causing it to become a possible target for the imposition of political costs. Political costs are associated with the redistribution of a department's resources to other parts of the public sector, the absorption of its function by other agencies, and the replacement of key senior management. Thus, these authors argued that government departments may attempt to manage their political visibility by making disclosures in their annual reports to minimise political costs. Lim and Mckinnon (1993) used three proxies for political visibility: firm size, number of employees and level of coverage in the official records of NSW parliamentary debates. They found a positive correlation between the political visibility of the statutory authorities and the level of voluntary disclosure of financial and nonfinancial information. They confirmed the political cost hypothesis of Watts and Zimmerman (1986), which states that entities subjected to a greater amount of scrutiny are more likely to disclose
information than those subjected to less scrutiny. In this study, political visibility was measured by the size of a governmental department and proxied for coercive isomorphism by the number of employees and the total revenue.

Based on the above discussion, hypothesis 2 is as follows:

H2: A positive relationship exists between the political visibility of Malaysian government departments and the use of performance indicators in the Annual Reports of these departments.

**Bureaucratic Accounting Ability**

An organisational factor that is expected to influence the development and use of performance indicators is the extent to which a bureaucrat's knowledge and experience supports program implementation (Shields 1995; Cavalluzzo & Ittner, 2004). Shields (1995) argued that training in the design, implementation and use of management accounting programs allows organisations to articulate the links between organisational objectives. This ability, in turn, provides a mechanism for employees to understand, accept and feel comfortable with new programs. According to the implementation of PMSs in Malaysia, a lack of understanding of the system affected the practices (Nichol & Taylor, 2001). Technical knowledge allows improvements in the ability of internal stakeholders to understand and use PMSs and positively improves the development and use of performance indicators (de Lancer & Holzer, 2001). In Malaysia, several efforts, such as technical training and formal post-graduate degree programs, have attempted to increase the knowledge of government employees and officers (Prime Minister Office of Malaysia, 2010). From this perspective, normative mechanisms, as suggested by di Maggio and Powell (1983), may have a considerable influence on reporting programs.

Malloy (2003, p. 10) noted that normative isomorphism is best illustrated in professional organisations. As personnel from different organisations band together and standardise their credentials and practices, their autonomous organisations, such as hospitals, universities and fire departments, inevitably come to resemble one another. Malloy (2003) observed that normative isomorphism for government agencies can signify (a) conforming to the behavioural standards, such as neutrality, hierarchy and professional demeanour, of a professional public service or (b) following the norms and values of a social movement, such as extensive consulting activities. Bureaucratic accounting abilities are proxied for normative isomorphism, including bureaucrat experience.

Therefore, on the basis of the above discussion, hypothesis 3 is as follows:

RESEARCH METHOD

Table 1 provides a summary of the proposed model, the variables and the number of items used to measure each variable. The structural model, also known as the inner model, focuses on the hypothesized relationships or paths between the latent variables (Hair, Black, Babin, Anderson, & Tatham, 2005). All measurable items used in this research were classified as reflective indicators. Internal accountability and external accountability are additional variables that will be examined to determine the extent of the use of performance indicators.

Table 1
Research model variables

<table>
<thead>
<tr>
<th>Latent Variables</th>
<th>Short Code</th>
<th>Manifest Variables</th>
<th># of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of Performance Indicator</td>
<td>PI use</td>
<td>Pluse to Pluse7</td>
<td>7 items</td>
</tr>
<tr>
<td>Oversight Bodies</td>
<td>OAG</td>
<td>OAG1 to OAG5</td>
<td>5 items</td>
</tr>
<tr>
<td>Political Visibility</td>
<td>POL</td>
<td>POL1 to POL1</td>
<td>1 item</td>
</tr>
<tr>
<td>Bureaucrats Accounting Ability</td>
<td>ACC</td>
<td>ACC1 to ACC2</td>
<td>2 items</td>
</tr>
<tr>
<td>Internal Accountability</td>
<td>I ACC</td>
<td>IACC to IACC1</td>
<td>1 item</td>
</tr>
<tr>
<td>External Accountability</td>
<td>EACC</td>
<td>EACC1 to EACC3</td>
<td>3 items</td>
</tr>
</tbody>
</table>

Legend: Extent of use of performance indicators includes; efficiency, effectiveness, quality, quantity, timeliness and cost performance indicators. Oversight bodies include; The Accountant General, and Treasury Department. Political Visibility includes; Size (number of employees and total revenue). Bureaucrats accounting ability include; years of experience, qualification and membership of a professional accounting body.

