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Thailand's Provincial Electricity Authority Queuing Performance Management System

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ABSTRACT

This study was conducted on Thailand's Provincial Electricity Authority using Structural Equation Modeling on the queuing performance management. This state enterprise is vital to the security and stability of Thailand and is responsible for organizing production, delivery and distribution of electricity being delivered to the public from 73 provincial sales offices out of a total of 77. Research methodologies used within this study include both quantitative and qualitative research. Quantitative is further qualified in this research essay from the survey given to 344 power generation and distribution executives. The Partial Least Square (PLS) technique, a form of structural equation modeling, is additionally used due to it being component-based rather than covariance-based. Additionally, qualitative research is supported by input from questionnaires from 10 key Thai government electricity officials utilizing the purposive sampling approach. The results showed that Competency and Organizational Management had a direct and immediate effect on innovation management and innovation management had a direct and positive effect on queuing management performance. A fact recognized by a hypothesis significance $p \leq 0.05$, respectively, with the results of qualitative research being consistent with the results of quantitative research. The findings from this study concluded that transformational leadership affects queuing management performance within the state electricity agency and is required by service staff to effectively and efficiently implement innovation management leading to organizational changes.

Key words: Performance management, queuing performance, organizational management, Thailand

INTRODUCTION

In modern society it is imperative that every organization take part in a queuing system in some way. Examples include a retail check-out line, waiting for a bank teller and queuing for healthcare services. You can also easily image the long lines at the motorway toll booths or even in a business, whether it is manufacturing, service or government agency.

Problems occur when customers and consumers queues overwhelm the available staff service members. Therefore, a queuing system becomes very important and is a model widely used. The queuing system is connected with the quality of services of the organization and is paramount in importance for corporate management. Management systems assist customers in the form of queue number dispensing machines to faster service and happier consumers. Agencies with management queue systems help to plan services and help with the ability to manage even with limited

resources. This can also significantly shorten the waiting time of the customers or clients as well (Bouzada, 2009).

Thailand's Provincial Electricity Authority (PEA) is a government agency under the Ministry of Interior. The main task is organizing production, delivery and distribution of electricity being delivered to businesses and industries in 73 provinces across the country, except the Bangkok metropolitan area including Nonthaburi and Samut Prakan.

Currently the Provincial Electricity Authority has expanded its operations into 67,446 villages, representing 99% of the total villages of 68,162. Only 716 villages in Thailand are not presently serviced by the PEA (MEA, 2010).

PEA uses a queuing system for customer support, to plan services and helps management deal with their limited resources. This can also significantly shorten the waiting time of the customers or clients as well (Bouzada, 2009).

Organizational Leadership is a key factor in management's decision to bring the resources of the organization to achieve the most effective and efficient service (Sarros *et al.*, 2011).

If the management queuing system uses appropriate technology and innovation management, it will effectively achieve the desired goals (Chansompong, 2006).

After a review of the above literature, variables that affect performance efficiency and management of PEA queuing is fast, efficient and accurate customer service. Focus on the customer needs requires the use of resources and technology which can be effectively applied in the service process which in turn will increase PEA's potential for increases in competitiveness.

TRANSFORMATIONAL LEADERSHIP

Theory and charismatic leadership have received a great deal of research over many years, having first been inspired by Burns (1978) notion of the transformational leader, followed by Bass (1985) and Mosley *et al.* (1996) extending and developing transformational leadership theory and placing it in the context of work organizations.

This new paradigm of transformational leaders is those who have a strong sense of direction (vision) which they communicate in inspiring ways. They are charismatic and elicit emotional responses and trust from followers. In addition to being charismatic, transformational leaders are said to raise follower self-confidence and self-efficacy (Shamir *et al.*, 1993), both by expressing confidence in followers and by providing training, coaching and development opportunities. Although, Bass (1985) considers charisma to be only one dimension of transformational leadership, there is substantial overlap in theory and research on charismatic and transformational leadership (Shamir *et al.*, 1993) and both literatures inform this inquiry.

Tojari *et al.* (2011) showed that transformational leadership has a significant positive influence on the effectiveness and organizational culture. It was also detailed how transactional leadership had a direct and significant negative influence on organizational effectiveness and indirectly had a significant positive influence through organizational culture. It was also determined that leadership related factors are:

- Leadership and ethics
- Leadership and power and influence
- Leadership and vision
- Leadership and decision making
- Leadership and team development
- Leadership and organization effectiveness

Warren Buffet has also been quoted many times about leadership and the characteristics of a good leader. Once such quote is, "Somebody once said that in looking for people to hire, you look for three qualities: Integrity, intelligence and energy. And if you don't have the first, the other two will kill you. You think about it; it's true. If you hire somebody without (integrity), you really want them to be dumb and lazy".

Bass (1985) proposed that corporate transformational leaders exhibited 4 major types of factors. These included:

- **Charisma:** Provides vision and sense of mission, instills pride, gains respect and trust. "Charismatic leaders have insight into the needs, values and hope of their followers. They have the ability to build on these needs, values and hopes through dramatic and persuasive words and actions"
- **Inspiration:** Communicates high expectations, uses symbols to focus efforts and expresses important purposes in simple ways. "....a sub factor within charismatic leadership behavior" in which "nonintellectual, emotional qualities" are used to arouse and heighten motivation among followers. Most charismatics are inspirational but one need not be charismatic to inspire
- **Intellectual stimulation:** Promotes intelligence, rationality and careful problem solving
- **Individualized consideration:** Gives personal attention, treats each employee individually, coaches and advises

Leadership style can affect organizational effectiveness through organizational culture. The results of Xenikou and Simosi (2006) research demonstrated that trans-formational leadership has an indirect but positive impact on performance via achievement, orientation and culture. The study by Hsu (2002) on 822 full-time employees in Taiwan sport/fitness clubs showed that leadership (transformational and transactional) has a positive and stronger significant effect on organizational effectiveness via organizational culture. Also, the results of Ogbonna and Harris (2000) research showed that leadership style (participative style and supportive leadership) had a positive and significant effect on organizational performance, although indirectly.

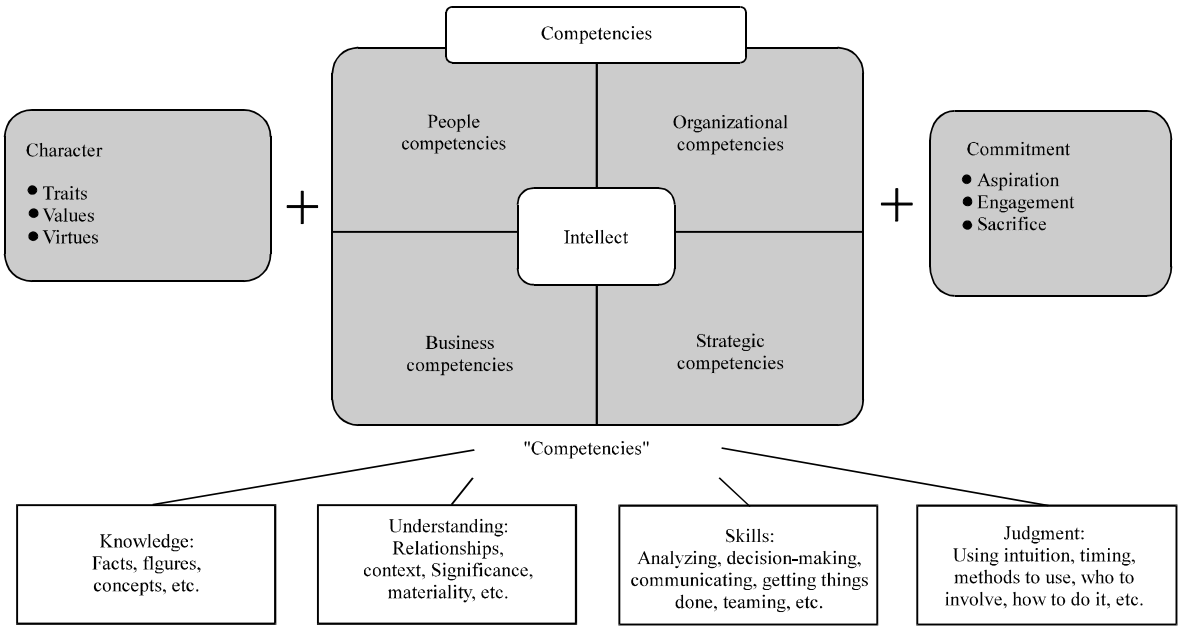
However, key leadership competencies and performance is dependent on strategic competencies, business competencies, organizational competencies and the management of individuals or people competencies.

