Analysis of Bangkok’s Metropolitan Administration (BMA) District Offices Using a Structural Equation Model

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ABSTRACT
This research study is concerned with the analysis of the Bangkok Metropolitan Administration’s (BMA) district offices using the Linear Structural Model (LEM) to determine the variables that affect public sector organizational performance. Three hundred and forty quantitative samples were drawn from all 50 of Bangkok’s BMA districts using simple random sampling (purposive sampling) while using Partial Least Square (PLS-Graph) software to apply Structural Equation Modeling (SEM) analysis. The research found that there are three factors determining BMA’s strategy. They are public sector marketing factors, transformational leadership and organizational strategy. The first element, public sector marketing factors has a direct and positive influence on BMA’s performance. The second, transformational leadership has been shown to have a positive although, indirect effect through variables in their organizational strategy. It was also discovered that organizational strategy able to keep pace with the flow of change and how to run a modern government efficiently and flexibly were crucial factors as well. These were important in achieving the goals of satisfying the constituency and optimizing public sector resources.

Key words: Public sector marketing, leadership, managerial skill, high performance organization

INTRODUCTION
Change is unavoidable and affects organizations in both the private and public sector. Every enterprise is confronted with new competition that often times require reengineering complete systems and processes or else they might be forced out of business. State agencies are no different than corporate enterprises in the fact that they are affected by new technologies and innovation and must be willing to generate change. At the same time, there is no guarantee that state agencies will always have funding assuring their survival.

They must also embrace strategic vision on how they can operate more efficiently as well as implement new innovations. They must market themselves to gain understanding of their issues from their tax-paying electorate. This also includes agencies concerned with their oversight and monitoring.

As state enterprises are big organization with large bureaucracies and complex management structures, it is necessary to adapt to these supporting changes (Kotler and Lee, 2006).

With regards to civil service reform, it is the state’s obligation to develop related laws that are consistent with political, administrative, economic and social developments. The intent is to enable
the civil servants to create rapid, equal and fair administration and service systems for society. In order to provide these public sector services, bureaucracies must decentralize and arrange state activities in which they can effectively develop and cooperate with other state agencies (Jantharasorn, 1997).

Today, a modern governmental administrative system needs to combine management models with commercial market models. Privatization of bureaucratic roles in public service operations creates a pressure building mechanism that creates competition.

This opinion was consistent with ‘New Public Management in Action’ which involves the introduction into public services of the ‘three Ms’: Markets, Managers and Measurement. This new method of governmental administration classified its operations into management of change, downsizing and decentralization and the search of excellence while focused on public services (Perie et al., 1996).

In an effort to restructure large and unwieldy bureaucracies into smaller and more efficient management systems, some have advocated a disaggregation of bureaucratic units in order to form a more efficient and accountable public service. Additionally, with the use of free-market mechanisms stimulating competition with appropriate cost-cutting measures, goal-oriented mangers with short-term employment contracts and better financial incentives and administrative autonomy will be better equipped to service their constituency.

Thailand has significant problems with its bureaucracies in that they serve their electorate less efficiently than modern businesses and they have little to no oversight governance. If the government does not encourage modern development and management within the public sector, it will undermine Thailand’s competitiveness which is an obstacle to its future economic and social development.

Review of the literature found that local government problems as well as Bangkok’s metropolitan area districts were exacerbated by the inability to have a dialog and discuss community issues such as public housing or water/flood management between government officials and the local communities. This resulted in local government project’s lack of support and often time failures.

Many scholars have suggested to government administrations that they need to embrace modern marketing concepts for the public sector. Akkrarabavorn (2008) said that bureaucracies needed to modernize their marketing concepts and use better management tools to better support their local areas. They also needed to think of their citizens as ‘customers’, in which the government is providing goods and services.

The Bangkok Metropolitan Administration (BMA) has a special status within the Kingdom of Thailand as its administrative organization also serves the nation as its capital. It contains a total area of 1,568.7 km² with a metropolitan population of 5,710,883 people, operating with 50 divisions or ‘District Offices’.

