# Impact of environmental scanning on the organisational performance of local authorities in Malaysia

Ahmad Fadzli Ahmad Tajuddin
*Perak Foundation, Perak Darul Ridzuan, Malaysia, and*

Syed Zamberi Ahmad
*Marketing & Management Department, Abu Dhabi University,
Abu Dhabi, United Arab Emirates*

## Abstract

**Purpose** – Previous studies on scanning behaviour focused mainly on the performance of the private sector, leaving the public sector, especially local authorities (LAs), largely understudied. Primarily, this paper aims to examine the element of strategic management tools associated with the impact of environmental scanning (ES) on organisational performance in the LAs. It explores the above relationship in the context of public sector organisations in Malaysia.

**Design/methodology/approach** – A quantitative approach has been used for this study where the data were collected through a mail survey ($n = 75$) of local authorities in Malaysia, which consists of four categories – City Council/City Hall, Municipal Council, District Council and organisations that exercise the functions of local authorities.

**Findings** – Overall, the results show that the scope of general environmental scanning is seen as a prerequisite to the successful alignment of competitive strategies as a result of changing the needs and demands of the larger society, and the diverse nature of businesses. In the context of Malaysian LAs, there is a significant relationship between the environmental scanning (operation) and the overall achievement of the organisation's performance.

**Research limitations/implications** – This paper is limited to the Malaysian context, and, hence, the findings cannot be applied generally.

**Practical implications** – This study could be used effectively as a road map to assist the council members, senior staff and stakeholders in evaluating their success and steering the organisation's performance and sustainability.

**Originality/value** – This paper provides important insights into the performance of local governments in Malaysia. To the authors' knowledge, this study is the first attempt to look at a more holistic perspective in exploring environmental scanning of LAs in the country. Increased understanding in this area is of critical importance in relation to implementing effectively the current and future modernisation and reform initiatives. It is of interest to both researchers and practitioners.

**Keywords** Local authorities, Public sector organisation, Strategic management, Performance, Environmental scanning, Malaysia

**Paper type** Research paper

## Introduction

Local authorities (LAs) are the entity entrusted with the delivery of goods and services by, and, for the government at the national, regional or local level (Mansour, 2008). Measures to enhance the performance of the LAs are crucial to ensure that these

organisations are capable of meeting the increasing demands from the communities for a more citizen-driven and higher standard of urban services. In Malaysia, as the business environment, events and demographics have been changing at a fast pace, the role of LAs is becoming more crucial, as they constitute a significant component of contemporary economies and contribute greatly to the quality of life of the residents in local communities. In fact, the Local Government Act of 1976 provides LAs with a very comprehensive set of functions and responsibilities, which cover the aspects of the environmental, public and social development of the residents. However, recently, there have been many service delivery complaints in Malaysia stemming from dissatisfaction with public service delivery in general. According to the Public Complaints Bureau (2010) Annual Report, several aspects were identified as the main reasons that have been cited for the service delivery complaints in Malaysia including public amenities (poor quality of roads and lack of parking), quality of service (street lights not functioning, and failure to maintain ornamental trees and drains), enforcement (enforcement on the increasing number of beggars, illegal collection of parking fees by a group or individuals, garbage not collected as scheduled or scattered, conducting business without a licence, and construction work carried out until late evening that disturbs the peace of the local residents), and public problems (application for rental of houses from Kuala Lumpur City Hall). As frontline agencies in providing services to the community, the performance of the LAs has been scrutinised from many directions, and thus, the reform agenda seems to be inevitable. Political masters, government officials, community leaders, public media and non-government organisations (NGOs) have continuously reiterated the importance of LAs improving their service through a clear long-term direction, customer focus, effective communication and feedback response, high integrity and transparency, enhanced people participation, and continuous efforts to inculcate a high quality culture in their organisations.

Although the Malaysian Government has been emphasising the enhancement of service delivery systems in the public sector under its "Excellent Work Culture Movement" since the early 1990s, relatively little has been revealed concerning the impact of strategic management towards organisational efficiency. This is imperative due to the fact that LAs are considered as a third tier of government in addition to the federal and state government in Malaysia. Furthermore, LAs are a more people oriented entity by virtue of providing various services, such as public amenities, issuing licences, garbage collection and so forth. It is also interesting to note that there are four layers of LAs, namely, city hall/city council, municipal council district council and organisations that exercise local authority functions. Understanding this phenomenon will enable us to see how environmental scanning (ES) would affect the services provided by LAs regardless of their size. Although the subject has generated a vast body of literature, it remains an underdeveloped domain in Malaysia in general, and in the public sector, in particular. Consequently, there is a paucity of literature on the subject, which, unfortunately, has limited a fuller understanding of how ES in the LA context is practiced. Effective scanning of the environment is seen as necessary to the successful alignment of competitive strategies with environmental requirements and the achievement of outstanding performance (Analoui and Karami, 2002; Suh *et al.*, 2004; Chrusciel, 2011; Haase and Franco, 2011). Similarly, organisations scan for change in the environment in pursuit of better performance (Rohrbeck and Bade, 2012). In this context,

organisations should continuously be involved in the scanning aspect to be alert to the current threats and opportunities (Babatunde and Adebisi, 2012).

The objective of this study is to extend previous work by examining the ES and its relationship with organisational performance by asking the following questions:

*RQ1.* What is the extent of ES practices in the LAs in Malaysia?

*RQ2.* What is the relationship between ES and the performance of LAs?

The paper contributes in at least two ways, notably:

(1) Although the notion of strategic management is nothing new, applying the element of strategic management, such as ES will have some significance because no study has been undertaken in the area of local government in Malaysia concerning this issue.

(2) Managers in LAs are only interested in obtaining results for achieving organisational performance rather than focusing on the impact that ES has on organisational efficiency.

However, most scholars have various schools of thought in deliberating on ES. Thus, this study will empirically test this notion with the hope of bridging the gap between theory and practice.

### Challenges of strategic planning in public sector

The early 1980s marked the importance of strategic planning in the public sector (Osborne, 1988; Osborne and Gaebler, 1992). It was during this period that the state government encountered pressure to reduce expenditure and increase its services. In such a scenario, Berry and Barton (1995) believed that state agencies might adopt strategic planning as a tool for responding to intense environmental demands and pressures. In line with this, studies by Behn (1980), Bryson and Roering (1988), and Wechsler (1989) proposed that replicating the positive experience of successful business firms with strategic planning is an important objective for leaders of public agencies. Similarly, according to Rubin (1985) the fiscal pressure on state agencies, and the need to resolve the competing resource allocation priority and desire to be responsive to constituents were thought to be important objectives of strategic planning. It is interesting to observe that the importance of strategic management and planning had been discussed more than two decades ago by Hofer (1976) and Wortman (1979), especially in non-profit organisations. Specifically, Crittenden and Crittenden (2000) viewed that shifts in the environment include the increased demand for non-profit services and decreased support, especially less government subsidy and under employment. Gebris *et al.* (1998) further argued that one of the strategic management and planning objectives is to take into account the immediate and long-term environmental factors that affect the organisation rather than too much emphasis on the short-term measures.

Although the public service had embarked on the strategic planning in its agencies, Green (1998) talked about three paradoxes of strategic planning, especially:

(1) The state has to provide the infrastructure facilities for an enterprise culture to flourish, thus spending more rather than less in terms of expenditure.

(2) Overlapping jurisdiction among agencies creates a coordination problem for the government.

(3) The perception that the civil service has no particular distinctive competence and should concentrate on the areas that the private sector has no wish to do.