Crossan *et al.* (2012) found that the performance characteristics and commitment of leadership can be divided into four competencies (Fig. 1) including:

- **Knowledge:** Including facts, figures, concepts, etc
- **Understanding:** Relationships, context, significance, materiality, etc
- **Skills:** Critical thinking, communication, decision making, getting things done, etc
- **Judgment:** Using intuition, timing, methods to use, who to involve, etc

Leaders cause changes in the culture of the organization and it is necessary to empower the people in the organization and keep promises to achieve organizational results (Sarros *et al.*, 2011; Nijhof *et al.*, 1998).

Changes in senior leadership has a huge influence on the organization because senior leaders are authorized to make decisions and use resources in an effective organization (Conger, 1999; Sarros *et al.*, 2011).



Gandz, J., Crissan, M., Seijts, G., Stephenson, C. (2010). Leadership on trial: A manifesto for leadership development. London, ON., Canada, Ivey publishing. September 2010

Fig. 1: Organizational competencies and the management of individuals or people competencies

From the leadership study by Chongvisal *et al*. (2010) concerning Thai Small and Medium Enterprises (SME), it was determined there were two phases which consisted of the first phase which was design to study the leadership of Thai SMEs entrepreneurs and the second phase was to develop new leadership through training courses.

In the first phase three sample sets were used. In the first sample set, the data were collected from 30 SMEs entrepreneurs. The data was analyzed to generate items of leadership scale for Thai SMEs entrepreneurs. The pilot leadership scale was tried out on the second sample set that consist of 544 SMEs entrepreneurs. The final leadership scale was studied with the third sample set that consisted of 1,064 SMEs entrepreneurs.

Educational leadership of the SMEs by collecting data on a sample of SMEs third series of 1,064 people found that leadership measurement tools consist of six elements:

- Promotion inspire subordinates
- Attention and goodwill towards others
- Good ethics and morals
- Ability to think strategically
- Strengthening social consciousness
- Open minded to things

The results indicated that the overall leadership was at a high level and in the second phase new direction for developing leadership of Thai SME entrepreneurs was proposed through the training course. The training workshop for "Developing SME Entrepreneurs" Leadership was

developed from theories, concepts, research findings and various documents relevant to leadership development and training course designing. There were 3 stages in the training course. The course was organized into 9 modules.

Leslie (2009) discussed uunderstanding to what or whom corporate communications leaders feel responsible is important in this age of rapid technological and economic change. A fast-changing world demands self-awareness among its leaders, particularly those who manage communications in an increasingly transparent environment. "Asking the right questions and involving the right people" emerged as a working definition of personal responsibility and themes of honesty/integrity, life balance and relationships also surfaced as influential in defining what personal responsibility means in communications leadership.

The research (Leslie, 2009) also had key findings which determined that there are seven leadership skills that are consistently viewed as most important now and in the future. They are: Leading employees, strategic planning, inspiring commitment, managing change and resourcefulness, being a quick learner and doing whatever it takes.

This corresponds to Crossan *et al.* (2012), that the leadership skills required are:

- The capacity to formulate strategies (Strategic Competencies) are those with the ability to understand the dynamics of the environment. Whether the market opportunities arising from the competitors, barriers and strengths or organizational weaknesses to define a competitive and responsive strategy
- Business competencies
- Organizational competencies
- People competencies

It is also necessary to have impartiality, open to comments, be cheerful and maintain relationship, emotional stability and good performance and leadership skills. A performance-oriented organization in the long-term requires humility, loyalty, teamwork, impartiality, decisive leadership, boldness, responsibility, understanding, optimism and the ability to communicate with shareholders and others.

Competency was first used in scholarly research as the term "Competence" which first appeared in an article authored by White (1959) as a concept for performance motivation. Later, in 1970, Craig C. Lundberg defined the concept in "Planning the executive development program". The term gained became mainstream when in 1973 the American psychologist and consultant, McClelland (1973), wrote a paper entitled, "Testing for competence rather than for intelligence", indicating the human factors by which competence depends.

In his study, he argued that aptitude and intelligence tests are not all that valid and continue that it is difficult, if not impossible to find a characteristic that cannot be modified by training and/or experience. The study concluded that personnel exhibiting good performance are something called competencies or competency (Akaraboworn, 2006) which is the definition of performance.

In 1982 it was Boyatzis who first drew together comprehensive data that had been collected in the USA using the McBer and Company 'Job Competence Assessment' method. Boyatzis (1982) defines a competency as "an underlying characteristic of a person which results in effective and/or superior performance in a job".

According to Boyatzis (1982) a job competency represents ability. An individual's set of competencies reflect their capability or what they can do. A job competency may be a motive, trait,

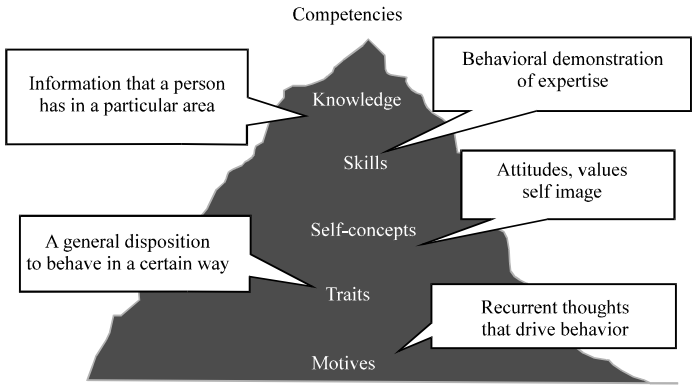


Fig. 2: McClelland's 'Iceberg' concept of competencies

skill, aspect of one's self-image or social role, or a body of knowledge that an individual uses and the existence and possession of these characteristics may or may not be known to the individual.

McClelland (1973) additionally described competencies as an iceberg (Fig. 2) with a person's knowledge and skills representing the visible tip of the iceberg while the underlying and enduring personal characteristics or self-concepts, traits and motives (for example, self-confidence, initiative, empathy, achievement orientation, etc.) which represent the larger portion of the iceberg, hidden below the waterline.