Sample and Data Collection

This research was based on a pilot study of semi-structured interviews with a sample of Malaysian SFOs and a questionnaire. The pilot study was conducted because of the lack of empirical research on the use of performance indicators in Malaysian government departments. Data from the interviews were used to design the questions for the questionnaire survey.

Several senior finance officers (SFOs) from Malaysian Federal and State government departments were interviewed. The subjects were selected from government departments, and based on their size and importance, they were deemed to be more politically visible in the public domain. Because of time
constraints, only 12 interviews were conducted. The interviews were conducted in English because Malaysian SFOs must be fluent in English. The Malaysian departments are classified as M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, and M12. The purpose of this phase of research was to gather information on the type and number of performance indicators to aid in the formation of questions for the questionnaire. Table 2 lists the interviewees.

The interviews were semi-structured and based on a questionnaire with three sections. Section One contained 20 questions on accountability. Of these questions, 17 were open-ended and asked respondents to express an opinion related to their department. Section Two contained sixteen questions on performance indicators, six of which were open-ended. The questions allowed respondents to include additional information on performance measures. Section Three allowed respondents to add additional information pertinent to the issues raised in the interview.

Table 2

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1</td>
<td>State</td>
</tr>
<tr>
<td>M2</td>
<td>State</td>
</tr>
<tr>
<td>M3</td>
<td>State</td>
</tr>
<tr>
<td>M4</td>
<td>State</td>
</tr>
<tr>
<td>M5</td>
<td>State</td>
</tr>
<tr>
<td>M6</td>
<td>State</td>
</tr>
<tr>
<td>M7</td>
<td>Federal</td>
</tr>
<tr>
<td>M8</td>
<td>Federal</td>
</tr>
<tr>
<td>M9</td>
<td>Federal</td>
</tr>
<tr>
<td>M10</td>
<td>Federal</td>
</tr>
<tr>
<td>M11</td>
<td>Federal</td>
</tr>
<tr>
<td>M12</td>
<td>Federal</td>
</tr>
</tbody>
</table>

The field survey included a questionnaire with instructions for completion, a cover letter and a self-addressed reply envelope, which was sent to the SFOs of 170 Malaysian government departments. The questions were written in Bahasa Malaysia. Although it was known from interviews that Malaysian SFOs speak and write English, the cover letters and questionnaires were written in Bahasa Malaysia to prompt a higher response rate. The cover letter and questionnaire were translated into Bahasa Malaysia by a professional interpreter.
and then sent to an independent translator for back translation to ensure that both the English version and the Bahasa Malaysia version were compatible. Responses in Bahasa Malaysia were translated into English by a qualified interpreter. Of the 170 questionnaires, 25 were returned (14.7%). A follow-up questionnaire added 12 usable responses for a total of 37 usable responses, representing an overall response rate of 21.76%. The details are presented in Table 2.

Table 3
Distribution of responses

<table>
<thead>
<tr>
<th></th>
<th>Sent (170)</th>
<th>Received (37)</th>
<th>Response Rate (21.76%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>%</td>
<td>Frequency</td>
</tr>
<tr>
<td>Federal</td>
<td>70</td>
<td>41.1</td>
<td>25</td>
</tr>
<tr>
<td>State</td>
<td>100</td>
<td>58.8</td>
<td>12</td>
</tr>
</tbody>
</table>

A total of 25 responses were received from Malaysian Federal Government Ministries, and 12 were received from Malaysian State Government departments. Table 2 shows that most respondents were from Federal government ministries (67.6%). Table 2 also shows that the smallest number of respondents was from State government departments (32.4%). The relatively low response rate can be explained by two factors. First, State government departments may lack performance-reporting experience, and many departments still do not have their own websites. Those that do not publish their financial reports in English. Furthermore, many State government departments were formed from departments that existed long before the reform agenda of the current government was instituted. Second, in the Malaysian government context, low responses are expected.