At this point, Butler (1993) and Plowden (1994) argued that it is perhaps no wonder that, in some countries, the civil service is in a state of crisis. In addition, Green (1998) postulated some pitfalls of strategic planning in the public sector; first, it does not emphasise innovation; second, although the government sees strategic planning as a way of cutting back the size of the civil service and reducing its scope and activities, no intrinsic reason was given as to why such activities need to operate under public ownership; third, strategic planning becomes an enforced form of self-destruction rather than a redefinition of competencies. Thus, it can be interpreted "to make us more like others" rather than as a way of leveraging core competencies. Green (1998) stressed that the real purpose of strategic planning is to help the department to think what they should be doing versus what they are doing. This is essential because there is a need to assist departments to redefine and redevelop in terms of efficiency or effectiveness over the private sector. Another challenge of strategic planning in the public sector is the feeling of isolationism. In explaining this, Dereli (2003) found that members of small authorities felt that they were left to find their way in the strategic planning and assumed that the government did not look at the smaller authorities in this matter compared to the larger organisations. In illustrating this, Lyles and Lenz (1982) found that the behavioural aspect of humans did play an important role in contributing to strategic planning. In addition, one may try to compare strategic planning between the private and public sector. In portraying this, Bryson (1995) noted that the conflicting criteria for performance assessment and public accountability of the many stakeholders hindered the duplication of strategic planning from the private to the public sector. Similarly, Gordon (2005) claimed that compared to a business entity that can get away from a non-productive product, local governments are tied to looking at programmes even if they are no longer efficient. Although local governments cannot imitate a business entity, the process can be improved to make it more efficient (Gordon, 2005).

## ES in the general literature

In the general literature, ES is viewed as an effective way to cope with environmental uncertainty. With the term first being coined by Aguilar in 1967, ES has been gradually extended to be a systematic process for coping with uncertainties.

### The importance of ES

ES is an important managerial tool that is used extensively in business and industry to assess and respond to external environmental change that may have a decisive impact on strategic business decisions, organisational performance and viability (Hambrick, 1981; Beal, 2000; Sawyerr et al., 2000; Dreyer and Gronhaug, 2004; Choy, 2012). It constitutes the first link in the chain of perceptions and actions, which permit an organisation to adapt to its environment (Hambrick, 1981). Information can be obtained from various internal and external sources. External sources of information originate outside the organisation whereas internal sources of information originate within the organisation (El-Sawy, 1985; Auster and Choo, 1993). Scholars, such as Aguilar (1967),

Duncan (1972), Hambrick (1982), Culnan (1983), Zhang *et al.* (2010), Oreja-Rodríguez and Yanes-Estévez (2010), and Saadeghvaziri *et al.* (2012) highlighted the elements of the external environment and how it affects decision making in the organisation. Therefore, managers in this school of thought have focused on external trends, events and so forth in the ES process. In contrast, some scholars, such as Wheelen and Hunger (2006), and Zulkurnain (2004), preferred to look at the mixed approach; balancing the external environment as well as the internal environment. This view was further reinforced by Auster and Choo (1993) who further mentioned that within the environmental uncertainty context, source quality is the most prominent factor in elaborating the source used in scanning. Thus, it is difficult to assess whether the former or the latter approach holds the advantage in terms of organisational performance. This is due to the fact that, nowadays, organisations are operating in a more competitive, dynamic and turbulent environment (Van de Ven and Joyce, 1981). The scope of ES concerns the types of information scanned in response to environmental change, including those that are generated both in the operating environment (i.e. customer, competitor and supplier), as well as the general environment (i.e. the national and global context of social, political, regulatory, economic and technological conditions). In this respect, Duncan (1972) identified two layers of the environment, notably:

(1) task environment; and

(2) general environment.

The task environment is said to have more influence on the organisation (Dill, 1958) and comprises the customer, competitor, supplier and regulatory body (Duncan, 1972; Asheghian and Ebrahimi, 1990). In contrast, the general environment is claimed to have an indirect influence on the organisation (Elenkov, 1997). Sometimes, the general environment is also termed as the remote environment and includes elements, such as government, economic condition, technology and socio-cultural sectors (Asheghian and Ebrahimi, 1990; Grant, 1991). Within the spectrum of task environment, Kefalas and Schoderbek (1973) revealed that factors, such as customer and competitiveness in the market sector received the most scanning attention. In contrast, it was found that decision makers valued the general environment more than task environment (Sawyerr *et al.*, 2000). For example, the study by Preble *et al.* (1988) identified the economic factor as the most essential element, while Elenkov (1997) highlighted the political/legal aspect. With regard to the scanning model, Fahey and King (1977) categorised the scanning model into three phases: irregular, regular and continuous. The irregular model is said to be reactive in contrast to the regular model, which is proactive. Similarly, the continuous model is also proactive and broad in scope (Fahey *et al.*, 1981). Jain (1984) classified four phases of scanning segments – primitive scanning, *ad hoc* scanning, reactive scanning, and proactive scanning. According to Jain (1984), primitive scanning occurs without management dedicating any effort to it compared to *ad hoc* scanning where no formal scanning system or initiatives take place. Meanwhile, reactive scanning is a scenario where all the information gathered seems to be essential (overloaded information); in contrast to proactive scanning where scanning is said to be more focused and specific. In addition, the study by Fahr *et al.* (1984) highlighted the frequency and scope as important features in scanning. In line with this, Daft *et al.* (1988) mentioned that frequency reflects the timeliness, relevancy and amount of information that firms can gather from suppliers, competitors and customers. In this context,

frequent scanning will ensure that firms keep abreast of current information and take advantage to position their product and service. Beal (2000) argued that there are a number of different environmental aspects monitored by a firm, and, in doing so, firms will keep in touch with trends and events that affect their survival. The underlying theory of this paper is the socio-cultural theory, which was introduced by Vygotsky (1983). It is also noted that several works emphasised the similarities and universality in the socio-cultural context (Hickson *et al.*, 1974; Form, 1979; Negandhi, 1985) while the rest concentrated on the uniqueness of organisations given the local scenario (Hofstede, 1980; Laurent, 1983; Newman and Nollen, 1996). Thus, this paper is of the opinion that ES also needs to consider the local setting.

*Organisational performance in the public sector*
Traditional measures of performance (such as return on investment, profit margin, and market share), which may be adequate in the general industry context, are not appropriate in the specific context of the public sector. In the public sector, it is generally accepted that organisational performance is measured through the non-financial aspects. Output and outcome measures are very pertinent. In the public sector, objectives are non-financial and vague, as well as the existence of multiple stakeholders and relationship accountability (Conroy, 2000; Kloot and Martin, 2000). Among the most practical approaches in measuring the organisational performance of public organisations is looking at the effectiveness and the efficiency of the organisation. Effectiveness and efficiency remain as the focal point of managers and scholars and at the centre of all organisational theories (Walton and Dawson, 2001; Pollanen, 2005). Scholars viewed effectiveness from various definitions – a subjective, socially-constructed, concept rather than an objective or rational fact (Wilcocks, 1992), the relationship between a responsibility centre's outputs and its objectives (Anthony and Govindarajan, 1998), how well an end result, a performance, or a service is delivered (Mali, 1990), and the ability to state goals/ability to achieve goals (Cooper *et al.*, 1999). In contrast, efficiency is defined as "the ratio of outputs to inputs, or the amount of output per unit of input" (Anthony and Govindarajan, 1998), how well resources are used for the end result in service (Mali, 1990) and the benefits realised/resources utilised (Cooper *et al.*, 1999). However, the ultimate goal of the performance management system concerns the effectiveness and efficiency, which is normally a trade-off between the objectivity of efficiency and the appropriateness of effectiveness measures to make it more balanced (Mayne and Zapico-Goni, 1997). Several studies found a positive relationship between scanning and performance (Newgren *et al.*, 1984; Smith *et al.*, 1991). In addition, it has been found that successful organisations differ from unsuccessful organisations in that they do more scanning and have a broader pattern of scanning (Babbar and Rai, 1993; Daft *et al.*, 1988).

*Hypotheses development*
The development of hypotheses for this paper is based on the following two factors:

   (1)  the literature review on various studies conducted on the ES; and

   (2)  performance as a dependent variable.