In addition, Akaraboworn (2006) stated that performance in a job or position must consist of three categories:

- Core competency is a behavior that everyone in the organization must have which represents the corporate culture and core values of the organization
- Professional competency is the ability of organizational management personnel to accomplish their work in line with the strategic vision of the organization
- Technical competency is the professional skills needed to execute and accomplish tasks which varies according to the nature of the work. This can be divided into two main sections including core technical competency and specific technical competency

Phuvidyaphan (2004) divided competency into three categories:

- Core competency refers to the expression of the personality or behavior of all employees in the organization. This reflects the knowledge, skills, attitudes, beliefs and habits of the organization as a whole. If every employee in the organization has this type of ability it will contribute in supporting the organization to achieve its goals and strategies
- Managerial competency is knowledgeable management which empowers all levels of management and staff to varying degrees depending on the role and responsibilities (Role-Based) of the different administrative positions. It also entails responsibility and which personnel in the organization need to work to get the job done and be consistent with the strategic vision of the mission of the organization
- Functional competency is competency at work which is reflected in knowledge, skills and characteristics of different jobs (Job-Specific) position such as an electrical engineer which should have knowledge of electrical engineering

Occupations have different "Functional competencies" which are job-specific competencies that drive proven high-performance, quality results for a given position. This is reflected by the individual's knowledge, skills, behaviors and attributes as well as the actual duties or staff responsibilities of the duties assigned. Even though individuals might have the same job function or title, that does not mean they work equally well. Increasing employee competency and skills has a direct and immediate impact on job performance, knowledge management and innovation within an organization (Gummesson, 1999; Ichijo *et al*., 1998; Beckman, 1999; O'Dell and Grayson, 1998) results.

Findings by Protogerou *et al*. (2008) who studied 'Dynamic capabilities and their indirect impact on form performance', determined that the performance of functional competency will result in an organization with stronger firm performance.

Organizational management is a system of corporate management which needs to be brought into the system as a process of providing services. Similarly, Hellriegel *et al*. (2001) also add that organizational culture has the potential to enhance organizational performance, individual satisfaction, problems solving and so on.

It is also necessary for an organization to be able to execute the plan to achieve the objectives that have been defined. Definitions of enterprise management include activities such as the following.

Organization structure: This component of the organization is developed and maintained by the human resource department which details the position and shows it within the structure of the organizational tree. Here is where the employee's position is detailed and defined and where changes are made as department budgets modify, delete or add to the manpower requirements.

Pongsriroj (2000) said that if organizational structure is appropriate and clear, it will enable organizations to achieve maximum efficiency and effectiveness eliminating duplications and redundancies. It also allows organizations to maintain more flexible structures, allowing them to change quicker to external and internal environments. This causes better coordination both within their own organizations and between external organizations and helps with executive management decisions.

This is consistent with Rungtusanatham *et al*. (1999) who mentioned that the organizations must have a process management system and that eemergent organizational behavior may result naturally due to ongoing double interacts that follow from very simple rules. These emergent behaviors may be used for learning or to develop new strategies.

Human Resource (HR): Management is the ability to recruit people as well as the development of individual capabilities as well as creating a corporate environment in which a person can work towards their full capacity, both in terms of quantity and quality (Nigro and Nigro, 1977). The HR is also responsible for the screening of applicants as well as recruitment of new staff which meets staffing requirements.

HR additionally must do training evaluation and position this knowledge within the organization. The system must be able to modify management's systems and processes allowing for easier recruitment and investment in education and training. To increase employee knowledge, expertise and skills, HR must take into account the benefits that organizations can by increased productivity (Al-Ruz and Khasawneh, 2011).

Organizational technology: It is a tool or device that supports the work leading to the ability to meet the needs of their clients. Sexton and Barrett (2004) interviews with seven small construction sector companies in the UK led to the insight that successful innovation tended to be ICT applications or clearly influenced by the developments of ICT. The innovations introduced with success were partnering (a management practice), computerized accounts and wages, mobile phones, cordless power tools and Computer-Aided Design (CAD). The conclusion reached was that successful innovations tend to be generic in nature and explicit in technology composition.

Advances in IT have reduced the life-cycle of products and, in addition, have revolutionized the way in which business is conducted in the new economy (Kandampully, 2002) and the nature of business today demands that firms interact with their customers and business partners using technology to provide services instantaneously across international borders.

The ability to use technology affects the overall success of an organization and contributes directly to innovation (Sexton and Barrett, 2004). These includes technology related areas such as financial and services, systems and links, value and ethics, marketing, production and maintenance of commercial and other organizations (Liyanage and Poon, 2003) the introduction of technology in organizations to help meet marketing to consumers as well (Kay, 2007).

And from the study by Marcoulides and Heck (1993) on "Organizational Culture and Performance: Proposing and Testing a Model" which proposed and tested a model concerning how an organization's culture affects organizational performance, results showed that organizational culture can predict performance, both directly and indirectly.

In fact, these shared philosophies, assumptions, values, expectations, attitudes and norms bind an organization together (Kilmann *et al*., 1985). Thus, the set of integrated concepts becomes the manner or strategies through which an organization achieves its specific goals. It can therefore be postulated that an organization's collective culture influences both the attitudes and subsequent behaviors of its employees, as well as the level of performance the organization achieves.

Innovation management is a mindset and not a one-time event. Innovation management principles should be incorporated as a part of daily schedule for each employee at all levels and is essential for supplier companies to prepare themselves for a future that will bring extreme competition and increasing customer demands.

The role of innovation management is not about producing innovative solutions but about the provisioning of a creative environment, in which solutions can be conceived, developed and applied (Goyal and Pitt, 2007) which contributes to success, growth and increased profitability of the company (Drucker, 1988; Christensen, 1997; Thomke, 2001).

Inauen and Schenker-Wicki (2011) developed innovative measures that deal better with day-to-day activities of the Organization for Economic Co-operation and Development (OECD) and its ability to development new knowledge and innovation. The group has implemented new and innovative ways for employees to be better involved in projects, including research and development, innovation, projects and communication technologies (OECD, 2002; Eurostat, 2006; Inauen and Schenker-Wicki, 2011).

Wong and Chin (2007) studied 'Organizational Innovation Management' (OIM) and developed measures which include the following:

- Organizational culture and beliefs
- Dimensional structure of innovative corporate structure is flexible, simple, uncomplicated emphasize decentralization

- Human Resource (HR) competency is a component of organizational commitment and leadership management including attitudes and abilities of employees
- Strategies for innovation must include the development of innovation strategies for the organization
- Innovation support mechanisms should be used as a resource management tool to help acknowledge the opinions of others which help achieve continuous improvement
- The development of cognitive skills which helps with the development of knowledge in the organization, including the exchange of knowledge with external organizations
- Growth of cumulative knowledge which is a mechanism of organizational learning, communication skills and knowledge utilization across the organizational structure

An administration queuing system effectively achieves the desired goal in corporate systems by using technology and innovation management to manage system logs, system service time and how many customers being services and how long it takes to do it (Chansompong, 2006).

Scarbrough and Swan (2001) argued that the rise and growth of knowledge management is one of the managerial responses to the empirical trends associated with globalization and post industrialism. These trends include the growth of knowledge worker occupations and technological advances created by ICT. In organizational terms, they argue, this new era is characterized by flatter structures, de-bureaucratization and 'virtual' or networked organizational forms.

Thus, Scarbrough (2003) pointed out that in innovative organizations the selection of individuals with both appropriate skills and appropriate attitudes has been identified as crucial to the project team's ability to integrate knowledge from diverse sources. He stresses that conventional approaches to selection may need to be revised in the light of the unpredictable knowledge flows involved in innovation projects. In such settings, it may simply be too difficult to specify the requisite knowledge and expertise in advance.