Non-response Bias

All respondents in this study were from Federal and State government departments in Malaysia, including the federal territories of Kuala Lumpur, Labuan and Putrajaya and 13 States (Negeri) with a total population of 28,377,090 million (Malaysian Bureau of Statistics, 2007). The survey was distributed in August 2007. Mail surveys are assumed to be an appropriate method for collecting data in community-based studies. This method is particularly useful for research on large or geographically dispersed populations, such as that of Malaysia. This method of data collection increases the coverage area of a study and can be conducted in less time and in a cost-effective manner. Therefore, this method was considered to be suitable for this study (Macdonald, Neuburn-Cook, Schopflocher, & Richter, 2009).
Researchers must exercise care in appropriately addressing the issue of nonresponse bias. Otherwise, the results of a study cannot be generalised. Nonresponse bias can be addressed by using the extrapolation method, which is based on the assumption that that subjects who respond less rapidly are more similar to non-respondents (Armstrong & Overton, 1977). Armstrong and Overton (1977, p. 397) stated that:

The most common type of extrapolation is carried over successive waves of implementing a questionnaire. Wave refers to the response generated by a stimulus (i.e., a follow up questionnaire). Participants who respond in later waves are assumed to have responded because of the increased stimulus and are expected to be similar to non-respondents.

Of the 14 late responses, 8 were from Federal departments, and 6 were from State Government departments. Because of the large number of Malaysian States (13), the cost and time involved in analysing data and the low response rate, the individual Malaysian State responses were not analysed. A further analysis of responses in the second wave of requests revealed no significant differences from the earlier wave of responses. Consequently, response bias was not considered to be an issue, and the results can be generalised.

Table 4
Validity and reliability tests for variables from the questionnaire data

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Mean</th>
<th>t-test</th>
<th>Total</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG</td>
<td>3.027</td>
<td>12.277</td>
<td>36</td>
<td>.000</td>
</tr>
<tr>
<td>Minister</td>
<td>2.676</td>
<td>12.196</td>
<td>36</td>
<td>.000</td>
</tr>
<tr>
<td>Treas</td>
<td>2.730</td>
<td>11.637</td>
<td>36</td>
<td>.000</td>
</tr>
<tr>
<td>Lobby</td>
<td>2.703</td>
<td>11.188</td>
<td>36</td>
<td>.000</td>
</tr>
<tr>
<td>Political Visibility</td>
<td>3.650</td>
<td>22.693</td>
<td>36</td>
<td>.000</td>
</tr>
<tr>
<td>Accounting Ability</td>
<td>2.027</td>
<td>10.794</td>
<td>36</td>
<td>.000</td>
</tr>
</tbody>
</table>

A validity test was performed using a one sample t-test for the attributes that influence the Malaysian government department's use of performance indicators (PIs). The attributes tested for validity and reliability for Malaysia include Oversight Bodies (Accountant-General Office, Minister, Treasury, Lobby Groups), Political Visibility (Size) and Bureaucratic Accounting Ability (Experience, Qualification and Membership of a professional accounting body). The results are presented in Table 4.
Reliability Tests

Reliability is related to estimates of the degree to which a measurement is free of random or unstable errors. Reliability refers to the consistency, stability, and repeatability of a data collection instrument. A reliable instrument does not respond to chance factors or environmental conditions; it will show consistent results if repeated or if used by different investigators. The reliability of an instrument says nothing about its validity; the wrong concept can be measured in a consistent, stable fashion (Hair et al., 2005).

The Cronbach alpha value is a widely used reliability coefficient based on an internal consistency test. It is based on the average correlations of variable items with one another if the items are standardised or the average covariance among items if the items are not standardised. If the items in a variable are, to a certain extent, measuring a common entity, then they will be positively correlated with one another (Hair et al., 2005). A variable is considered reliable if the Cronbach alpha value is both positive and greater than 0.6.

Table 5 shows the reliability test results for the following variables: performance indicator disclosure, disclosure of accountability information, oversight bodies, and experience. The results in Table 4 show that only one variable—the disclosure of accountability information—failed the reliability test because the Cronbach alpha (\(\alpha\)) value was less than 0.6 and all 5 variable items were not correlated. The other dependent and independent variables were reliable because the Cronbach alpha (\(\alpha\)) value for each variable was positive and greater than 0.6.