It is interesting to note that Aguilar (1967) refers to ES as the way in which management gathers information about trends outside the company in the hope of guiding its future direction. He further discussed four types of scanning: undirected viewing,

conditioned viewing, informal searching and formal searching. Furthermore, Choo (2001) highlighted four modes of scanning, namely, undirected viewing, conditioned viewing, enacting and searching. In addition, Kroon (1995) viewed ES as the study of how we interpret political, economic, social and technological trends that affect the business, industry and market. However, Lester and Waters (1989) simplified the definition by referring to it as the process of using environmental information making in decision making. In the context of this research, ES is defined as the process of analysing information that has influence in determining the survival of a business entity. The paper divided ES into two dimensions:

(1) ES operation.

(2) ES service.

The former entails dimensions, such as residents' expectation, effective and efficient facilities, organisational image, and capacity of employees in implementing mission. This is in line with the internal analysis element (Wheelen and Hunger, 2006), and culture perspective (Miller, 1993; Sullivan and Nonaka, 1988; Schneider and De Meyer, 1991) where information is acquired on day-to-day work (Aguilar, 1967). Therefore, in the context of the study those elements are known as the ES operation due to the fact that those things are related to the routine operation of LAs and portray the good image of the organisation. As suggested in the respective literature, the ES operation has a direct relationship with performance. Based on the above arguments, it is hypothesised that:

*H1.* ES operation is positively related to efficiency in environmental performance.

*H1a.* ES operation is positively related to keeping the environment healthy and clean.

*H1b.* ES operation is positively related to garbage collection.

However, the latter highlighted elements such as political analysis, socio-cultural change, change in laws, overall service quality analysis and operational cost analysis. According to Wheelen and Hunger (2006), those elements are termed as external analysis, which consist of two components:

(1) societal environment, which covers the general forces; and

(2) task environment, which considers the industry analysis.

This notion is congruent with Bourgeois (1980) who stressed that the general environment may influence long-term decisions. In the perspective of the research, those elements (political analysis, socio-cultural change, change in laws, overall service quality analysis, operational cost analysis) may affect the service of LAs. The study termed this variable as ES service because of the need to observe those elements within the spectrum of the service provided by the sample of 150 LAs in the country. Therefore, it is hypothesised that:

*H2.* ES service is positively related to the efficiency in environmental performance.

*H2a.* ES service is positively related to keeping the environment healthy and clean.

*H2b.* ES service is positively related to garbage collection.

**An overview of public service reform in Malaysia**
In the Malaysian context, strategic management has been highlighted in terms of administrative reform since the 1980s and 1990s. The concept of administrative reform can be traced back to the doctrine of new public management (NPM). Moynihan (2006) claimed that the doctrine of NPM emerged from studies on economic theories of the firm and managerialism (Aucoin, 1990; Peters and Waterman, 1982). The NPM, according to Siddiquee (2006), suggested radical changes in the public service besides questioning the philosophical, institutional and operational aspects of the conventional public administration. In addition, Siddiquee (2006) viewed NPM as contemporary administrative changes aimed at improving public efficiency and performance in the delivery of services. Moynihan (2006) illustrated the NPM suggestion on leaving aside the administrative culture of compliance, error evidence and presumed inefficiency to a more positive oriented public service, especially in terms of effectiveness and efficiency.

There are many schools of thought in discussing the elements or perspective of NPM. However, the literature suggests there are no consistent or universal factors that determine the elements or perspective of NPM (Peters, 1998; Siddiquee, 2006). For instance, Schick (1999) focused the common ideas on the NPM, which includes:

- Managers having clear goals and being result oriented.
- Managers given flexibility in using resources.
- Government decisions and controls stressing outputs and outcomes instead of inputs and procedures.
- Managers to be responsible for the use of resources and the results produced.

In contrast, Peters (1998) associated the two attributes for initiation of effective reform known as driving factors and sustaining factors. The elements include advocacy and ownership of reform, the role of the central agency, time, scope of reform, personnel, budget, uniformity and the practical reality of reform. Moreover, Siddiquee (2006) postulated several elements that deal with the organisation, performance and organisational culture. Those elements include:

- decentralisation of authority;
- downsizing (reducing budget and staff), deregulation, and employee empowerment in the public service;
- outcomes and results instead of inputs and processes;
- private sector management and flexibility;
- cost recovery, competition between public and private agencies for the contract to deliver services;
- improving quality of regulation and human resource management; and
- concern for the centrality of citizens/customers and accountability for results (Osborne and Gaebler, 1992; Hood, 1991, 1998; Pollitt and Bouckaert, 2000).

At this point, Abdullah (2002) focused on the need to improve and the shifting paradigm. He characterised the bureaucratic paradigm as large and increasing in size, hierarchical, slow and inflexible in responding to changing environment, lots of waste, mistakes, defects and unproductive practices, inefficient, corrupt and lacking in

accountability and discipline. To overcome this issue, Abdullah (2002) looked at excellence in four principal values:

(1) Effectiveness – achieving set of objectives pertaining to government policies.

(2) Efficiency – the extent of resources that have been utilized in an economic and optimal manner.

(3) Responsibility – reflected in the conformance to the basic principles of accountability.

(4) Responsiveness – the manner in which the organization is sensitive to the needs and aspirations of the customer, client, stakeholders or the society it serves.

This is in line with Sarji (1996) who stressed the need to reduce the discretionary authority and practice neutrality. Similarly, Rais (2000) highlighted the reform package and strategies for administrative reform, such as systems and procedures, information and communication technology, accountability and ethics, organizational structure and performance, leadership and human resource support, inter-sectoral partnerships, and recognition of excellent performance. In addition, Rais (2000) proposed an administrative reform process through several strategies, namely, building consensus and commitment, issuing comprehensive guidelines on improvements, promotion and training programme, development and consultancy work, inspections and audits.

In a similar fashion, Phang (2000) suggested several aspects for managing change through establishing strength, assessing the weaknesses of local government, identifying opportunities, listing the constraints, generating ideas that can be formulated into policies and implementation and mobilising personalities and agencies to improve better urban management. Samsudin (2003) stressed the delivery system, where the public sector needs to be more responsive and effective. He identified three areas where the delivery system can be improved: fast track approval for certificate of fitness (CF), redesign government interface with the public to be based on clear rules and transparent procedures, and improve the quality of information available to the government and policy makers for monitoring and planning purposes. This was reinforced by Zulkurnain (2004) who introduced two main elements of quality service delivery, namely: 5Es (effectiveness, efficiency, equality, economic, ethics), and working with all stakeholders for sustainable local economies, better health and well being, safety and others. In the same dimension, Mills and Seragaldin (1991) discussed the ingredients of good governance, which includes freedom of expression, institutional pluralism, transparency, accountability and participatory approach. This is supported by Yusof *et al.* (2000) who found that the most cited criteria of good governance in Malaysia are democratic practices, and transparent/just/responsible government based on Islamic principles and values. Similarly, Halim (2000) discussed the leadership qualities of good governance, which focuses on visionary, collaborative, credibility and integrity and strategic networking. At this juncture, Xavier (1999, 2000) pointed out the benefits of transparency in government, which includes sharing information to improve the existing system, improving the quality of decisions, giving opportunity/facility to qualified people, reducing the conflict level as well as improving the trust on certain decisions. Among the transparency criteria noted are openness, decision/procedures apply to all, material information, clarity, consistency, fixed decision/procedure for a certain time frame, applicability, discretionary and

accountability (Xavier, 2000). However, the studies by Hakim (2004), and Zulkurnain and Maimunah (2003) looked at output approach. In this context, Hakim's (2004) focal point was community participation, in tandem with Local Agenda 21 (LA21). The participation of the public or the community in local governance is essential to strengthen local capacities in a systematic way through activities, such as developing a local plan, promoting neighbourhood or community development, housing, infrastructure and neighbourhood upgrading and so forth (Hakim, 2004). The main reason for LAs being the subject of the study is due to the severe complaints received by the Public Complaints Bureau concerning the former. LAs are part of the government machinery that serves the grass roots and provides many services, however, in this research we concentrated on keeping the environment healthy and clean as well as garbage collection issues due to the fact that those services have a direct influence and have a prominent effect on the performance of LAs in the eyes of the residents compared to other services, such as the illegal collection of parking enforcement. In addition, the environmental aspect is the first issue mentioned in the Local Government Act, 1976 together with public, social and development.