The search for individual employee development and the ability to exchange knowledge, affects organizational knowledge (Grandori and Soda, 1995; Scarbrough, 2003). The exchange of knowledge between employees drives new production methods and has a direct impact on reducing the time to deliver (Kazi and Wolf, 2006).

Learning technology strategy can affect the environment and context of the organization as well as production technology which affects the creative process and organizational knowledge and competitiveness (Ahmad and Schroeder, 2011). The key factors causing the rapid development within organizations are how to practice teamwork (Anderson and West, 1998).

Bain *et al.* (2001) stated that a team's climate for innovation has been shown to be important for innovation in management and work teams. It is argued that the relationship between team climate and innovation will be stronger for research teams than development teams as research teams have greater scope for creating novel and innovative ideas. However, the relationships between team climate and individual and team innovation were stronger for research teams than development teams.

Studies by Amabile (1996), showed that organizational creativity and innovation in the workplace can lead to action which creates new ideas and can be utilized to achieve new business and new programs in order to deliver products and services to customers. In discussing the structure of creativity and innovation or the psychological processes of organizations need to be promoted as well as their characteristics of the innovation. As a result, focusing on the team and create the conditions necessary for them is a way of innovation (Panuwatwanich *et al.*, 2008).

Viriyapan (2009) found that the management team can affect the collaborative success or failure of a country's business, such as in the case of Japan's large industries including Sony, Hitachi, Toyota, Nissan, NEC or Honda, etc. If these organizations can manage to have effective and efficient management teams, they will become world leaders within their respective industries.

Ju *et al.* (2006) developed a strategic contingency model to identify interrelationships among knowledge characteristics, knowledge management strategy, knowledge integration, organizational learning, Knowledge Management (KM) capability and innovation. They explored that knowledge characteristics with higher modularity and explosiveness could enhance organizational learning and knowledge integration. Furthermore, they found that levels of organizational learning, knowledge integration and knowledge management capability have significant impact on firm's innovation.

Ju *et al.* (2006) argued that in order to get competitive advantage organizations should continuously learn from outside sources. Through the proper knowledge distribution and sharing, organizations can bring the innovation. So, organizations must develop such channels within the organizations through which employees share their knowledge with one another.

The research results concluded that: Knowledge characteristics with higher modularity and explicitness could enhance organizational learning and knowledge integration; levels of organizational learning, knowledge integration and KM capability had significant impact on a firm's innovation; the interaction effects of human oriented KM strategy and organizational learning and system oriented KM strategy and knowledge integration were found to significantly impact KM capability.

Rhodes *et al.* (2008), discussed the influence of particular organizational factors (IT systems, structured learning strategies, innovative organizational culture and flexible structure and design) on knowledge transfer. It was discovered that of the particular organizational factors considered, IT systems had the most significant impact on organizational knowledge transfer followed by a structured learning strategy and an innovative organizational culture. Personalized (tacit) knowledge transfer had a strong influence on innovative capabilities development and process innovation had a greater impact on organizational performance than product innovation.

Additionally, it was determined that:

- Perceived organizational performance, such as the quality of the services and programs of the organization as compared to its competitors over a 3 year period
- Recognition of the perceived market performance, such as growth in sales, profitability and market share over three years

Queue management performance: Queue management systems help to increase customer service offering delivery of real-time centralized motoring. Waiting time and service time metrics can be used to improve customer service bringing a higher degree of transparency and promoting an analytical driven culture. Software solutions can provide reports which are sent out every week to bank branch managers, motivating them to better their branch performance to a higher level (Reporter, 2013). Branch managers will therefore be able to monitor the queue status from the desktop platform online allowing management to get the data and summary of information about the number of customers and service matrix, time and other special reports.

In the study conducted on Nigeria's First Bank, Maitanmi *et al.* (2013), the study focused on single-channel waiting line systems. Study was conducted on customer flow management

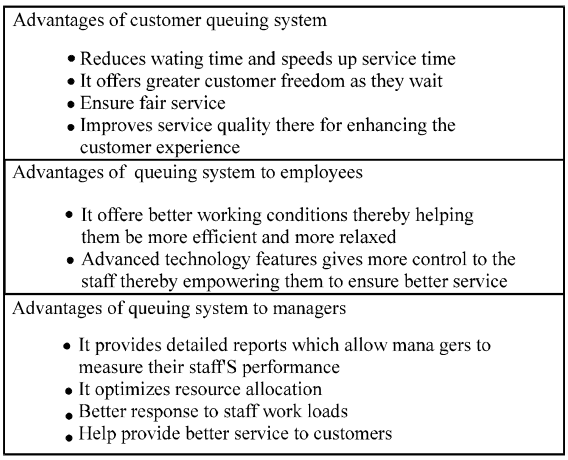


Fig. 3: Advantages of queuing systems (Maitanmi *et al.*, 2013)

processes and concluded that there were the following advantages to customers, employees and managers (Fig. 3).

Technology has a direct effect on growth and is vital to customer service (Kandampully, 2002). The ability to use technology is also a factor affecting the overall success and continued innovation especially (Sexton and Barrett, 2004), where the technology is used as a base of knowledge related to areas such as services and finance, systems and links adding value and ethics, marketing, manufacturing and maintenance of commercial and corporate work. Liyanage and Poon (2003), bringing the technology into the organization to help bring the market to its subscribers by Kay (2007) and from studies of Marcoulides and Heck (1993) on "Organizational culture and performance, proposing and testing a model".

The study found that corporate culture can predict the performance of both direct and indirect variables. The organizational structure is related to the organization and climate of the organization. Corporate values associated with the work of the organization are atmosphere and attitude of the employees in the organization. Organizational climate is the relation between employee attitudes and organizational performance. Atmosphere is the relationship organization's employee attitudes and job performance. Employee attitudes correlated with performance.

Efficient queuing management consists of the service users along with the number of service stations (Thesarat and Sindhuchao, 2008) and the type of queuing which helps develop a measure of success (Kamolsuk, 2012).

The study found that the leadership change will affect queuing management performance, both directly and through innovation management, although indirectly.

METHODOLOGY

The sample group for this research includes 344 executive managers within the Thai Provincial Electricity Authority (PEA).

Data collection: Questionnaire was constructed to be a tool to measure concept definition and practice. The instrument or questionnaire used the 7-Point Likert Scale as the measurement scale and the conceptual framework for determining the internal consistency measured by coefficient alpha. (α-coefficient) of Akron BAC (Cronbach) to calculate the average value of the correlation