Table 5
Reliability tests

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>No. of items</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of Performance Indicators disclosed (Meandiscl)</td>
<td>6</td>
<td>0.940</td>
</tr>
<tr>
<td>Discharge of Accountability Information</td>
<td>5</td>
<td>0.506</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>No. of items</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oversight Bodies</td>
<td>7</td>
<td>0.802</td>
</tr>
<tr>
<td>Experience</td>
<td>2</td>
<td>0.832</td>
</tr>
</tbody>
</table>
DATA ANALYSIS AND DISCUSSION

The first subsection of this section discusses aspects of the disclosure of accountability information by government departments, as obtained from the main questionnaire. Then, the hypothesis testing is presented; a multiple regression analysis was used to evaluate the impacts of oversight bodies, political visibility and bureaucratic accounting ability on the use of performance indicators.

Disclosure of Accountability Information

A series of questions related to the disclosure of accountability information by Malaysian government departments was included in the questionnaire (see Appendix). The first question asked respondents to indicate, on a 5-point Likert scale ranging from 1 (no importance) to 5 (highest importance), their perceptions of the aspects that influence accountability disclosures in Annual Reports. The results are presented in Table 6.

Table 6
<table>
<thead>
<tr>
<th>Accountability disclosure</th>
<th>Means</th>
<th>Sig (2 – tailed) (p-value)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objectives</td>
<td>4.16</td>
<td>0.374</td>
</tr>
<tr>
<td>Efficiency</td>
<td>3.97</td>
<td>0.025</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>4.16</td>
<td>0.927</td>
</tr>
<tr>
<td>Compliance</td>
<td>4.03</td>
<td>0.388</td>
</tr>
<tr>
<td>Trends</td>
<td>4.05</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Legend: Table 5 is an independent sample t-test. This table is based on a 5 point likert scale (range from 1 = no importance to 5 = highest importance).* highly significant at p < 0.1. The table is based on a sample size of 37 cases.

The result for the effectiveness of indicators is interesting based on interviews with the SFOs of Malaysian departments who believed that the achievement of outcomes was the most important factor in the discharge of accountability. Furthermore, Nichol and Taylor (2001) studied the importance of accountability information in Malaysian federal public accounts and found a decline in the disclosure of effectiveness performance information, with 9 effectiveness indicators being disclosed in the 1985 Malaysian public accounts compared with only 6 indicators in 1995. The results from the current study indicate that since 1995, the importance of disclosing effectiveness performance information has increased among the SFOs of Malaysian government departments. A possible explanation for this increase could be the adoption of public sector reforms by the Malaysian Government.
Table 6 shows that efficiency performance information is highly significant ($p = 0.025$; mean = 3.97). This result indicates that government departments consider efficiency information to be important in the discharge of accountability information. This result is interesting because interviewees commented that their Ministers are not concerned with how the department achieves their goals, so long as the goals are achieved. A similar situation has been observed in Malaysian government departments. The SFO of State department M3 commented that:

> In Malaysia, we do not have a specified mechanism for measuring performance information. Further, the government has instructed us to focus on outcomes only.

Thus, as shown in Table 7, the high results for effectiveness indicators, trends and compliance and the relatively high result for efficiency indicators indicate that since the introduction of the PMS, the use of performance information has increased.

The extent of disclosure for the various categories of performance indicator information by Malaysian government departments is shown in Table 7, which includes categories for efficiency, effectiveness, quality, timeliness and cost. This table shows the responses to the question on performance indicators for each department in their Annual Report. The results indicate that 2 of the 12 departments did not disclose any performance measures in their Annual Report. Table 7 shows that Quantity Indicators were mostly disclosed by Malaysia departments in their annual reports and that quantity indicators represent the number/amount of goods/services being administered.

One possible explanation for the limited disclosure of efficiency and effectiveness indicators may be that government departments are still relatively inexperienced at disclosing these indicators. This assertion is supported by comments from the representative of State Department M1:

> There has been no proper and specified mechanism for measuring performance information; the deficiency in reporting effectiveness indicators is possibly perpetuated by the non-mandatory status of effectiveness audits.

Only six of the Malaysian departments interviewed claimed disclosure of all eight types of performance indicators.
Table 7
Disclosure of performance information by Malaysian Government Departments

<table>
<thead>
<tr>
<th>Department</th>
<th>Effic</th>
<th>Effect</th>
<th>Output</th>
<th>Outcome</th>
<th>Time</th>
<th>Quality</th>
<th>Quantity</th>
<th>Cost</th>
<th>Total PIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>M2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>M3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>M4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>M5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>M6</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>M7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>M8</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>M9</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>M10</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>M11</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>M12</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total PIs</td>
<td>7</td>
<td>6</td>
<td>9</td>
<td>6</td>
<td>9</td>
<td>8</td>
<td>10</td>
<td>8</td>
<td>63</td>
</tr>
</tbody>
</table>

Notes: Effic = Efficiency, Effect = Effectiveness, Time = Timeliness

The SFO of Malaysian Federal government department M11 stated that:

We only report efficiency indicators internally, as the Minister and CEO want to ensure that our department is operating efficiently. For our annual reports, which are distributed externally, it is only necessary to report what we achieve.