Reorganization and administrative autonomy are necessary so that officials can perform their duties in a manner that is consistent with the district’s economic and social conditions. This also helps facilitate better serving the people’s needs and helps with the coordination and monitoring of state government goals and objectives within Bangkok (BMA Data Center, 2012).

A survey was conducted for Bangkok in which citizens were asked about their opinion of civil service performance and their satisfaction with it. The results were later used to improve civil service staff which was consistent with the study of Luke and Verreyne (2006) that strategy formulation in governmental administrative organizations had a direct influence on the activities
of businesses. Also, strategies in business management affected the structural hierarchy as well as the research process and project management (Hitt et al., 2001).

The study by Walsh (1954), found that many semi-public service organizations have come into existence and attempt to become more market-oriented. The underlying assumption here seems to be that exposure to some form of market mechanism leads to improved customer management processes and thus improves customer satisfaction.

After reviewing the above literature, the researcher has determined after research and analysis of Bangkok’s BMA 50 districts that government officials and administrators must experiment with new activities and services, such as communication and information channels to reach the public they service. This will result in public recognition for their better quality of services. Transforming the public sector however requires restructuring, technology development, better and easier to use community services; all leading to a better and more efficient and cost savings solution.

GOVERNMENTAL CUSTOMER CARE

The new concept of 'C-Customer' or customer care should be the starting point to find personnel that are able to apply private sector marketing principles that can deliver better services to their electorate.

Efficient and effective organizations need to have the capacity for change, support innovation and function effectively without being ‘top-heavy’ with excessive managers. The key is to encourage and motivate personnel so they can sustain a good attitude and work performance.

Research conducted by Miller (2009) analyzed the role of High Performance Organizations (HPO) produce organizational capability that delivers sustainable organizational results through a system of teamwork and good operational practices.

They would also change from a High-Control Organization (HCO) to one embracing ideas found as a High-Trust Organization (HTO). Change would also occur from being focused on material manufacturing to knowledge based services.

In organizations of high trust (HTO), problems are dealt with easily and efficiently with management teams compared to low-trust environments with a single individual. Team spirit and work leads to team rewards compared to individual reward. Corporate and institutional structure flattens out compared to a more bureaucratic hierarchal structure. HTO's also demonstrate more flexibility in their structure willing to exchange information with both employees and outsiders as well as accepting blame for mistakes and problems. As such, this study is concerned with the analysis of the BMA government organization measuring (1) Constituency satisfaction (2) Customer service and (3) Transparency and accountability of each office, leading to the following three hypotheses.

The study by Kelloway et al. (2000) 'Enhancing transformational leadership: The roles of training and feedback' applied transformational leadership measures of Bass et al. (1990) perhaps one of the best contributions to our understanding of transformational leadership. Transformational leaders are thought to engage followers by employing one or more of the 4 "I's" to stimulate voluntary and enthusiastic responses to their influence attempts. These characteristics are:

- **Individualized consideration**: Gives personal attention to others, making each individual feel uniquely valued
- **Intellectual stimulation**: Actively encourages a new look at old methods, stimulates creativity, encourages others to look at problems and issues in a new way
• **Inspirational motivation:** Increases optimism and enthusiasm, communicates high expectations, points out possibilities not previously considered

• **Idealized influence:** Provides vision and a sense of purpose. Elicits respect, trust and confidence from followers

The conclusion of the study found that leadership training for transformational leaders was an effective and positive use of resources which contributed to more positive attitudes and better information exchange amongst management. It could also be determined from their study that training contributed to better group morale and more positive attitudes.

However, Kirkbride (2006) also found that it was essential for transformational leaders to have leadership skills that emphasized creativity and was able to be innovative with new work methods. They also add value to the environment from existing resources, affecting service quality and customer satisfaction.

**Idealized influence:** Is described when a leader is being a role model for his/her followers and encouraging the followers to share common visions and goals by providing a clear vision and a strong sense of purpose.

**Inspirational motivation:** Represents behaviors when a leader tries to express the importance of desired goals in simple ways, communicates high level of expectations and provides followers with work that is meaningful and challenging.

**Intellectual stimulation:** Refers to leaders who challenge their follower’s ideas and values for solving problems.

**Individualized consideration:** Refers to leaders who spend more time teaching and coaching followers by treating followers based on individual basic.