## Research methodology
### Participants and procedure
This study employed the quantitative method, which included a mail survey questionnaire to all 150 LAs in Peninsular Malaysia, Sabah and Sarawak. The questionnaire was systematically developed based on a review of the literature to identify the perceptions of the organizations concerning the external environment and information sources as well as scanning activities. The list of LAs was obtained from the Ministry of Housing and Local Government, Kuala Lumpur, Malaysia. The mail survey method was chosen as a means to collect data because of the geographical factor to reach respondents as well as the low costs. Furthermore, mail surveys are considered to have a high response rate (Onodera, 2012). In addition, such a methodology also supports the study by Olarewaju and Folarin (2012) and Saadeghvaziri *et al.* (2012). For the purpose of this study, a mail survey was employed for two primary reasons:

(1) We assume that different types of local authority, such as city hall/city council, municipal council and district council mean a different style of ES practices, and, therefore, needs to be measured and standardized.

(2) As an introspective process for the LAs to reflect the existing ES process in the organisation.

Questions were adopted and modified from Wheelen and Hunger (2006). Basically, the questions on ES consist of strengths, weaknesses, opportunities and threats (SWOT) analysis. In line with this, four dimensions of ES were investigated:

(1) general scanning;

(2) service scanning;

(3) output and operation scanning; and

(4) corporate and personnel scanning.

In addition, the study also includes 14 questions that cover the respective four dimensions of ES. For example, for general scanning the questions were on political

analysis (change in government), socio-cultural change (change in citizen's value and attitude) and change in laws (laws, regulations). The service scanning questions stressed the overall service quality analysis compared to other LAs and after-service analysis (by obtaining feedback from residents). Similarly, the output and operation scanning questions focused on operational cost analysis compared to other LAs, capacity to deliver and satisfy residents' expectations, effective facilities/machines/tools in delivering service/product, and efficient facilities/machines/tools in delivering service/product. Moreover, questions on corporate and personnel scanning highlighted organisational culture, which supports organisational objective, need for strategic planning, experienced and skilled employees and organisational image in the eyes of residents, and capacity of employees in implementing organisational mission.

The questionnaire was targeted at the individual having responsibility for making decisions in the organisation. The responses from 75 LAs were received – for a response rate of 50 per cent. Table I shows the summary of the demographic composition of the respondents. The position in the organisation of the respondent varies. The characteristics of the sample are presented in Tables II and III. The composition of LAs that took part in the study includes five city councils, 14 municipal councils, 53 district councils and three LAs that have been empowered with the functions of LAs, namely Pasir Gudang Local Authority, Bintulu Development Authority and Labuan Municipality.

*Validity and measurement of variables*
The questionnaire items were initially developed based on the extant literature, as well as on the professional experience of the author in municipal administration. The questionnaire was designed in English and translated to the Malay language, the official language used in public agencies in Malaysia. Senior lecturers in the strategic management area of a public university were approached to resolve any inconsistencies in terms of sentencing, phrasing and conception between the two versions. Expert opinions on the draft version of the questionnaire were sought, first from colleagues with research and municipal experience, and, subsequently, from ten practising municipal administrators who were asked to participate in pre-testing the questionnaire. The questionnaire items

|  | Frequency | % | Valid per cent | Cumulative % |
|---|---|---|---|---|
| Valid – | 1 | 1.3 | 1.3 | 1.3 |
| Assist general manager | 1 | 1.3 | 1.3 | 2.7 |
| Assistant director | 1 | 1.3 | 1.3 | 4.0 |
| Chairman | 4 | 5.3 | 5.3 | 9.3 |
| Chief clerk | 5 | 6.7 | 6.7 | 16.0 |
| Deputy mayor | 1 | 1.3 | 1.3 | 17.3 |
| Director | 2 | 2.7 | 2.7 | 20.0 |
| Engineer/technician | 4 | 5.3 | 5.3 | 25.3 |
| Head of department | 1 | 1.3 | 1.3 | 26.7 |
| Mayor | 1 | 1.3 | 1.3 | 28.0 |
| Officer | 20 | 26.7 | 26.7 | 54.7 |
| Secretary council | 28 | 37.3 | 37.3 | 92.0 |
| Yang Dipertua | 6 | 8.0 | 8.0 | 100.0 |
| Total | 75 | 100.0 | 100.0 | |

**Table I.**
Respondents'
demographic profile

| Variable | Description | Frequency | % |
|---|---|---|---|
| Name of state that LAs operate | Johore | 7 | 9.3 |
| | Perak | 15 | 20 |
| | Kedah | 8 | 10.7 |
| | Malacca | 3 | 4 |
| | Sabah | 7 | 9.3 |
| | Sarawak | 11 | 14.7 |
| | Selangor | 5 | 6.7 |
| | Kelantan | 6 | 8 |
| | Terengganu | 4 | 5.3 |
| | Federal Territory | 1 | 1.3 |
| | Negeri Sembilan | 2 | 2.7 |
| | Penang | 1 | 1.3 |
| | Pahang | 5 | 6.7 |
| | Total | 75 | 100 |

**Table II.**
Summary of LAs respond
according to state

| No. | Description | District council | Category Municipal council | City council | Others[a] | Total |
|---|---|---|---|---|---|---|
| 1 | Peninsular | 36 | 14 | 4 | 1 | 55 |
| 2 | Sarawak | 9 | 0 | 1 | 1 | 11 |
| 3 | Sabah | 8 | 1 | 0 | 0 | 9 |
| | Total | 53 | 15 | 5 | 2 | 75 |

**Note:** [a]Others include local authority of Pasir Gudang and Bintulu Development Authority

**Table III.**
Summary of LAs respond
according to category

were refined based on the comments of these experts. The focal point of this study is to measure three main variables in strategic management practices, namely:

(1) ES operation (independent variable);

(2) ES service (independent variable); and

(3) performance (dependent variable).

Meanwhile, efficiency in environmental performance is conceptualised from two perspectives, namely, keeping the environment healthy and clean and garbage collection. Questions related to ES operation and environmental service are measured by using the Likert scale ranging from "1 – none", "2 – little", "3 – so-so", "4 – to some extent", "5 – to a large extent". On the other hand, the measurement for performance is in terms of efficiency ranging from "1 – very unsatisfactory", "2 – unsatisfactory", "3 – satisfactory", "4 – good" and "5 – excellent". It is imperative to note that the questions related to ES operation include the capacity to deliver and satisfy residents' expectations, effective facilities/machines/tools in delivering service/product, efficient facilities/machines/tools in delivering service/product, organisational image in the eyes of residents and capacity of employees in implementing organisational mission. In contrast, the questions associated with the ES service are political analysis (change in government), socio-cultural change (for instance change in citizen's value and attitude), change in laws, overall service quality analysis compared to other LAs and operational

cost analysis compared to other LAs. The data were analysed using statistical analysis methods. Thus, the research method incorporated several aspects of the "tailored design method", advocated by Dillman (2000), in an effort to obtain reasonably reliable and valid data.

## Results

The research employed factor analysis, reliability analysis and regression analysis for the research design. First of all, the factor analysis for the 14 items from the four dimensions of ES, namely, general scanning, service scanning, output and operation scanning and corporate and personnel scanning was carried out. Then, the second analysis was made to ensure which items should be retained and vice versa. This is also essential to achieve the most use of factor analysis – summarisation and data reduction (Hair *et al.*, 1998). At this point three items were deleted because of the loading being less than 0.5 and the cross loading less than 0.10. These items were after-service analysis, organisational culture, which supports organisational objective, and experience and skills of employees. Similarly, one item was also deleted; need for strategic planning. This item was also deleted for similar reasons. The ten items produced from the second run of the factor analysis are illustrated in Table IV. Items on the ES operation have loadings between 0.55 and 0.80, and items on the ES service have loadings between 0.63 and 0.86.