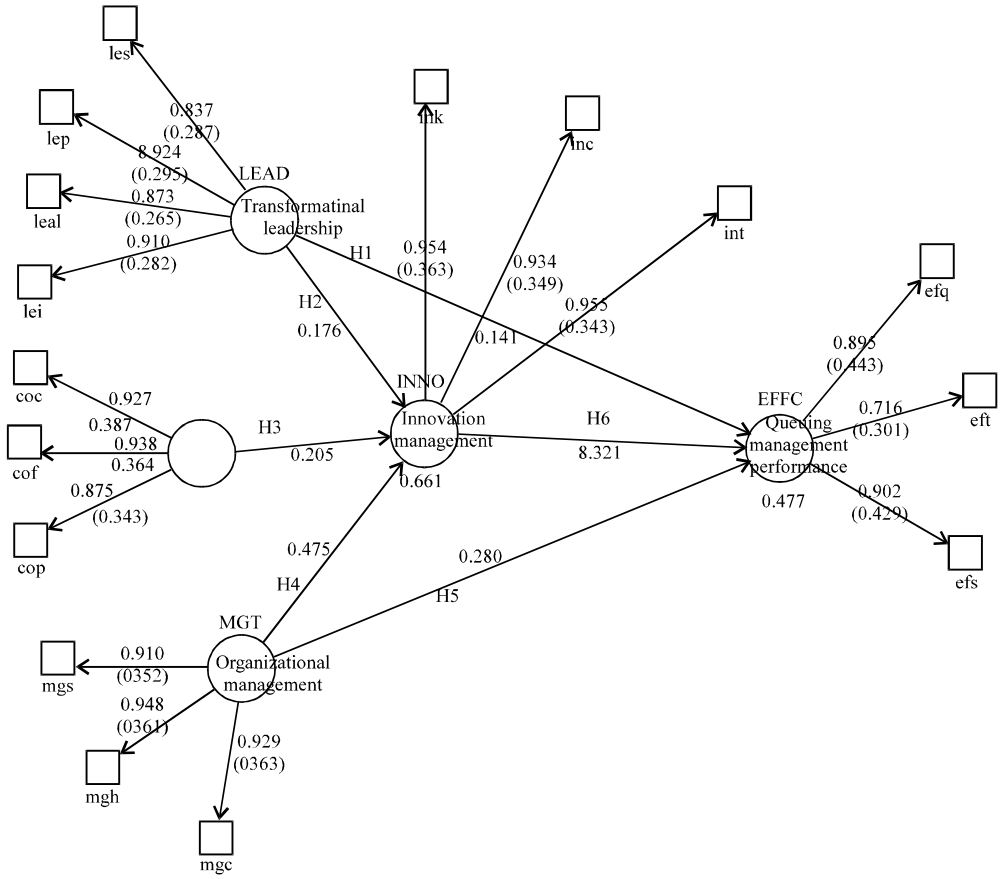


Fig. 4: Final model-analysis of factors that affect queuing management performance

coefficient was found that alpha coefficients ranged from 0.763-0.908 which is considered a highly reliable. All values lower than 0.50 were eliminated from the measurement.

Measurement

Dependent variable: Queue management performance analysis used a measurement instrument or questionnaires utilizing a 7-Point Likert Scale (Likert, 1970) and have been constructed with the scales developed enabling measurement of Total Customer Numbers, Number of Stations and Queuing type (Maitanmi *et al*., 2013; Thesarat and Sindhuchao, 2008; Kamolsuk, 2012) as presented in Fig. 4.

Independent variables: Transformational leadership (LEAD) analysis used a measurement instrument or questionnaires utilizing a 7-Point Likert Scale (Likert, 1970) and have been constructed with four aspects (Table 1) including idealized influence (IEI), individualized consideration (IES), inspiration motivation (IEP) and intellectual stimulation (IEA) (Bass, 1985) as presented in Fig. 4.

Competency (COMP) analysis used a measurement instrument or questionnaires utilizing a 7-Point Likert Scale (Likert, 1970) and have been constructed with three aspects (Table 1) including core competencies (COC), job competencies (COF) and personal performance (COP) (Smithikrai, 2007; Akaraboworn, 2006; Santhong, 2004) as presented in Fig. 4.

Table 1: Statistic values presenting convergent validity of reflective scales of latent variables

Construct/item	Loading	t-stat
LEAD: Transformational leadership		
IEI: Idealized influence	0.910	92.081
IES: Individualized consideration	0.837	41.982
IEP: Inspiration motivation	0.924	113.270
IEA: Intellectual stimulation	0.873	54.538
COMP: Competency		
COC: Core competencies	0.926	116.289
COF: Job Performance	0.938	131.273
COP: Personal Performance	0.875	51.565
MGT: Organizational management		
MGS: Organization	0.911	85.171
MGH: Human resource management	0.948	143.500
MGT: Technology	0.930	120.226
INNO: Innovation management		
INK: Knowledge management	0.954	142.780
INC: Creativity	0.934	96.596
INT: Team innovation	0.955	166.569
EFFC: Queuing management performance		
EFQ: Total customer No.	0.711	67.538
EFS: Number of stations	0.904	60.190
EFT: Queuing type	0.896	16.288

Organtional management (MGT) analysis used a measurement instrument or questionnaires utilizing a 7-Point Likert Scale (Likert, 1970) and have been constructed with three aspects (Table 1) including organization (MGS), human resource management (MGH) and technology (MGT) (Pongsriroj, 2000; Rungtusanatham *et al*., 1999; Khan and Khan, 2010; Hongladarom, 2006; Sexton and Barrett, 2004; Kandampully, 2002) as presented in Fig. 4.

Innovation Management (INNO) analysis used a measurement instrument or questionnaires utilizing a 7-Point Likert Scale (Likert, 1970) and have been constructed with three aspects (Table 1) including knowledge management (INK), creativity (INC) and team innovation (INT) (Scarbrough, 2003; Kaufman *et al*., 2009; Inauen and Schenker-Wicki, 2011; Panuwatwanich *et al*., 2008) as presented in Fig. 4.

RESULTS

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).

According to the analysis result of scale validity and reliability, scale investigation has been conducted using internal consistency measurement coefficient alpha. (α-coefficient) of Akron BAC (Cronbach) to calculate the average value of the correlation coefficient was found that alpha coefficients ranged from 0.606-0.905 which is considered to have high reliability.

In case of measure variables with reflective analysis, convergent validity has been conducted. Loading is used as consideration criteria and must be positive quantity and indicator loading has been more than 0.707 and all values have been statistically significant ($|t| \geq 1.96$) representing convergent validity of scales (Lauro and Vinzi, 2004; Henseler *et al*., 2009) quoted in Piriyakul (2010) and analysis results as shown in Table 1.

Transformational leadership (LEAD) factors underlying the external variables influence an ideology (LEA) to inspire (LEP) intellectual stimulation (LES) to take into account the individual (LEI) with values loading from 0.707 and a significant level of confidence percentage 95% (t-stat>1.96) which considers such factors highly reliable. These factors have a direct and positive impact on Innovation Management and indirectly pass through management innovation variables.

Competency (COMP) factors underlying the external variables influence Core Competencies (COC), job performance (COF) with values loading from 0.707 and a significant level of confidence percentage 95% (t-stat>1.96) which considers such factors highly reliable. It has an impact on innovation management.

Organizational management (MGT) factors underlying the external variables influence organizational structure (MGS), human resource management (MGH) and technology (MGT) with values loading from 0.707 and a significant level of confidence percentage 95% (t-stat>1.96) which considers such factors highly reliable. It has an impact on innovation management.

Innovation management (INNO) factors underlying the external variables influence, knowledge management (INK) creativity (INC)and team innovation (INT) with values loading from 0.707 and a significant level of confidence percentage 95% (t-stat>1.96) which considers such factors highly reliable, affecting the queuing management performance. Therefore, the researcher took the variables core (COC), job performance (COF), personal performance (COP), Organization (MGS), Human resource management (MGH), technology (MGT), knowledge management (INK), creativity (INC) and team innovation (INC) used in the structural equation model analysis.

The above reflective model in Table 1 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 reliability (CR) as well as the average variance extracted (AVE) and R^2. The CR value should not go below 0.60 and the AVE values should also drop below 0.50 and R^2 values should not be under 0.20 (Lauro and Vinzi, 2004; Henseler *et al*., 2009) quoted in Boondhavan and Montri (2010).