The above factors contribute to employee loyalty and customer satisfaction. According to the study and analysis by Anantnavee (2006) on leadership characteristics of Eastern Thailand Educational Service Area executives, it was found that organizational environment affected effective administration.

Research results found that these educational managers on Thailand’s eastern seaboard (1) Had both transformational and a high level of transactional leadership skills as well a low level of laissez-faire thinking (2) Office environments had excellent morale (3) Management was capable at doing their jobs and (4) And last, the variable with the most effect upon the organization was transformational leadership skills. A secondary factor was the organization’s work environment and the intuition of the administrators.

Transformational leadership skills and the workplace environment had both a direct and indirect effect on management outcomes on Eastern Thailand’s Educational Service Areas offices.

In a study about the linkages between internal marketing and leadership Gounaris (2006) and Hult (1996) concluded that if managers gave priority to the communications with customers, this would facilitate a better understanding of their products and services (Bell et al., 2004).

In addition, the study by Pasmore (2011) found that transformational leaders created new jobs as well embracing social responsibility, better customer relations and risk management. Leadership roles effect organizational strategy formulation within in the public sector in different ways and
was consistent with the study of Sarros et al. (2008), Carr (1996) and Marckett et al. (2011). According to literature review summaries, hypotheses have been formulated as follows:

H1: Transformational leadership affects organizational strategy formulation

Governmental organizations are plagued with the negative perception concerning their relationship with their ‘customers’, the general public. The perception is that they are large, slow and bureaucratic organizations unable to deal with new innovation and information technologies. This thinking and sadly, in many cases reality, must change.

It is within this context that customer relations management has the greatest potential to fulfill the needs of the general public (Da Silva and Batista, 2007). Applying good customer service management techniques should be the focal point for implementation of new operating processes and information technology platforms.

According to the study by De Sousa Filho et al. (2010), ‘Strategic Corporate Social Responsibility Management for Competitive Advantage’, the findings were that social responsibility has become indispensable and strategic decisions of large companies involve social as well as economic consequences which are intimately connected. Strategy and competitive advantage are related to enhancing the company’s image and reputation through the efforts of employees.

This was also applicable for a company’s image and reputation as the relationship between social strategy and competitive advantage was influenced from opportunity, resources, employee skill, company, industrial structure and stakeholders. Decisions from the strategy formulation process should take into account the positive and negative impacts that may arise, not only for the business itself but also for stakeholders and society in general.

Therefore, the crucial strategy of an organization is managing the customer relationships and enhancing the reputation of the government. You also need to successfully take advantage of the management of the relationship as much as possible which will be reflected in better customer service for the public. Administrators also need to be keenly aware of policy formulation, democratic governance and marketing to their constituents (Da Silva and Batista, 2007). This positively affects customer communications by building good relations with the customers which also affects operations, increasing profits and customer satisfaction in user services (Akroush et al., 2011; Kim et al., 2004; Yim et al., 2004; Sin et al., 2005) and customer loyalty building (Venkatraman and Ramanujam, 1986; Walker and Ruekert, 1987; Day and Wensley, 1988; Venkatraman, 1990; Doyle, 1995; Ambler and Kokkinaki, 1997). The literature review summaries have led to following hypotheses:

H2: Organizational strategy formulation affects marketing in the public sector
H3: Organizational strategy formulation affects High Performance Organization (HPO)s

Management of the public sector in the future will require different management tools which are adopted for use in a variety of organizations. Akkrarabavorn (2008) said that the public sector should aim at the ‘customer’ which is the start of the sales of goods and services. Public administration should mirror concepts of private business in marketing to the public sector and meet their expectations and satisfaction to the best of their abilities.

In a marketing research study for government Nutley (2003) and Palermo et al. (2010) found that public policy needs to be creative and updated to reflect their new roles and to keep up with
external changes. They must also experiment with new activities and services, such as communication and information channels to reach the public. As a result, organizations will get public recognition for their quality of services.

Transforming the public sector requires restructuring, development, processes and services to citizens which will result in a solution. It will also cause great changes and affect public sector performance management (Sparrow et al., 2002).