In addition, the study utilises the Cronbach's $\alpha$ to focus on the consistency and stability of the measurement. Table V summarises the reliability measures.

Regression analysis was employed to illustrate the relationship between the independent variables (ES operation and ES service) and dependent variables (keeping environment healthy and clean, and garbage collection). As shown in Table VI, the results between the independent variables (ES operation and ES service) and the dependent variable (keeping environment healthy and clean) of model 1 indicated

| No. | Item (as in the questionnaire): "to what extent/to what activity is your organization focusing on the following" | Factor 1 (ES operation) | Factor 2 (ES service) |
| --- | --- | --- | --- |
| 1 | Political analysis (change in government) | − 0.00 | 0.84 |
| 2 | Socio-cultural change (e.g. change in citizen's value and attitude) | 0.08 | 0.86 |
| 3 | Change in laws (laws, regulations) | 0.26 | 0.79 |
| 4 | Overall service quality analysis compared to other LAs | 0.32 | 0.79 |
| 5 | Operational cost analysis compared to other LAs | 0.30 | 0.63 |
| 6 | Capacity to deliver and satisfy residents' expectation | 0.62 | 0.43 |
| 7 | Effective facilities/machines/tools in delivering service/product | 0.76 | 0.40 |
| 8 | Efficient facilities/machines/tools in delivering service/product | 0.80 | 0.30 |
| 9 | Organisational image in the eyes of residents | 0.67 | 0.15 |
| 10 | Capacity of employees in implementing organisational mission | 0.55 | − 0.01 |

**Table IV.**
Summary of factor analysis on ES

| Factor | Variable | Number of items | Cronbach's $\alpha$ |
| --- | --- | --- | --- |
| 1 | ES operation | 5 | 0.88 |
| 2 | ES service | 5 | 0.90 |

**Table V.**
Reliability coefficient for independent variables

$R^2$ is 0.004 and adjusted $R^2$ is 0.010 explaining about 0.4 and 0.1 per cent variance of the model. Similarly, model 2 shows that $R^2$ is 0.248 and adjusted $R^2$ is 0.215 clarifying approximately about 25 and 22 per cent variance of model 2. Meanwhile, the results (Table VII) between the independent variables (ES operation and ES service) and dependent variable (garbage collection) of model 1 indicated $R^2$ is 0.016 and adjusted $R^2$ is 0.002 signalling about 16 and 2 per cent variance of the model. In a similar fashion, model 2 indicated that $R^2$ is 0.259 and adjusted $R^2$ is 0.257, both explaining about 26 per cent variance of model 2. It is also interesting to note that number of staff does not significantly affect the dependent variable.

Based on the regression analysis it is essential to note that ES (operation) is positively related with the efficiency in keeping the environment healthy and clean $(\beta = 0.496; t = 3.992), p < 0.01$. The results illustrate that the higher the practice of ES (operation) the higher is the efficiency in keeping the environment healthy and clean. However, $H2a$ was not found to be significant at $p < 0.10$. Therefore, $H2a$ is not supported.

In relation to the garbage collection, it demonstrates that ES (operation) is positively related with the efficiency in garbage collection $(\beta = 0.385; t = 3.063), p < 0.05$. The results revealed that the higher the practice of ES (operation), the higher the efficiency in garbage collection. In contrast, $H2b$ was not found to be significant at $p < 0.10$. Thus, $H2b$ is not supported. The summary of hypotheses testing is shown in Table VIII.

| Model | $\beta$ | $T$ | Sig. |
|---|---|---|---|
| *1. Constant* | | | |
| Number of staff | 0.062 | 38.358 | 0.603 |
| *2. Constant* | | | |
| Number of staff | 0.028 | 4.936 | 0.800 |
| ES (operation) | 0.496 | 3.992 | 0.000 |
| ES (service) | 0.004 | 0.037 | 0.971 |

**Notes:** $R^2 = 0.004$ (model 1), 0.248 (model 2); adj. $R^2 = 0.010$ (model 1), 0.215 (model 2); $F$-value $= 0.273$ (model 1), 7.491 (model 2); $F$ change $= 0.273$ (model 1), 11.060 (model 2); sig. $F$ change $= 0.603$ (model 1), 0.000 (model 2)

**Table VI.**
Coefficients between independent variables and dependent variable (keeping environment healthy and clean)

| Model | $\beta$ | $T$ | Sig. |
|---|---|---|---|
| *1. Constant* | | | |
| Number of staff | 0.127 | 1.072 | 0.287 |
| *2. Constant* | | | |
| Number of staff | 0.005 | 0.044 | 0.965 |
| ES (operation) | 0.385 | 3.063 | 0.003 |
| ES (service) | 0.181 | 1.402 | 0.166 |

**Notes:** $R^2 = 0.016$ (model 1), 0.259 (model 2); adj. $R^2 = 0.002$ (model 1), 0.227 (model 2); $F$-value $= 1.149$ (model 1), 7.941 (model 2); $F$ change $= 0.273$ (model 1), 11.060 (model 2); sig. $F$ change $= 0.287$ (model 1), 0.000 (model 2)

**Table VII.**
Coefficients between independent variables and dependent variable (garbage collection)

### Discussion and conclusion

The study reported in this paper analysed the relationship between the ES activities and performance of LAs. In Malaysian LAs, ES (operations) is related to how LAs collect and analyse information from the environment to perform their day-to-day job, especially in the case of keeping the environment healthy and clean as well as garbage collection. For example, with the hotline number service in LAs, residents are more sensitive towards the environment and cleanliness of their surroundings. Thus, LAs will have to improve their services to cope with the higher expectation of the residents. ES, in this scenario, allows managers to be alert to the environmental factors that later on may influence the strategic direction of the organisations. This is imperative because scanning serves as the first link in the chain of perceptions and actions that permit organisations to adapt to their environment (Jennings and Lumpkin, 1992). The results of the study also confirm the study of ES and performance/business success (Dollinger, 1984; Newgren *et al.*, 1984; Ngamkroeckjoti and Johri, 2003; Subramanian *et al.*, 1993).

Meanwhile, the results indicated that ES (service) has no affiliation in keeping the environment healthy and clean, and garbage collection. This may be due to the fact that items on political analysis, socio-cultural change, change in laws, overall service quality analysis and operational cost analysis do not receive much attention from Malaysian LAs. This notion is also supported by Elenkov (1997), who stressed that general environment has no indirect influence on organisation. It is assumed that LAs are not sensitive to those items unlike any business entity because the underpinning existence of government agency is to serve the public rather than thinking of organisational survival like a business entity. This is in line with Gordon (2005) who argued that local government is not a business entity that can walk away from a non-productive product. Local governments in this case are obliged to review programmes that are no longer efficient. Despite the fact that LAs scan the environment, too much attention given to scanning has negative implications on organisational performance (Ancona and Caldwell, 1992). To some extent, this may be true of LAs that are concerned with action-oriented services (Saib, 2004). In exemplifying this, Peters and Waterman (1982) noted that scanning in and of itself is not sufficient because the information gained from scanning must be used in some relevant manner. In a nutshell, ES (service) is seen as a hypothetical subject because it has no action-oriented dimension. Future research of this area should emphasise the status quo of existing ES in LAs. The results of the study signify that LAs tend to be more short-term oriented rather than looking at a long-term view in the case of ES. This is essential for the future direction of policy making by government agencies if the ES aspect needs to be improved and further understood. Finally, the study concludes that ES operation has more influence than ES service with regard to efficiency in environmental performance. Perhaps, managers in Malaysian LAs are inclined towards optimising internal resources of organisations rather

| Hypothesis | Statement of hypothesis | Result |
|---|---|---|
| *H1a* | ES operation is positively related to efficiency in keeping the environment healthy and clean | Supported |
| *H1b* | ES operation is positively related to efficiency in garbage collection | Supported |
| *H2a* | ES service is positively related to efficiency in keeping the environment healthy and clean | Not supported |
| *H2b* | ES service is positively related to efficiency in garbage collection | Not supported |

**Table VIII.**
Summary of hypotheses testing

than changing the rules of the game and thereby influencing the general environment to be in favour of their agenda. The results discussed above suggest certain principles to be followed for strategic planning to be effective in Malaysian LAs. Among them, one specifies that top management must play an active role by taking ownership of the strategic management process. This means accepting strategic management as its primary responsibility and not one to be delegated to lower level managers.