Table 2 shows the results of factor analysis affecting the PEA organizational performance. The data also shows the CR values are higher than 0.60, with all AEV values higher than 0.50 for all values and R^2 values higher than 0.20, representing the reliability of the measurement. It found that data sets in the $\sqrt{AVE}$ 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 samples were analyzed to answer the research hypotheses criteria of the following three assumptions (Table 3).

Table 2: Confirmatory Factor Analysis (CFA) of the independent variables of service quality and E-CRM and their affects on the dependent variable and customer satisfaction

				Cross construct correlation				
Construct	CR	R^2	AVE	LEAD	COMP	EFFC	MGT	INNO
LEAD	0.936	-	0.786	0.887				
COMP	0.938	-	0.835	0.863	0.914			
EFFC	0.879	0.477	0.709	0.611	0.638	0.842		
MGT	0.950	-	0.864	0.825	0.831	0.651	0.928	
INNO	0.964	0.661	0.898	0.745	0.752	0.648	0.791	0.948

CR: Composite reliability, R^2: Square of the correlation, AVE: Average variance extracted. Statistical significance level is at 0.01 and diagonal figures mean $\sqrt{AVE}$

Table 3: Research hypotheses test results

Hypotheses	Coef.	t-stat	Results
H1: Transformational leadership changes affect queuing management performance	0.141	1.802*	Supported
H2: Transformational leadership changes affect the innovation management	0.176	1.756*	Supported
H3: Competency affects innovation management	0.205	2.182**	Supported
H4: Organizational management affects innovation management	0.475	6.693**	Supported
H5: Organizational management affects queuing management performance	0.280	3.406**	Supported
H6: Innovation management affecting queuing management performance	0.321	4.215**	Supported

Coefficient refers to the Beta (β). t-stat = t-value. *,**Fact that under the assumption that significant $p \leq 0.05$, $p \leq 0.01$, respectively

Furthermore, the structural analysis model framework 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.

DISCUSSION AND IMPLICATIONS

Based on the research subject, 'Thailand's Provincial Electricity Authority Queuing Performance Management System', issues to be discussed are as follows.

Transformational leadership and leadership are critical aspects to the success of the organization. The leader has the obligation and is directly responsible for planning, directing and controlling the operations and personnel of the organization to achieve the organizations goals and objectives.

Bass (1985) explained the psychological mechanisms and introduced the term "transformational" to help explain how transformational leadership could be measured, as well as how it impacts follower motivation and performance. This is measured first, in terms of his influence on the followers, who view the leaser through a feeling of trust, admiration, loyalty and respect for the leader and because of the qualities of the transformational leader are willing to work harder than originally expected. This iidealized influence or charisma inspires others as well as achieves intellectual stimulation.

These outcomes occur because the transformational leader offers followers something more than just working for self gain; they provide followers with an inspiring mission and vision and give them an identity (self-actualization) and glory (well-being). The leader transforms and motivates followers through his or her idealized influence (earlier referred to as charisma), intellectual stimulation and individual consideration. In addition, this leader encourages followers to come up with new and unique ways to challenge the status quo and to alter the environment to support being successful. The study found that the leadership change will affect queuing management Performance, both directly and through Innovation Management, although indirectly.

This corresponds to Xenikou and Simosi (2006) study which demonstrated that transformational leadership has an indirect but positive impact on performance via achievement, orientation and culture. Furthermore, positive changes will directly impact positive business performance.

Ogbonna and Harris (2000) study showed that leadership style (participative style and supportive leadership) had a positive and significant effect on organizational performance, although indirectly. However, leadership performance is determined by important components such as: Strategic competencies, business competencies, organizational competencies and people competencies.

An individuals' competency is hidden within each person's character which can motivate the individual to make their performance better. Job competency criteria include:

- Core competency refers to a person's individuality which reflects their knowledge, skills, attitudes, beliefs and habits which supports the organization as a whole, helping organizations to achieve their goals
- Job competency refers to a person's personality which reflects their knowledge, skills, attitudes, beliefs and habits that motivates them. This can produce management results leading to higher standards
- Personal competency refers to a person's individuality which reflects their knowledge, skills, attitudes, beliefs and habits which make them unique from other individuals (Santhong, 2004)

Results of the study showed that the performance will affect innovation in organizations. If management performance in competent with the ability for strategic vision and planning and implement organizational goals effectively. Performance will be a factor that enhances the capabilities of the organization according to (Gummesson, 1999; Von Krogh *et al*., 2000; Beckman, 1999; Demarest, 1997; O'Dell and Grayson Jr., 1999) which found that competency directly affects the innovation management and organizational management affects innovation management of the enterprise. It also helps to increase the performance of the organization (Protogerou *et al*., 2008).

Patanapongse (2004) found that attitudes, behaviors, knowledge and skills contribute to high quality, efficiency and effectiveness in the performance of the personnel in the organization. All staff members should be able to complete basic functions which are the same and equal. They need to develop their own distinct special abilities beyond the capabilities of the duties, depending on the potential for their Emotional Quotient (EQ) and Intelligence quotient (IQ) and Knowledge and Skills and the Attributes which will be expressed as a way of thinking and work habits that will affect the performance of the individual, as well as continuous self-development.

This is consistent with Sexton and Barrett (2004) who stated that the ability to use technology affects the overall success of an organization and contributes directly to innovation, however they must also be concerned about customer identification and prioritization.

Kandampully (2002) found that the introduction of technology in the management of the organization has a direct effect on growth and is vital to the service.

Sexton and Barrett, 2004 studied the organizational form of learning in the process that led to the success of information technology (An Empirical Study of the Learning Organization Model in Information. Technology Enabled Process Improvement).

The Barnett and Raja (1999) studied the organizational form of learning in the process that led to the successful outcome of Information Technology in the paper titled 'The Learning Organization Model in Information Technology Enabled Business Process Improvement Projects: A Pilot Study'. The study found that The Learning Organization Model is a possible framework for understanding the behavior of organizations engaged in the implementation of process improvements using information technology. An information technology oriented extension to this model was then presented. The results of the pilot study phase showed that the extended Learning Organization Model does have some initial support.

This is in line with Kaiser (2000) study, showing patterns in organizational learning case studies entitled, 'Mapping the learning organization: Exploring a model of organizational learning'.

The study used experimental variables of organizational learning to determine the driving forces in an organization. Variables used in the study were leadership, culture, mission and strategy, operations management, organizational structure, organizational atmosphere, motivation, learning, innovation and the extent of outside learning.

This is consistent with Goyal and Pitt (2007) who stated that innovation management is a mindset and not a one-time event. Innovation Management principles should be incorporated as a part of daily schedule for each employee at all levels and is essential for supplier companies to prepare themselves for a future that will bring extreme competition and increasing customer demands. The role of innovation management is not about producing innovative solutions but about the provisioning of a creative environment, in which solutions can be conceived, developed and applied which contributes to success, growth and increased profitability of the company (Christensen, 1997; Thomke, 2001).

Studies by Amabile (1996), showed that organizational creativity and innovation in the workplace can lead to action which creates new ideas and can be utilized to achieve new business and new programs in order to deliver products and services to customers. In discussing the structure of creativity and innovation or the psychological processes of organizations need to be promoted as well as their characteristics of the innovation.