Two questions related to the form and content of an organisation's Annual Report assessed the importance of the disclosure of accountability information. The first question probed perceptions of the level of influence that specific groups of taxpayers, including the Auditor-General, Treasury, lobby groups, the Minister, and the CEO, have on the form of information included in the Annual Report (Table 7). The data reveal that the Accountant-General had a mean score of 3.35, indicating influence on the form of performance information in the Annual Report.

Hypothesis Testing

To test the hypotheses, the construct equations were interpreted with standard errors and test statistics. The construct equations measure the extent to which one factor relates to another, that is, the extent to which the structural path coefficient and t-values between hypothesised constructs reflected direct relationships.
(Tabachnick & Fidell, 1996). The t-values (robust scores) must be significant to support the hypothesised paths and should be greater than 1.96 or 2.56 for alpha protection levels of 0.05 and 0.01, respectively (Gefen, Straub, & Boudreau, 2000). The structural relationship results are reported in Table 8.

Table 8
Summary of hypothesis testing results

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variable</th>
<th>Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>p-value</td>
</tr>
<tr>
<td>MEANUSEP CONSTANT</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>ACCOUNTANT–GENERAL</td>
<td>−0.337</td>
<td>0.051**</td>
</tr>
<tr>
<td>Minister Experience</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.112</td>
<td>0.229</td>
</tr>
</tbody>
</table>

Legend: Table 8 is a linear regression model with backward regression (model six). The above table is based on a sample size of 37 Malaysia).

** indicates significance at p < 0.05.

Model fit Adj r squared 0.086, F value = 4.096 and Sig F = 0.051

Table 8 shows the multiple regression analysis results for hypotheses 1, 2 and 3. Table 8 shows that only the oversight body influenced the ACCOUNTANT–GENERAL (beta of −0.337 and significance of 0.051). All other oversight bodies, including the Minister, Treasury, and Lobby, had SIG T > 0.05 and were therefore not significant. Thus, Hypothesis 1 is rejected.

The strong significant result for the Accountant–General in Malaysia can be explained by increases in the quality of accountability-related disclosures required by Malaysian government departments. In studying the Malaysian departments, Nichol and Taylor (2001) found a major shift in the disclosure categories of performance indicators between 1985 and 1995. Of the six categories of compliance, three categories, compliance reporting, Auditor–General certificates, and the number and type of abridged, consolidated financial statements, showed important changes.

Another issue is whether public accounts should contain the summarised audit report on the government entity's major programmes. All 12 Malaysian Federal department SFOs disagreed with this Statement, with the respondent from M12 arguing that:

The Auditor–General's opinion is sufficient for the discharge of accountability in relation to a government entity's major
programmes because the public accounts are audited by the Auditor–General. The Auditor–General's role is to check the public accounts of the Public Sector and to form an independent opinion of whether Malaysian Federal departments or other Public Sector entities conform to their audit requirements. Unless a fundamental error is discovered by the auditor, changes are not made to the drafting of the Annual Report.

The Malaysian SFOs were also asked if they believed that the reporting of internal controls should be mandatory. All 12 respondents agreed that such reporting should not be made mandatory. The SFO of Federal department M9 stated that:

Internal controls are not governed by any external factors. We do monthly account checks. This is referred to as Accountability of control. The internal control report is transferred to the Central administration system in Malaysia.

Furthermore, the SFO of Malaysian State department M6 commented that:

In Malaysia, we follow an outcome-based approach to reporting performance. Therefore, we report outcomes on a monthly basis but not performance indicators. Performance indicators are reported internally to senior management and are thus only reported on an annual basis.

Table 8 presents the regression results for SIZE. Here, size is a surrogate for political visibility and serves as the independent variable. The results in this table illustrate that the SIZE of a government department is excluded from backward regression model six and therefore is not significant. Therefore, hypothesis 2 is rejected, indicating no relationship between the political visibility of Malaysian government departments and the extent of use of performance indicators in the annual reports of those departments. Table 8 further illustrates that the variable EXPERIENCE, which is related to an SFO's accounting ability, is not significant with a p-value of 0.202. Therefore, hypothesis 3, which is related to accounting ability, is rejected.