However, the study ‘Marketing Planning in the Public and Non-profit Sectors’ by Cousins (1990), showed that marketing planning in the public sector is not much different compared to the private market. Market share is less important than the overall size of the market. Pricing is something that cannot be controlled as well. Competition is usually not relevant to the needs of the market. Resources determine to some extent the better performance of the organization and the difference in the positions of competitors.

In a review of the literature this leads us to the following hypothesis:

H4: Marketing in public sector affects High Performance Organization (HPO)

RESEARCH METHODOLOGY

The survey was conducted from a random sampling of residents within the 50 Districts of the Bangkok Metropolitan Administration area.

Data collection: The sample group for this research includes 340 of Bankokian.

Questionnaires design: The questionnaires were designed to be used as a measurement tool according to the conceptual framework and operational definitions. The survey used the 5-Point Likert Scale and field definitions were constructed with its use.

Quality has been assured by using Cronbach’s α-coefficient for calculation of average of correlation coefficient gained. It was found that α-coefficient for the entire questionnaire was 0.964 and the α-coefficient for each enquiry was between 0.508 to 0.853 which is considered a high reliability factor if each item of α value is less than <0.50. Resultant data below 0.50 has been eliminated from the measurements.

Dependent variables: Analysis on the ‘High Performance Organization (HPO)’ were applied from research scholars including Verdegem and Hauttekeete (2008), Nor et al. (2010), Iqbal et al. (2011) and Liem (2007) which were used as measuring instruments according to a conceptual framework and operational definitions. The measuring instrument or questionnaires were constructed by applying a 5-Point Likert Scale type measure (Likert, 1972).

Independent variables

Transformational leadership: Scholarly research includes Bass et al. (1990), Kelloway et al. (2000) and Kirkbridge (2006) and the measuring instrument or questionnaires were constructed by applying 5-Point Likert Scale type measure (Likert, 1972).

Organizational strategy formulation: Scholarly research includes Da Silva and Batista (2007), Day and Wensley (1988), Sin et al. (2005) and De Sousa Filho et al. (2010) and the measuring instrument or questionnaires were constructed by applying 5-Point Likert Scale type measure (Likert, 1972).
Governmental marketing: Scholarly research includes Verma referred in Punyaratbandhhu (1986), Sparrow et al. (2002), Cousins (1990); Palermo et al. (2010) and the measuring instrument or questionnaires were constructed by applying 5-Point Likert Scale type measure (Likert, 1972).

ANALYSIS

Partial Least Squares has been applied for analysis of quantitative data by the researcher. It is data analysis for Confirmatory Factor Analysis (CFA) relating to the determination of Manifest Variable and Latent Variable and testing of research hypothesis exhibiting in structural model analyzed by using the applications of PLS-Graph (Chin, 2001).

Transformational Leadership variables included idealized influence (LDF), inspiration building (LDI) and individuality (LDC). The loading value was more than >0.707 and all values have been statistically significant (|t| ≥1.96) representing convergent validity of scales.

Organizational Strategy Formulation variables included Customer Relations Management (CRM) and Corporate Social Responsibility (CSR). The loading value was more than >0.707 and all values have been statistically significant (|t| ≥1.96) representing convergent validity of scales. This was considered that such factors affected marketing in public and high performance organizations.

Strategic Public Marketing (MKS) variables included Customer Relations Management (CRM) and Corporate Social Responsibility (CSR).

Governmental Marketing variables included people needs and desires (MKN), service convenience (MKV) and communication (MKM). The loading value was more than >0.707 and all values have been statistically significant (|t| ≥1.96) representing convergent validity of scales which is considered that such factor affected High Performance Organization (HPOs).

High Performance Organization (HPO) variables included satisfaction of service user (HPS), service quality (HPQ) and transparency (HPT). The loading value was more than >0.707 and all values have been statistically significant (|t| ≥1.96) representing convergent validity of scales as shown in (Table 1).