## Limitations
The findings of this study have several limitations, and, therefore, the results from this study must be interpreted with care. First, the sample size of 75 LAs limits the generalisation of the results to all public sectors. In addition, all of the samples studied were from LAs that reside in Malaysia. Generalisations to be made across foreign governmental sectors should consider the similarities and differences in governmental structures and policies across the countries. Second, a limitation is derived inasmuch as the results of a mail survey only represent a snapshot at one point in time, subject to possible non-response bias, omitted variables, and measurement problems, and should be interpreted with care and validated in future studies in a different context.

## Implications
In general, organisational performance was mostly regarded from the strategic viewpoint. It is observed that any change for the betterment of any organisation would first require a clear vision and management goals. In a similar vein, Cannon (1995) stressed that strategic development theory in the case of ES should be consistently renewed to address corporate performance. This research bridges the gap between theory and practice by producing a study that takes the perspective of ES in a more operationalised manner. In this case, we apply the ES elements from Wheelen and Hunger (2006), which assert that ES could only be studied to ascertain the degree of influence on organisational performance, if the variables are action-based constructs. The results of such research could provide further guidance to public-sector administrators and professionals for planning and decision-making purposes and to professional bodies and regulatory agencies for understanding ES and organisational performance. For managers and administrators in the LAs, ES will enable them to concentrate and improve the delivery system and thus improve the effectiveness. Meanwhile, for researchers the study will reflect and give an introspective view on how ES can help in explaining the real situation of any organisation and vice versa. The study demonstrates that in the spectrum of LAs in Malaysia, what we do is more essential than what we believe. The results of the research illustrate that, in reality, managers and employees in LAs are only interested in their day-to-day job rather than policy issues, such as political analysis (change in government), socio-cultural change and so forth. Finally, further studies need to be carried out knowing that developing countries have different socio cultures than those in developed countries. This would provide insights and further direction into the way that ES is being practiced in these countries.

## References
Abdullah, A. (2002), "Leadership and management in the public service", paper presented at Training Course on Effective Capacity Building for Senior Sudanese Officials, Shah Alam, Malaysia.

Aguilar, F.J. (1967), *Scanning the Business Environment*, Macmillan, New York, NY.

Analoui, F. and Karami, A. (2002), "How chief executives' perception of the environment impacts on company performance", *Journal of Management Development*, Vol. 21 No. 4, pp. 290-305.

Ancona, D.G. and Caldwell, D.F. (1992), "Bridging the boundary: external activity and performance in organizational teams", *Administrative Science Quarterly*, Vol. 37, pp. 634-665.

Anthony, R.N. and Govindarajan, V. (1998), *Management Control Systems*, 9th ed., McGraw-Hill, Toronto.

Asheghian, P. and Ebrahimi, B. (1990), *International Business*, Harper & Row, New York, NY.

Aucoin, P. (1990), "Administrative reform in public management: paradigms, principles, paradoxes and pendulums", *Governance*, Vol. 3 No. 2, pp. 115-137.

Auster, E. and Choo, C.W. (1993), "Environmental scanning by CEOs in two Canadian industries", *Journal of the American Society for Information Science*, Vol. 44 No. 4, pp. 194-203.

Babatunde, B.O. and Adebisi, A.O. (2012), "Strategic environmental scanning and organization performance in a competitive business environment", *Economic Insights-Trends and Challenges*, Vol. LXIV No. 1, pp. 24-34.

Babbar, S. and Rai, A. (1993), "Competitive intelligence for international business", *Long Range Planning*, Vol. 26 No. 3, pp. 103-113.

Beal, R.M. (2000), "Competing effectively: environmental scanning, competitive strategy, and organisational performance in small manufacturing firms", *Journal of Small Business Management*, Vol. 38 No. 1, pp. 27-47.

Behn, R. (1980), "Leadership for cut-back management: the use of corporate strategy", *Public Administration Review*, Vol. 40 No. 6, pp. 613-620.

Berry, F.S. and Barton, W. (1995), "State agencies' experience with strategic planning: findings from a national survey", *Public Administration Review*, Vol. 55 No. 2, pp. 159-168.

Bourgeois, L. (1980), "Performance and consensus", *Strategic Management Journal*, Vol. 1 No. 3, pp. 227-248.

Bryson, J.M. (1995), *Strategic Planning for Public and Non-profit Organizations*, Jossey-Bass, San Francisco, CA.

Bryson, J.M. and Roering, W.D. (1988), "Initiation of strategic planning by governments", *Public Administration Review*, Vol. 48 No. 6, pp. 995-1004.

Butler, R. (1993), "The evolution of the civil service: a progress report", *Public Administration*, Vol. 71 No. 3, pp. 395-406.

Cannon, F. (1995), "Business-driven management development", *Journal of European Industrial Training*, Vol. 19 No. 2, pp. 26-31.

Choo, C.W. (2001), "Environmental scanning as information seeking and organizational learning", *Information Research*, Vol. 7 No. 1, pp. 1-14.

Choy, W. (2012), "Environmental scanning in an age of globalisation: understanding the nature of the education environment", *Journal of the NUS Teaching Academy*, Vol. 2 No. 1, pp. 5-23.

Chrusciel, D. (2011), "Environmental scan: influence on strategic direction", *Journal of Facilities Management*, Vol. 9 No. 1, pp. 7-15.

Conroy, D.K. (2000), "The quest for performance measurement in nonprofit organizations-multiple accountabilities to multiple stakeholders for indeterminate objectives: is there a solution?", in Neely, A. and Walters, A. (Eds), *Performance Measurement and Management: Research and Action*, Centre for Business Performance, Cranfield School of Management, Cranfield, pp. 133-140.

Cooper, W.W., Seiford, L.M. and Tone, K. (1999), *Data Envelopment Analysis: A Comparative Analysis Text with Uses, Example Applications, References and a DEA Solver Code*, Kluwer Academic, Norwell, MA.

Crittenden, W.F. and Crittenden, V.L. (2000), "Relationship between organizational characteristics and strategic planning processes in nonprofit organizations", *Journal of Managerial Issues*, Vol. 12 No. 2, pp. 150-168.

Culnan, M. (1983), "Environmental scanning: the effects of task complexity and source accessibility on information gathering behaviour", *Decision Sciences*, Vol. 14 No. 2, pp. 194-206.

Daft, R.L., Sormunent, J. and Parks, D. (1988), "Chief executive scanning, environmental characteristics, and company performance: an empirical study", *Strategic Management Journal*, Vol. 9 No. 2, pp. 123-139.

Dereli, C. (2003), "Strategy and strategic decision-making in the smaller local authority", *The International Journal of Public Sector Management*, Vol. 16 No. 4, pp. 250-260.

Dill, W.R. (1958), "Environment as an influence on managerial autonomy", *Administrative Science Quarterly*, Vol. 2 No. 4, pp. 409-443.

Dillman, D.A. (2000), *Mail and Internet Surveys: The Tailored Design Method*, Wiley, Toronto.

Dollinger, M.J. (1984), "Environmental boundary spanning and information processing effects on organizational performance", *Academy of Management Journal*, Vol. 27 No. 2, pp. 351-368.

Dreyer, B. and Gronhaug, K. (2004), "Uncertainty, flexibility and sustained competitive advantage", *Journal of Business Research*, Vol. 57 No. 5, pp. 484-494.

Duncan, R.B. (1972), "Characteristics of organizational environments and perceived environmental uncertainties", *Administrative Science Quarterly*, Vol. 17 No. 3, pp. 313-327.

Elenkov, D.S. (1997), "Strategic uncertainty and environmental scanning: the case of institutional influences on scanning behaviour", *Strategic Management Journal*, Vol. 18 No. 4, pp. 287-302.