The absence of political visibility and bureaucrat experience effects on PI disclosure can be explained by the following comments.
Maria Anna Mucciarone and John Neilson

The SFO of Federal Department M2 stated the following:

I am accountable to my CEO and the Secretary-General. I am given direction by these people as to what performance measures need to be reported and what budget I have to account for. In the Malaysian public sector, we now have a modified budget system in which managers have more power to manage their resources; that is, the managers are able to manage.

The SFO of Malaysian State department M5 commented that:

Now, we are busy with the demands set by our Minister. We put all our information on the web to enable people to access the information they need about us. In the past, before technology and the use of the internet, we received many demands from citizens for information. Now, they can go to our website and download whatever information they need.

CONCLUSIONS

From our results, in Malaysian Federal and State governments, oversight bodies, political visibility and the accounting abilities of bureaucrats do not appear to influence the use of performance indicators. The only oversight body that influenced the use of performance indicators was the Accountant-General department, implying that the main reason for developing indicators is simply to comply with central government regulations and that compliance rather than performance is the main motivation.

This result is not surprising, and the SFO of State department M2 stated that there is no formal mechanism in place for measuring performance information, particularly the efficiency and effectiveness of government programs.

Similar results were obtained by analysing the use of performance indicators. For the disclosure of accountability information, trends and efficiency information were disclosed most often. The Malaysian SFO stated that trends and efficiency information are essential in the discharge of accountability information. This result is a gradual improvement for SFOs who measure their departments' performance.

The SFO from Malaysian Federal Department M4 commented that in Malaysia, Public Servants are not as computer literate as those in Australia. In
Malaysia, most Federal departments have their own websites with information about the department in both English and Bahasa Malaysia. However, financial information on the websites is limited and only available in Bahasa Malaysia. Malaysian State Government departments also have their own websites with information about their services, staff, finances and operations. However, the information is only in Bahasa Malaysia.

The SFO of Malaysian Federal Department M1 commented that:

> In Malaysia, we want to do like Australia and have all our financial and operating information on our website and in English, but we do not have the people who can help us to do this. Computer technology is not considered very important in Malaysia. Also, only officers at a senior level in Malaysian Public Service need to have a good knowledge of English, so we lack the staff expertise to have a system like you have in Australia, which is very good.

The overall results of this study indicate that Malaysian Federal and State SFOs still have some work to do in improving the use of performance indicators in their government departments. This research provides an understanding of factors that influence the use of performance indicators, which could be used to formulate future government policy. This paper also provided some evidence of the existence of institutional isomorphism. This study investigated three attributes that could possibly influence the extent of the use of performance indicators. Future studies could examine other factors, such as culture, management commitment and salary, to determine their influence on the extent of the use of performance indicators.

**ACKNOWLEDGEMENT**

The author would like to acknowledge the support and assistance received from EAA 2007 conference participants and Professor Greg Tower of the School of Accounting at Curtin University of Technology.

**REFERENCES**


63


Neilson, J. E. (2002). The accountability reporting and focus of local government entities in Western Australia from agency and institutional theory perspectives. PhD diss., School of Accounting, Curtin University of Technology, Perth.


Performance Reporting in Malaysia

APPENDIX

Questionnaire

Performance Measurement in the Public Sector

This questionnaire seeks information on the accountability and types of performance indicators disclosed by government agencies.

The majority of the questions require your view or opinion. There is no right or wrong answer. However your careful consideration of each response, based on your own experiences and beliefs is requested.

Your responses will be anonymous and only statistical aggregations will be reported. Please complete the following sections of the questionnaire:

<table>
<thead>
<tr>
<th>Section One</th>
<th>Accountability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section Two</td>
<td>External Influences</td>
</tr>
<tr>
<td>Section Three</td>
<td>Performance Indicators</td>
</tr>
<tr>
<td>Section Four</td>
<td>Demographic Data</td>
</tr>
<tr>
<td>Section Five</td>
<td>General</td>
</tr>
</tbody>
</table>

This questionnaire will take approximately 15–20 minutes to complete. Unless otherwise requested, please circle your response to each question.