<table>
<thead>
<tr>
<th>Table 1: Convergent validity statistics in latent variable measurements in the Reflective Model</th>
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</thead>
<tbody>
<tr>
<td>Construct/Item</td>
</tr>
<tr>
<td>LDS: Transformational leadership</td>
</tr>
<tr>
<td>LDF: Idealized influence</td>
</tr>
<tr>
<td>LDI: Inspiration motivation</td>
</tr>
<tr>
<td>LDM: Intellectual stimulation</td>
</tr>
<tr>
<td>LDC: Individualized consideration</td>
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<tr>
<td>MKS: Strategic public marketing</td>
</tr>
<tr>
<td>CRM: Customer relation management</td>
</tr>
<tr>
<td>CSR: Corporate social responsibility</td>
</tr>
<tr>
<td>PMK: Governmental marketing</td>
</tr>
<tr>
<td>MKN: Customer solution</td>
</tr>
<tr>
<td>MKM: Customer communication</td>
</tr>
<tr>
<td>MKC: Customer cost</td>
</tr>
<tr>
<td>MKV: Customer comfort</td>
</tr>
<tr>
<td>HPO: High performance organization</td>
</tr>
<tr>
<td>HPT: Transparency</td>
</tr>
<tr>
<td>HPQ: Service quality</td>
</tr>
<tr>
<td>HPS: Satisfaction</td>
</tr>
</tbody>
</table>
Table 2: Confirmatory Factor Analysis (CFA) of the independent variables of leadership, management skill, organizational innovation and their affects on the dependent variable, organizational performance

<table>
<thead>
<tr>
<th>Construct</th>
<th>CR</th>
<th>R²</th>
<th>AVE</th>
<th>LDSF</th>
<th>MKS</th>
<th>PMK</th>
<th>HPO</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDSF</td>
<td>0.922</td>
<td></td>
<td>0.738</td>
<td></td>
<td>0.871</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKS</td>
<td>0.948</td>
<td>0.301</td>
<td>0.901</td>
<td></td>
<td>0.448</td>
<td>0.949</td>
<td></td>
</tr>
<tr>
<td>PMK</td>
<td>0.823</td>
<td>0.596</td>
<td>0.543</td>
<td>0.772</td>
<td>0.737</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HPO</td>
<td>0.901</td>
<td>0.675</td>
<td>0.752</td>
<td></td>
<td>0.395</td>
<td>0.478</td>
<td>0.867</td>
</tr>
</tbody>
</table>

Statistical significance level is at 0.01 and diagonal fig mean $\sqrt{AVE}$. CR: Composite reliability; R²: Square of the correlation, AVE: Average variance extracted.

Table 3: Hypothesis Testing Result of Hypothetical Research

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Coef.</th>
<th>t-stat</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational leadership affects organizational strategy formulation</td>
<td>0.448</td>
<td>10.356</td>
<td>Supported</td>
</tr>
<tr>
<td>Organizational strategy formulation affects marketing in public sector</td>
<td>0.722</td>
<td>33.206</td>
<td>Supported</td>
</tr>
<tr>
<td>Organizational strategy formulation affects high performance organizations (HPOs)</td>
<td>0.396</td>
<td>7.028</td>
<td>Supported</td>
</tr>
<tr>
<td>Marketing in public affects high performance organizations (HPOs)</td>
<td>0.478</td>
<td>6.586</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Fig. 1: Results for the structural model of the independent variables of leadership, management skill, organizational innovation and their affects on the dependent variable, organizational performance. CR: composite reliability; R²: square of the correlation, AVE: average variance extracted, LDSF: Transformational leadership, PMK: Governmental marketing, MKS: Strategic public marketing, HPO: High performance organization.

The above reflective model shows the discriminant validity of the internal latent variables and the correlation of variables. It also depicts the scale reliability which has been analyzed from composite value reliability (CR) as well as the Average Variance Extract (AVE) and R². The CR value should not go below 0.60 and the AVE values should also drop below 0.50 and R² values should not be under 0.20 (Lauro and Vinzi, 2004; Henseler et al., 2009) quoted in Boonthavan and Montri (2010).
Table 2, it can be found that all CR values were >0.60 and all R² values were >0.20 and all AEV values were higher than 0.50, showing that the measures were reliable. It found that data sets in the √AVE have higher values than all of the corresponding values in the 'Cross Construct Correlation' in the same column, representing discriminant validity of the measure in each construct and with a greater value than >0.50 of AVE as shown in (Table 2).