Wong and Chin (2007), studied 'Organizational Innovation Management' (OIM) and developed measures which include the following:

- Organizational culture and beliefs
- Dimensional structure of innovative corporate structure is flexible, simple, uncomplicated emphasize decentralization
- Human Resource (HR) competency is a component of organizational commitment and leadership management including attitudes and abilities of employees
- Strategies for innovation must include the development of innovation strategies for the organization
- Innovation support mechanisms should be used as a resource management tool to help acknowledge the opinions of others which help achieve continuous improvement
- The development of cognitive skills which helps with the development of knowledge in the organization, including the exchange of knowledge with external organizations and
- Growth of cumulative knowledge which is a mechanism of organizational learning, communication skills and knowledge utilization across the organizational structure

CONCLUSION

Queuing management must take into account various factors including innovation management for corporate management to achieve a practical way to develop the capacity of the organization. As a starting point in developing the organization, the organization needs to adapt to changing circumstances in accordance with the requirements of the client. Organizational Leadership also needs to have the ability to think strategically as well as have the ability to be flexible with the organizational skills to implement these changes.

The structure needs to be simple allowing for quick decision capability when problems arise as well as supervising employees fairly and justly.

Organizations must also manage their customer relationships as they adopt new technology which helps facilitate and support the work of the employees in the organization. Additionally, they

must devise tools that allow customers to interact with the organization which helps in facilitating the planning of customer services.

Organizations must also be able to manage on limited resources and shorten the waiting time of their services to their customers and clients. Services must be conveniently designed and quick to use as these factors contribute to the quality of providing excellent service to the public.

REFERENCES

Ahmad, S. and R.G. Schroeder, 2011. Dimensions of competitive priorities: Are they clear, communicated and consistent? J. Applied Bus. Res., 18: 77-86.

Akaraboworn, C., 2006. Human Resource Development Role in Thailand. Kpon Printing, Bangkok, Thailand.

Al-Ruz, J.A. and S. Khasawneh, 2011. Jordanian pre-service teachers' and technology integration: A human resource development approach. Educ. Technol. Soc., 14: 77-87.

Amabile, T.M., 1996. Creativity in Context. West View Press, Boulder, CO., USA., ISBN-13: 9780813330341, Pages: 317.

Anderson, N.R. and M.A. West, 1998. Measuring climate for work group innovation: Development and validation of the team climate inventory. J. Organiz. Behav., 19: 235-258.

Bain, P.G., L. Mann and A. Pirola-Merlo, 2001. The innovation imperative: The relationships between team climate, innovation and performance in research and development teams. Small Group Res., 32: 55-73.

Barnett, W. and M. Raja, 1999. The learning organization model in information technology enabled business process improvement projects: A pilot study. Proceedings of the 5th Americas Conference on Information Systems, August 13-15, 1999, Milwaukee, Wisconsin.

Bass, B.M., 1985. Leadership and Performance Beyond Expectations. The Free Press, New York, ISBN-13: 978-0029018101, Pages: 256.

Beckman, T., 1999. The Current State of Knowledge Management. In: Knowledge Management Handbook, Liebowitz, J. (Ed.). CRC Press, Boca Raton, FL.

Boondhavan, V. and P. Montri, 2010. PLS path modeling of social responsibility, quality product and service perception, good customer behavior and performance perception for original retail stores. J. Manage. Sci. Khon Kaen Univ., 9: 50-62.

Bouzada, M.A.C., 2009. Dimensioning a call center: Simulation or queue theory? J. Oper. Supply Chain Manage., 2: 34-46.

Boyatzis, R.E., 1982. The Competent Manager: A Model for Effective Performance. John Wiley and Sons, New York, USA., ISBN-13: 9780471090311, Pages: 308.

Burns, J.M., 1978. Leadership. Harper and Row, New York, USA.,ISBN: 9780060105884,.

Chansompong, C., 2006. The analysis of fixed line service system. Graduate School of Management and Innovation King Mongkut's University of Technology Thonburi, Bangkok, Thailand.

Chin, W.W., 2001. PLS-Graph User's Guide. Version 3.0, Soft Modeling Inc., Houston, TX., USA.

Chongvisal, R., D. Yolao and S.C. Carr, 2010. Study of leadership and new direction for developing entrepreneurs in Thai small and medium sized enterprises. Int. J. Behv. Sci., 4: 81-100.

Christensen, C.M., 1997. The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail. Harvard Business School Press, Boston, USA., ISBN-13: 9780875845852, Pages: 225.

Conger, J.A., 1999. Charismatic and transformational leadership in organizations: An insider's perspective on these developing streams of research. Leadersh. Q., 10: 145-179.

Crossan, M., J. Gandz and G. Seijts, 2012. Developing leadership character. Ivey Bus. J.,.

Demarest, M., 1997. Understanding knowledge management. Long Range Plan., 30: 374-384.

Drucker, P.F., 1988. The coming of the new organization. Harvard Bus. Rev., 66: 45-53.

Eurostat, 2006. Revisions analysis. Internal Report Submitted to the October 2006 Meeting of the FROCH Group.

Goyal, S. and M. Pitt, 2007. Determining the role of innovation management in facilities management. Facilities, 25: 48-60.

Grandori, A. and G. Soda, 1995. Inter-firm networks: Antecedents, mechanisms and forms. Organ. Stud., 16: 183-214.

Gummesson, E., 1999. Total Relationship Marketing: Rethinking Marketing Management from 4ps to 30Rs. Butterworth-Heinemann, Oxford.

Hellriegel, D., S.E. Jackson and J.W. Slocum, 2001. Management: A Competency-Based Approach. 9th Edn., South-Western College Publishing, USA., ISBN: 9780324055580, Pages: 561.

Henseler, J., C.M. Ringle and R.R. Sinkovics, 2009. The Used of Partial Least Squares Path Modeling in International Marketing. In: Advances in International Marketing: New Challenges to International Marketing, Sinkovics, R.R. and P.N. Ghauri (Eds.). Emerald, Bingley, UK., pp: 277-319.

Hongladarom, C., 2006. HR Champions: Conversations with Human Resource Development, Thinkers and Practitioners of the Period. 4th Edn., Chira Academy Publishing, Bangkok, Pages: 334.

Hsu, C.H., 2002. The structural equation modeling analysis of transformational leadership, organizational culture and organizational effectiveness. Ph.D. Thesis, University of Munawwar-ul-Islam.

Ichijo, K., G. Krough and I. Nonaka, 1998. Knowledge Enablers. In: Knowing in Firms, Krough, G. and J. Roos (Eds.). Sage Publication, Thousand Oaks, CA.

Inauen, M. and A. Schenker-Wicki, 2011. The impact of outside-in open innovation on innovation performance. Eur. J. Innovat. Manage., 14: 496-520.

Ju, T.L., C.Y. Li and T.S. Lee, 2006. A contingency model for knowledge management capability and innovation. Ind. Manag. Data Syst., 106: 855-877.

Kaiser, S., 2000. Mapping the learning organization: Exploring a model of organizational learning. Ph.D. Thesis, Louisiana State University, Baton Rouge.

Kamolsuk, N., 2012. Queuing system analysis: The study of 7-eleven at Muangthai-Patthara Branch. J. Manage. Inform. Sci., 7: 66-78.

Kandampully, J., 2002. Innovation as the core competency of a service organisation: The role of technology, knowledge and networks. Eur. J. Innovat. Manage., 5: 18-26.

Kaufman, J.C., J.C. Cole and J. Baer, 2009. The construct of creativity: Structural model for self-reported creativity ratings. J. Creative Behav., 43: 119-134.

Kay, M.J., 2007. Healthcare marketing: What is salient? Int. J. Pharma. Healthcare Market., 1: 247-263.

Kazi, A.S. and P. Wolf, 2006. Real-Life Knowledge Management: Lessons from the Field. Knowledge Board, London, ISBN: 9789525004724, Pages: 333.