Please return the completed questionnaire in the self addressed envelope by no later than 7 July 2007.

Your kind participation in this study is greatly appreciated.

SECTION ONE: ACCOUNTABILITY

1. In discharging the accountability of government departments, how important, in your opinion, is disclosure of the following information in annual reports?

<table>
<thead>
<tr>
<th></th>
<th>No importance</th>
<th>Little importance</th>
<th>Quite important</th>
<th>Very important</th>
<th>Highest importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Information relating to a department's objectives</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(b) Information relating to efficiency e.g. ratios of outputs to inputs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
2. To whom do you consider you are accountable? Please rank each of the following responses from 1 to 5 (with 1 being the most important).

(a) Chief Executive Officer  
(b) Parliament  
(c) Public at large  
(d) Treasury  
(e) Minister  

3. In your opinion, when preparing the annual report of your government department how much influence do the following parties have on the FORM of information that will be included in the annual report?

<table>
<thead>
<tr>
<th></th>
<th>No influence</th>
<th>Little influence</th>
<th>Reasonable influence</th>
<th>High influence</th>
<th>Highest influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Taxpayers</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(b) User's of the department's goods or services</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(c) Treasury</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(d) Lobby Groups</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(e) Minister</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(f) Chief Executive Officer</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
4. In your opinion, when preparing the annual report of your government agency, how much influence do the following have on the CONTENT of information included in the annual report.

<table>
<thead>
<tr>
<th></th>
<th>No influence</th>
<th>Some influence</th>
<th>Reasonable influence</th>
<th>High Influence</th>
<th>Highest influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Taxpayers</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(b) User's of the department's goods or services</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(c) Treasury</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(d) Lobby Groups</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(e) Minister</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(f) Chief Executive Officer</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

5. Our organization's performance measures are made available to the public.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Most of the time</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

If not, why not:

________________________________________________________________________

6. Performance Indicators are:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rarely</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sometimes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most of the time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) Available on request                  1 2 3 4 5
(b) Mailed to citizen groups              1 2 3 4 5
(c) On our organisation's website         1 2 3 4 5
(d) On display in the public libraries    1 2 3 4 5
(e) On display in our organisation's library 1 2 3 4 5
(f) Released to news media                1 2 3 4 5
(g) Discussed at public meetings          1 2 3 4 5
SECTION TWO: EXTERNAL INFLUENCES

With questions 7 to 37, the following scales apply:

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Seldom</td>
<td>Sometimes</td>
<td>Often</td>
<td>Very Often</td>
</tr>
</tbody>
</table>

7. There is consultation with the Accountant-General Office during the course of preparing the annual report.

1 2 3 4 5

8. Changes are made to the drafting of the annual report on the suggestions of the appointed minister.

1 2 3 4 5

9. Changes are made to the drafting of the annual report on the suggestions of the Auditor-General office during the audit review process.

1 2 3 4 5

10. There is consultation with the Treasury Department during the course of preparing the annual report.

1 2 3 4 5

11. Changes are made to the drafting of the annual report on the suggestions of Treasury officers.

1 2 3 4 5

12. The views of major lobby/interest groups are taken into consideration when preparing the annual report.

1 2 3 4 5

13. Specific needs of lobby/interest groups are satisfied by certain information included in the annual report.

1 2 3 4 5
14. There is consultation with the board of management or similar before preparing the annual report.

1 2 3 4 5

15. A working group is established consisting of individuals both within and outside our organisation to develop our performance measures.

1 2 3 4 5

16. The managers (senior, middle and/or line) are involved in the development of all performance measures.

1 2 3 4 5

17. Experts are employed to assist with the development of our organisations performance measures.

1 2 3 4 5

18. Lower level employees are involved in the development of our performance measures.

1 2 3 4 5

19. Citizens and/or citizen's groups are involved in the development of our performance measures.

1 2 3 4 5

20. We have difficulty getting managers (senior, middle and/or line) to accept our performance measures.

1 2 3 4 5

21. We have difficulty in getting lower level employees to accept our performance measures.

1 2 3 4 5
22. We have difficulty in getting citizens and/or citizen groups to accept our performance measures.

   1  2  3  4  5

23. We have little or no control over the choice of the performance measures reported on our organisation's performance.

   1  2  3  4  5

24. We undertake performance audits in our organisation

   1  2  3  4  5

25. Performance audits take place:

   Less than once a year  More than once a year  
   Once a year

Other: Please write the information in the box below.