El-Sawy, O.A. (1985), "Personal information systems for strategic scanning in turbulent environments: can the CEO go on-line?", *MIS Quarterly*, Vol. 9 No. 1, pp. 53-60.

Fahey, L. and King, W.R. (1977), "Environmental scanning for corporate planning", *Business Horizons*, Vol. 20 No. 4, pp. 61-71.

Fahey, L., King, W.R. and Narayannan, V.K. (1981), "Environmental scanning and forecasting in strategic planning: the state of the art", *Long Range Planning*, Vol. 14 No. 1, pp. 32-39.

Fahr, J.L., Hoffman, R.C. and Hegarty, W. (1984), "Assessing environmental scanning at the subunit level: a multitrait-multimethod analysis", *Decision Sciences*, Vol. 15 No. 2, pp. 197-220.

Form, W. (1979), "Comparative industrial sociology and the convergence hypothesis", *Annual Review of Sociology*, Vol. 5, pp. 1-25.

Gebris, G.T., Grenell, K.D. and Kaatz, J. (1998), "Reinventing local government human service management: a conceptual analysis", *Public Administration Quarterly*, Vol. 22 No. 1, pp. 74-97.

Gordon, G. (2005), "From vision to implementation and evaluation: the changing state of strategic planning", *Public Management*, Vol. 87 No. 8, pp. 26-28.

Grant, R.M. (1991), "The resource-based theory of competitive advantage: implications for strategy formulation", *California Management Review*, Vol. 33 No. 3, pp. 114-135.

Green, S. (1998), "Strategic management initiatives in the civil service: a cross cultural comparison", *The International Journal of Public Sector Management*, Vol. 11 No. 7, pp. 536-552.

Haase, H. and Franco, M. (2011), "Information sources for environmental scanning: do industry and firm size matter?", *Management Decision*, Vol. 49 No. 10, pp. 1642-1657.

Hair, J.F., Anderson, R.E., Tatham, R.L. and Black, W.C. (1998), *Multivariate Data Analysis*, 5th ed., Prentice-Hall, Upper Saddle River, NJ.

Hakim, A.B. (2004), "Moving in unison with the community: the MPSJ experience", paper presented at Seminar in Strengthening Public Service Delivery: Forging Ahead Together, Malaysia.

Halim, A. (2000), "Leadership and good governance", paper presented at the Fifth National Civil Service Conference, INTAN Bukit Kiara, Malaysia.

Hambrick, D.C. (1981), "Specialization of environmental scanning activities among upper level executives", *Journal of Management Studies*, Vol. 18 No. 3, pp. 299-320.

Hambrick, D.C. (1982), "Environmental scanning and organizational strategy", *Strategic Management Journal*, Vol. 3 No. 2, pp. 159-174.

Hickson, D.J., Hinnings, C.R., MdMillan, C.J.M. and Schwitter, J.P. (1974), "The culture free context of organization structure: a tri-national comparison", *Sociology*, Vol. 8, pp. 59-80.

Hofer, W.C. (1976), "Research on strategic planning: a survey of past studies and suggestions for future efforts", *Journal of Economic Business*, Vol. 28 No. 3, pp. 261-286.

Hofstede, G. (1980), *Culture's Consequences*, Sage, Beverly Hills, CA.

Hood, C. (1991), "Public management for all seasons?", *Public Administration*, Vol. 69 No. 1, pp. 3-19.

Hood, C. (1998), "The new public management in the 1980s: variations on a theme", *Accounting, Organizations and Society*, Vol. 202 No. 3, pp. 93-109.

Jain, S.C. (1984), "Environmental scanning in US corporations", *Long Range Planning*, Vol. 17 No. 2, pp. 117-128.

Jennings, D. and Lumpkin, J. (1992), "Insights between environmental scanning activities and Porter's generic strategies: an empirical analysis", *Journal of Management*, Vol. 18 No. 4, pp. 791-803.

Kefalas, A.G. and Schoderbek, P.P. (1973), "Scanning the business environment: some empirical results", *Decision Science*, Vol. 4 No. 1, pp. 63-74.

Kloot, L. and Martin, J. (2000), "Strategic performance management: a balanced approach to performance management issues in local government", *Management Accounting Research*, Vol. 11 No. 2, pp. 231-251.

Kroon, J. (1995), *General Management*, 2nd ed., Pearson South Africa, Cape Town.

Laurent, A. (1983), "The cultural diversity of Western conceptions of management", *International Studies of Management & Organizations*, Vol. 13 Nos 1/2, pp. 75-96.

Lester, R. and Waters, J. (1989), *Environmental Scanning and Business Strategy*, British Library, Research and Development Department, London.

Lyles, M.A. and Lenz, R.T. (1982), "Managing the planning process: a field study of the human side of planning", *Strategic Management Journal*, Vol. 3 No. 3, pp. 105-118.

Mali, P. (1990), "Differentiating high from low productivity performance in city governments", *National Productivity Review*, Vol. 9 No. 3, pp. 281-299.

Mansour, A.M.E. (2008), "The impact of privatization on the United Arab Emirates (UAE) federal public sector", *International Public Management Review*, Vol. 9 No. 2, pp. 66-89.

Mayne, J. and Zapico-Goni, E. (1997), "Effective performance monitoring: a necessary condition for public sector reform", in Mayne, J. and Zapico-Goni, E. (Eds), *Monitoring Performance in the Public Sector: Future Directions from International Experience*, Transaction Publishers, New Brunswick, NJ.

Miller, K. (1993), "Industry country effects on managers' perceptions of environmental uncertainty", *Journal of International Business Studies*, Vol. 24 No. 4, pp. 693-794.

Mills, L.P. and Seragaldin, R. (1991), "Governance and the external factor", paper presented at the World Bank's Annual Conference on Development Economics, Washington, DC.

Moynihan, D.P. (2006), "Managing for results in state government: evaluating a decade of reform", *Public Administration Review*, Vol. 66 No. 1, pp. 77-89.

Negandhi, A.R. (1985), "Management in the third world", in Joynt, P. and Warner, M. (Eds), *Managing in Different Cultures*, Universitetsforlaget, Oslo, pp. 69-97.

Newgren, K.E., Rasher, A.A. and LaRoe, M.E. (1984), "An empirical investigation of the relationship between environmental assessment and corporate performance", *Proceedings of the Academy of Management*, Academy of Management, Boston, MA, pp. 352-356.

Newman, K. and Nollen, S. (1996), "Culture and congruence: the fit between management practices and national culture", *Journal of International Business Studies*, Vol. 27 No. 4, pp. 753-779.

Ngamkroeckjoti, C. and Johri, L.M. (2003), "Coping with hypercompetition in the financial services industry in Thailand: environmental scanning practices of leaders and followers", *International Journal of Bank Marketing*, Vol. 21 Nos 6/7, pp. 359-368.

Olarewaju, A.A. and Folarin, E.A. (2012), "Impacts of external business environment on organizational performance in the food and beverage industry in Nigeria", *British Journal of Arts and Social Science*, Vol. 6 No. 2, pp. 194-201.

Onodera, N. (2012), *A Study of Mail Survey Methodology: Experimental Mail Surveys Conducted in 2008 and 2010*, NHK Broadcasting Culture Research Institute, Public Opinion Research, Tokyo.

Oreja-Rodríguez, J. and Yanes-Estévez, V. (2010), "Environmental scanning: dynamism with rack and stack from Rasch model", *Management Decision*, Vol. 48 No. 2, pp. 260-276.

Osborne, D. (1988), *Laboratories of Democracy*, Harvard Business School Press, Boston, MA.

Osborne, D. and Gaebler, T. (1992), *Reinventing Government*, Plume, New York, NY.

Peters, B.G. (1998), "What works: the antiphons of administrative reform", in Peters, B.G. and Savoie, D.J. (Eds), *Taking Stock: Assessing Public Sector Reforms*, McGill-Queen's University Press, Montreal, pp. 78-107.

Peters, T.J. and Waterman, R.H. Jr (1982), *In Search of Excellence*, Warner Books, New York, NY.