Khan, M.H.U.Z. and M.R. Khan, 2010. Human capital disclosure practices of top Bangladeshi companies. J. Hum. Resour. Costing Account., 14: 329-349.

Kilmann, R.H., M.J. Saxton and R. Serpa, 1985. Introduction: Five Key Issues in Understanding and Changing Culture. In: Gaining Control of the Corporate Culture, Kilmann, R.H., M.J. Saxton and R. Serpa (Eds.). Jossey-Bass, San Francisco, CA., USA., pp: 1-16.

Lauro, C. and V.E. Vinzi, 2004. Some contribution of PLS path modeling and a system for the European customer satisfaction. Dipartimento di Matematica e Statistica Universita Federico II di Napoli. http://www.sis-statistica.org/old/htdocs/files/pdf/atti/RSMi0602p201-210.pdf.

Leslie, J.B., 2009. The leadership GAP: What you need and don't have, when it comes to leadership talent. Center for Creative Leadership. http://www.ccl.org/leadership/pdf/research/leadershipGap.pdf.

Likert, R., 1970. The Human Resources: Cases and Concepts. Harcourt Brace, New York.

Liyanage, S. and P.S. Poon, 2003. Technology and innovation management learning in the knowledge economy: A techno-managerial approach. J. Manage. Dev., 22: 579-602.

MEA, 2010. [Social and environmental annual report 2010]. Metropolitan Electricity Authority (MEA), Bangkok, Thailand (In Thai).

Maitanmi, O.S., S.O. Okolie and A.K. Adio, 2013. Queue management systems for congestion control: Case study of first bank, Nigeria. IJASCSE, 2: 54-58.

Marcoulides, G.A. and R.H. Heck, 1993. Organizational culture and performance: Proposing and testing a model. Organ. Sci., 4: 209-225.

McClelland, D.C., 1973. Testing for competence rather than for intelligence. Am. Psychol., 28: 1-14.

Mosley, D.C., P.H. Pietri and L.C. Megginson, 1996. Management: Leadership in Action. 5th Edn., HarperCollins College Publishers, Glenview, IL., ISBN-13: 9780673992642, Pages: 752.

Nigro, F.A. and L.G. Nigro, 1977. Modern Public Administration. 4th Edn., Harper and Row, New York, Pages: 108.

Nijhof, W.J., M.J. de Jong and G. Beukhof, 1998. Employee commitment in changing organizations: An exploration. J. Eur. Ind. Train., 22: 243-248.

O'Dell, C. and C.J. Grayson, 1998. If only we knew what we know: Identification and transfer of internal best practices. California Manage. Rev., 40: 154-174.

O'Dell, C. and C.J. Grayson Jr., 1999. Knowledge transfer: Discover your value proposition. Strat. Leader., 27: 10-15.

OECD, 2002. Babies and Bosses-Reconciling Work and Family Life: Australia, Denmark and the Netherlands. Vol. 1, OECD, Paris, France.

Ogbonna, E. and L.C. Harris, 2000. Leadership style, organizational culture and performance: empirical evidence from UK companies. Int. J. Hum. Resour. Manage., 11: 766-788.

Panuwatwanich, K., R.A. Stewart and S. Mohamed, 2008. The role of climate for innovation in enhancing business performance: The case of design firms. Eng. Constr. Architect. Manage., 15: 407-422.

Patanapongse, W., 2004. Balanced Scorecard (BSC) Key Performance Indicators (KPI) for Sustainable growth of the Organization. Pacific Publishing, Bangkok, Thailand.

Phuvidyaphan, A., 2004. Career Development in Practice. HR Center, Bangkok, Thailand.

Piriyakul, M., 2010. Partial least square path modeling (PLS path modeling). Proceedings of the 11th Academic Conference of Applied Statistics, November 19, 2010, Bucharest, Romania.

Pongsriroj, S., 2000. Organization and Management. 9th Edn., Chulalongkorn University Printing House, Bangkok, Thailand.

Protogerou, A., Y. Caloghirou and S. Lioukas, 2008. Dynamic capabilities and their indirect impact on firm performance. Proceedings of the 25th Celebration Conference on Entrepreneurship and Innovation-Organizations, Institutions, Systems and Regions Copenhagen, June 17-20, 2008, Copenhagen, Denmark, pp: 1-46.

Reporter, S., 2013. Exim bank introduces hi-tech queue management system. http://www.businesstimes.co.tz/index.php?option=com_content&id=2665:exim-bank-introduces-hi-tech-queue-management-system&Itemid=57.

Rhodes, J., R. Hung, P. Lok, B.Y.H. Lien and C.M. Wu, 2008. Factors influencing organizational knowledge transfer: Implication for corporate performance. J. Knowl. Manage., 12: 84-100.

Rungtusanatham, M., J.C. Anderson and K.J. Dooley, 1999. Towards measuring the SPC implementation/practice construct: Some evidence of measurement quality. Int. J. Qual. Reliabil. Manage., 16: 301-329.

Santhong, N., 2004. Competency is Known Today. 3rd Edn., HR. Center, Bangkok, Thailand.

Sarros, J.C., B.K. Cooper and J.C. Santora, 2011. Leadership vision, organizational culture and support for innovation in not-for-profit and for-profit organizations. Leadership Organiz. Dev. J., 32: 291-309.

Scarbrough, H. and J. Swan, 2001. Explaining the diffusion of knowledge management: The role of fashion. Br. J. Manag., 12: 3-12.

Scarbrough, H., 2003. Knowledge management, HRM and the innovation process. Int. J. Manpower, 24: 501-516.

Sexton, M. and P. Barrett, 2004. The role of technology transfer in innovation within small construction firms. Eng. Constr. Architect. Manage., 11: 342-348.

Shamir, B., R.J. House and M.B. Arthur, 1993. The motivational effects of charismatic leadership: A self-concept based theory. Organiz. Sci., 4: 577-594.

Smithikrai, C.C., 2007. Recruitment, Selection and Evaluation of the Performance of Personnel. 2nd Edn., Chulalongkorn University Press, Bangkok, Thailand.

Thesarat, S. and S. Sindhuchao, 2008. Simulation of a queueing system for reducing customer waiting time case study: Trakarn Phuetphon hospital, Ubon Ratchathani province. http://app.eng.ubu.ac.th/~resproject/upload/p1/23.papaer_l_sombat.pdf.

Thomke, S., 2001. Enlightened experimentation: The new imperative for innovation. Harv. Bus. Rev., 79: 66-75.

Tojari, F., M.S. Heris and A. Zarei, 2011. Structural equation modeling analysis of effects of leadership styles and organizational culture on effectiveness in sport organizations. Afr. J. Bus. Manag., 5: 8634-8641.

Viriyapan, T., 2009. Team management under crisis. School of Business University of the Thai Chamber of Commerce, pp: 446-462.

Von Krogh, G., K. Ichijo and I. Nonaka, 2000. Enabling Knowledge Creation: How to Unlock the Mystery of Tacit Knowledge and Release the Power of Innovation. Oxford University Press, Oxford, New York, Pages: 292.

White, R.W., 1959. Motivation reconsidered: The concept of competence. Psychol. Rev., 66: 297-333.

Wong, S.Y. and K.S. Chin, 2007. Organizational innovation management: An organization-wide perspective. Ind. Manage. Data Syst., 107: 1290-1315.

Xenikou, A. and M. Simosi, 2006. Organizational culture and transformational leadership as predictors of business unit performance. J. Managerial Psychol., 21: 566-579.