26. Performance audits are undertaken by,

   External Auditor  Auditor – General  
   CEO

Other: Please write the information in the box below


27. What does the performance audits include? Please answer both the statements below:

(a) Performance data verification

1 2 3 4 5

(b) Financial data verification

1 2 3 4 5

SECTION THREE: PERFORMANCE INDICATORS

28. How often did you compute the following types of departmental performance measures during the last financial year? (Please circle the appropriate box.)

<table>
<thead>
<tr>
<th>Type</th>
<th>Weekly</th>
<th>Monthly</th>
<th>Quarterly</th>
<th>Half Yearly</th>
<th>Yearly</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Efficiency</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(b) Effectiveness</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(c) Quality</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(d) Quantity</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(e) Timeliness</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(f) Cost</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(g) Other (please specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
With the following questions (29–39) please tick the appropriate box.

29. How is the information on performance measures disseminated?

<table>
<thead>
<tr>
<th></th>
<th>Efficiency</th>
<th>Effectiveness</th>
<th>Quality</th>
<th>Quantity</th>
<th>Timeliness</th>
<th>Cost</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Annual report</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Internally to Senior Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) Internally to all staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) Externally to Auditor – General or Treasury Department</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e) Tabled in document to Parliament</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(f) Externally through pamphlets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(g) Externally through news sheets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(h) Externally through web sites</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Not applicable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

30. Our performance measures are derived from the missions, goals, objectives, and service standards established for our programs and/or organisation.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Most of the time</th>
<th>Always</th>
</tr>
</thead>
</table>

31. When developing performance measures, we focus on what is important to measure rather than the availability of data.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Most of the time</th>
<th>Always</th>
</tr>
</thead>
</table>
32. We use our performance measures to track performance over time.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Most of the time</th>
<th>Always</th>
</tr>
</thead>
</table>

33. We have difficulty compiling and distributing the data from our performance measurement system in a timely manner.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Most of the time</th>
<th>Always</th>
</tr>
</thead>
</table>

34. We have difficulty measuring the quality of our programs and services

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Most of the time</th>
<th>Always</th>
</tr>
</thead>
</table>

35. We have difficulty keeping our performance measures current and up to date.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Most of the time</th>
<th>Always</th>
</tr>
</thead>
</table>

36. Our staff lack the analytical skills needed to effectively analyse the performance measurement data we collect.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Most of the time</th>
<th>Always</th>
</tr>
</thead>
</table>

37. We establish standards and targets for most of our performance measures.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Most of the time</th>
<th>Always</th>
</tr>
</thead>
</table>
SECTION FOUR: DEMOGRAPHIC DATA

Tick (√) the appropriate box:

38. Male ☐ Female ☐

39. Age Range
   - Under 30 ☐ 50 to 59 ☐
   - 30 to 39 ☐ 60 and over ☐
   - 40 to 49 ☐

40. What is your current annual remuneration package (Gross)?
   - Less than $80,000 ☐
   - $80,000 to $100,000 ☐
   - $100,000 to $130,000 ☐
   - $130,000 and above ☐

41. Approximate size of your organisation (head count, including part-time and casual employees)
   - More than 10,000 employees ☐
   - Between 5,001 – 10,000 employees ☐
   - Between 1,001 – 5,000 employees ☐
   - Between 100 – 1,000 employees ☐
   - Less than 100 employees ☐
42. Are you a member of a professional accounting body?
   Yes ☐ No ☐

If yes, please tick all applicable boxes:
CPA Australia ☐
ICAA ☐
ACCA ☐

Other (please specify below)

43. Please indicate your length of service
   (a) In your current organisation
   Less than 1 year ☐ More than 5 years ☐
   1 to less than 3 years ☐
   3 to less than 5 years ☐

   (b) In your current position
   Less than 1 year ☐ More than 5 years ☐
   1 to less than 3 years ☐
   3 to less than 5 years ☐

44. Which category is most appropriate to your organisation?
   Federal Government Agency ☐
   State Government Department ☐
   In which state are you located?

__________________________
SECTION FIVE: GENERAL

45. Please make any further comments in regards to your organisation's performance measurement system below.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Thank you for your time in completing this questionnaire.

Would you like an analysis of the results of this study?

Yes ☐ No ☐

Name ________________________________________________
Organisation __________________________________________
Address ______________________________________________