Phang, S.N. (2000), "Urban governance: positioning local government in Malaysia to meet the challenges of the urban century", paper presented at the Fifth National Civil Service Conference, INTAN Bukit Kiara, Malaysia.

Plowden, W. (1994), *Ministers and Mandarins*, Institute for Public Policy Research, London.

Pollanen, R.M. (2005), "Performance measurement in municipalities: empirical evidence in Canadian context", *International Journal of Public Sector Management*, Vol. 18 No. 1, pp. 4-24.

Pollitt, C. and Bouckaert, G. (2000), *Public Management Reform: A Comparative Analysis*, Oxford University Press, Oxford.

Preble, J.F., Rau, P.A. and Reichel, A. (1988), "The environmental scanning practices of US multinationals in the late 1980s", *Management International Review*, Vol. 28 No. 4, pp. 4-14.

Public Complaints Bureau (2010), *Public Complaints Bureau Annual Report*, Public Complaints Bureau, Kuala Lumpur.

Rais, M. (2000), "Managing the change process through administrative reform", paper presented at the Fifth National Civil Service Conference, INTAN Bukit Kiara, Malaysia.

Rohrbeck, R. and Bade, M. (2012), "Environmental scanning, futures research, strategic foresight and organizational future orientation: a review, integration, and future research directions", paper presented in the ISPIM Annual Conference, Barcelona, Spain.

Rubin, I. (1985), *Shrinking the Federal Government: The Effects of Cutbacks on Five Federal Agencies*, Longman, New York, NY.

Saadeghvaziri, F., Khaef, A., Motaqi, P. and Esfahani, A.M. (2012), "Environmental scanning and performance: a study of Iranian automobile parts manufacturers", *African Journal of Business Management*, Vol. 6 No. 14, pp. 4921-4925.

Saib, M. (2004), "Isu dan Cabaran Dalam Pengurusan Kerajaan Tempatan", Pelan Tindakan Kursus Kepimpinan dan Pengurusan Untuk Yang Dipertua dan Setiausaha Pihak Berkuasa Tempatan Negeri Perak Darul Ridzuan, Malaysia, Mei 24-27.

Samsudin, O. (2003), "Mempertingkatkan Sistem Penyampaian (delivery system) Bagi Mempertingkatkan Daya Saing Negara", Ucapan Amanat Ketua Setiausaha Negara dan Majlis Penutup Persidangan Pegawai-pegawai Daerah dan Pihak Berkuasa Tempatan.

Sarji, A. (1996), *Civil Service Reforms: Toward Malaysia's Vision 2020*, Pelanduk, Kuala Lumpur.

Sawyerr, O.O., Ebrahimi, B.P. and Thibodeaux, M.S. (2000), "Executive environment scanning, information source utilization, and firm performance", *Journal of Applied Management Studies*, Vol. 9 No. 1, pp. 95-115.

Schick, A. (1999), "Opportunity, strategy, and tactics in reforming public management", paper presented at the OECD Symposium, Government of the Future: Getting from Here to There, Paris, September 14-15.

Schneider, S. and De Meyer, A. (1991), "Interpreting and responding to strategic issues: the impact of national culture", *Strategic Management Journal*, Vol. 12 No. 4, pp. 307-320.

Siddiquee, N.A. (2006), "Public management reform in Malaysia: recent initiatives and experiences", *International Journal of Public Sector Management*, Vol. 19 No. 4, pp. 339-358.

Smith, K.G., Gannon, C.M., Martin, J. and Chen, M.-J. (1991), "Organizational information processing, competitive responses, and performance in the US domestic airline industry", *Academy of Management Journal*, Vol. 34 No. 1, pp. 60-85.

Subramanian, R., Fernandes, N. and Harper, E. (1993), "Environmental scanning in US companies: their nature and their relationship to performance", *Management International Review*, Vol. 33 No. 3, pp. 171-186.

Suh, W.S., Key, S.K. and Munchus, G. (2004), "Scanning behavior and strategic uncertainty: proposing a new relationship by adopting new measurement construct", *Management Decision*, Vol. 42 No. 8, pp. 1001-1016.

Sullivan, J. and Nonaka, I. (1988), "Culture and strategic issue categorization theory", *Management International Review*, Vol. 28 No. 3, pp. 6-10.

Van de Ven, A. and Joyce, W.F. (1981), *Perspectives in Organization Design and Behavior*, Wiley, New York, NY.

Vygotsky, L.S. (1983), *Sobranie sochinenii, Tom tretii. Problemy razvitiya psikhiki* (*Collected Works, Vol. 3: Problems in the Development of Mind)*, Izdatel'stvo Pedagogika, Moscow.

Walton, E.J. and Dawson, S. (2001), "Managers perceptions of criteria of organizational effectiveness", *Journal of Management Studies*, Vol. 38 No. 2, pp. 173-200.

Wechsler, B. (1989), "The uses of strategic management in state governments", in Rabin, J., Miller, G. and Hildreth, B. (Eds), *Handbook of Strategic Management*, St Martin's Press, New York, NY.

Wheelen, T. and Hunger, J. (2006), *Strategic Management*, Prentice-Hall, Englewood Cliffs, NJ.

Wilcocks, S.G. (1992), "Managerial effectiveness in the public sector", *International Journal of Public Sector Management*, Vol. 3 No. 3, pp. 4-10.

Wortman, M.S. (1979), "Strategic management: not-for-profit management", in Schendel, D. and Hofer, C. (Eds), *Strategic Management*, Little, Brown, and Co., Boston, MA, pp. 353-373.

Xavier, J.A. (1999), "Re-engineering federal budgeting: some directions", *INTAN Management Journal*, Vol. 4 No. 1, pp. 1-35.

Xavier, J.A. (2000), "Model Ketelusan dalam Membuat Keputusan", *INTAN Management Journal*, Vol. 5 No. 1, pp. 131-178.

Yusof, M.K., Shukri, M.N. and Rashila, R. (2000), "Citizen perceptions on good governance: the case of Malaysian professionals", paper presented at Fifth Civil Service Seminar, INTAN Bukit Kiara, Malaysia.

Zhang, X., Majid, S. and Foo, S. (2010), "Environmental scanning, an application of information literacy skills at the workplace", *Journal of Information Science*, Vol. 36 No. 6, pp. 719-732.

Zulkurnain, A. (2004), "Enhancing local authority effectiveness: unconventional approach to a conventional problem", paper presented at Seminar in Strengthening Public Service Delivery: Forging Ahead Together, Malaysia.

Zulkurnain, A. and Maimunah, O. (2003), "Public and private sector delivery systems and mechanism: changing patterns of delivering on the demand side", paper presented at the Eighth National Civil Service Conference, INTAN Bukit Kiara, Malaysia.

## Further reading

Abels, E. (2002), "Hot topics: environmental scanning", *Bulletin of the American Society for Information and Science and Technology*, Vol. 28 No. 3, pp. 1-4.

## About the authors

Ahmad Fadzli Ahmad Tajuddin obtained his Doctorate of Business Administration (DBA) at the Universiti Sains Malaysia in 2007. He then joined the Malaysian Civil Service in 1996 where he was posted to various agencies at federal and state levels. His working experience is in planning, development and poverty eradication. His interest is in strategic management, organisational behavior and strategic leadership. Currently, he works as the General Manager of Perak Foundation, Malaysia.

Syed Zamberi Ahmad holds a PhD from the Hull University Business School (HUBS), United Kingdom. His research interests include firm evolution and growth strategies including alliance, market entry and internationalisation strategies of SMEs and multinational firms. He is currently an Associate Professor of International Business and Entrepreneurship Management at the College of Business Administration, Abu Dhabi University (ADU), United Arab Emirates (UAE). Prior to entering academia, he had several years' industrial experience in international banking and treasury of several reputable banks in Malaysia. He also had served several universities in Malaysia, Yemen, and Saudi Arabia. Syed Zamberi Ahmad is the corresponding author and can be contacted at: syed.ahmad@adu.ac.ae

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