The model generated below was done using Partial Least Square-Graph software. It mirrors the variables found in (Table 1) but instead generates ‘hypothesis testing results’ from all of the research variables. This data is shown on Fig. 1 and in (Table 3).

Figure 1 shows the structural model of variables that influence the high performance organization of Bangkok’s Metropolitan Administration (BMA) District Offices. Variables included Transformational Leadership, Governmental Marketing and Strategic Public Marketing of surveyed Bangkokian. The samples were analyzed to answer the research hypothesis criteria of the following four assumptions (Table 3).

Furthermore, the structural analysis model was used to research the t-test coefficients and their relationship of each path of the t-test hypothesis with significance greater than 1.96**. This explains the results obtained from analysis as shown in (Table 1 and 2) as well as the test results presented in (Table 3).

RESULTS AND DISCUSSION

Quantitative analysis of the conceptual framework and research hypotheses, including the study of the various theories and a review of the relevant literature, leads to the conclusion that the findings are useful for development. The authors discuss the findings of the objectives of the research and have chosen to model the nonlinear relationships of variables affecting the High Performance Organization (HPO). Details are as follows.

Transformational leadership: It included the four “I”s which were (1) Individualized Consideration (2) Intellectual Stimulation (3) Inspirational Motivation and (4) Idealized Influence (Bass et al., 1990). According to the study, it was found that transformational leadership had the capacity for public organizational development.

This was consistent with Kirkbride (2005) who said that it was essential for transformational leaders to have leadership skills that emphasized creativity and were able to be innovative with new work methods. They were also able to intelligently build value from existing resources, as well as able to formulate organizational strategies in which they were able to keep up with their industry trends.

In a study about the linkages between internal marketing and leadership Gounaris (2006) and Hult (1996) concluded that if managers gave priority to the communications with customers, this would facilitate a better understanding of their products and services (Bell et al., 2004).

Organizational strategy formulation: Strategic thought and vision is an important component of a high performance organization and formulates the direction of public organizations. Negative perceptions about customer relations and service within the public sector are difficult obstacles to overcome due to the slow execution of executive decisions.

These issues could be overcome however with the formulation and application of new information technologies increasing an organization’s effectiveness and adding customer satisfaction and value (Da Silva and Batista, 2007). This agreed with the study results from
De Sousa Filho et al. (2010) that social responsibility has become indispensable and strategic decisions of large companies involve social as well as economic consequences which are intimately connected. Strategy and competitive advantage are related to enhancing the company's image and reputation through the efforts of employees.

This was also applicable for a company's image and reputation as the relationship between social strategy and competitive advantage was influenced from opportunity, resources, employee skill, company, industrial structure and stakeholders. Decisions from the strategy formulation process should take into account the positive and negative impacts that may arise, not only for the business itself but also for stakeholders and society in general.

It also showed that marketing planning in the public sector is not much different compared to the private market. Market share is less important than the overall size of the market. Pricing is something that cannot be controlled as well. Competition is usually not relevant to the needs of the market. Resources determine to some extent the better performance of the organization and the difference in the positions of competitors.

**Governmental marketing:** In public administration, the emphasis on High Performance Organization (HPO) concepts in governmental marketing was consistent with Cousins (1990) that in marketing services, there was no differences between public and private sector marketing. Market share is less important than the overall size of the market with pricing usually unable to control. Competition is usually not relevant to the needs of the market as resources will determine to some extent the organizational performance and the difference in the positions of competitors.

However, it was noticed that resource utilization was a factor that drove higher performance in public organizations. In a marketing research study for government Nutley (2003) and Palermo et al. (2010) found that public policy needs to be creative and updated to reflect their new roles and to keep up with external changes. It will also cause great changes and affect public sector performance management (Sparrow et al., 2002).

**CONCLUSION**

Government officials and administrators must experiment with new activities and services, such as communication and information channels to reach the public they service. This will result in public recognition for their better quality of services. Transforming the public sector requires restructuring, technology development, better and easier to use community services, all leading to a better and more efficient and cost savings solution.

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