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The empirical evidences of good governance in E-government procurement

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ABSTRACT

This research presents the components of electronic government procurement (E-GP) that can create good governance in government procurement thorough e-auction. A survey was conducted with Thai government officers who are involved in e-government procurement. There are five major factors that enhance governance procurement: strict e-procurement process, public officer, political official, vendor, and policy and regulation requirements. A strict e-procurement process has positive effect on good governance practice in terms of enhancing cost effectiveness and transparency, and decreasing collusion among vendors. Vendor commitment has negative impact on collusion. Public officers had a negative impact on enhancing law enforcement. Policy and regulation requirements can enhance cost effectiveness, transparency, and law enforcement.

Keywords

E-government procurement, good governance, Thailand

INTRODUCTION

In the digital era, government uses the Internet to deliver services and to communicate with citizens and organizations. The Thai government has implemented E-government procurement (E-GP) to make the procurement process more efficient and to enhance procurement governance by reduced corruption. Good governance in the public sector management is focused on virtue, peace, and maximum benefits to the country, people, and society consistently and fairly. These include transparent principles, citizen participation, responsibility, rule of law, effectiveness efficiency, equity, and accountability. Although there are many studies with regard to e-procurement (Croom and Johnston, 2003; Croom and Brandon-Jones, 2007; de Boer, Harink and Heijboer, 2002; Evenett and Hoekman, 2005; Hui, Othman, Omar, Rahman and Haron, 2011), much of the prior work to date has focused on system implementation and effectiveness. This research explores the antecedents of good governance in the electronic auction (e-auction) of government procurement and their impacts on good governance.

LITERATURE REVIEW

E-government procurement (E-GP) employs online information technology to purchase goods/service for public agencies from business. E-GP can add service value and cost savings to the government (Casaki and Gelleri, 2005; Iqbal and Seo, 2008). E-GP can improve transparency and governance changing business practice and encouraging new suppliers/vendors to join the procurement (Harris and Rajora, 2006). E-GP is an effective system which enhancing good governance in procurement limiting political interference (Heywood, 2002). Procurement process is a major problem for good governance of procurement. The selection of procurement method and defining the product specification are major practices that can improve procurement (Hui *et al.*, 2011). For instance, special tendering is applied for big projects which actually must use e-auction. Human resource is another factor relates to corruption. Kennedy and Deeter-Schmelz (2001) found that top management was a significant motivator to the use of e-procurement. Government managers or decision-makers set the priorities for procurement (Hardy and Williams, 2008). Political factor has major influence on corruption (ADB, 2004; Belwal and Al-Zoubi, 2008).

Good governance in procurement consists of integrity, transparency, accountability, and fairness. The good governance requires a fair process of transactions and services with accountable administration (Bedi, Singh, and Srivastava, 2001; Saxena, 2006). In general, corruption can be business related or government corruption. Economic corruption is the use of public office for private gains. Political corruption is the violation of the formal rules governing the allocation of public resources by administrators for financial gains or political support (Ampratwum, 2008). Hasan (2004) emphasized that e-governance increase efficiency, effectiveness and organizational performance. It provides solution to corruption, bureaucratic inefficiency and ineffectiveness, nepotism, cronyism, lack of accountability and transparency. Good governance in this

research specifies transparency in e-government procurement through using the e-auction approach. This approach provides effectiveness, accountability, and thorough fairness. Transparent procurement can ensure a public organization to get the best choice of product/service with reasonable price (Evenett and Hoekman, 2005; Hui *et al.*, 2011).

RESEARCH FRAMEWORK

Past research indicates that an effective e-procurement process can improve transaction cost and financial benefits to the organization (Amit and Zott, 2001; Arbin, 2003; Subramaniam and Shaw, 2004). Effective cost savings accrue from improvements in the procurement process itself. These savings are realized through increased automation of procurement with improved accuracy (Cox, 1999; Croom, 2000; Deeter-Schemelz, Bizzari, Graham and Howdyshell, 2001; Kalakota and Robinson, 1999; Zsidisin and Ellram, 2001). Higher level of process and system compliance can increase the level of transparency (Croom and Brandon-Jones, 2007; Croom and Johnston, 2003; Neef, 2001; Subramaniam and Shaw, 2004). The attitudes of executives, especially about creating good governance are also important (Ararat and Ugur, 2003).

The attitudes of executives, especially about creating good governance are also important (Ararat and Ugur, 2003). Government officers have major impact on enhancing good governance ((Hui *et al.*, 2011). Strong governance determination is required in order to implement appropriate E-GP system that ensures transparency (Leipold, 2007).

Hui *et al.* (2011) found that lower of vendor's collusion can enhance governance of e-government procurement. E-auction procurement has a major role in diminishing collusion in procurement by broadening participation and expanding suppliers or interested firms to join the e-government procurement auction (Almeida, 2006). It provides transparency to e-government procurement by providing established procurement procedures and ensuring public access to procurement data more easily. Many studies reveal that politicians involve in government procurement corruption (Almeida, 2006; Granados and Masilungan, 2001; Mahmood, 2010; Pillay, 2004; Radics, 2001). Normally, they hardly get directly involved but the members of government procurement boards and structure have been changed for their personal benefit, including those responsible for government procurement (Aizawa, 2008).Politicians have major impact on governance procurement (e.g., obtaining cost effectiveness, rendering transparency, and following rule and regulations) (ADB, 2004; Aizawa, 2008; Belwal and Al-Zoubi, 2008).

Regulations and transparent procedures in e-government procurement (e.g., strict e-procurement process, establishment of procurement committee, effectiveness of e-government procurement, and public awareness and penalty of corruption and fraud) are examples of effective measures of good governance procurement (Aizawa, 2008). Government policy and regulation as the explicit knowledge published to the public can assist related organization concern of good governance practice (Rotchanakitumnuai, 2010).

Finally, politicians seek to involve in the procurement process and use public budget for personal benefits and have major impact on determining procurement process ((Almeida, 20056, Hui et al., 2011).

METHODOLOGY

A survey research was conducted with e-procurement officers of government agencies. The questionnaire items measured by a Likert scale ranging from 1 to 5 (1 = "strongly unimportant", 5 = "strongly important"). Respondents were selected using purposive sampling from a variety of government organizations. Personal interview was used to gather data of the questionnaire items from at least two respondents responsible for purchasing in the e-procurement department. At least one of the respondents was in a manager position. A total of 169 respondents from 67 government agencies completed the questionnaire. The respondent profile is presented in Table I.

Table II shows that in good e-procurement process, government officers should receive no benefit from purchasing is ranked highest (mean= 4.83). Public managers recognizing the benefits of E-GP is positively related to governance (mean = 4.81). Cooperation among vendors (4.73) and no benefit offered (4.71) are critical to good governance. Clear and fair specifications of product/service support a positive procurement process. Minimizing politician involvement is another issue that can enhance good governance or limited involvement in the e-procurement committee. Documentation related to E-GP (4.16) supports good governance of E-GP. Setting product /service priorities and online intermediary selection are lowest related scoreI in electronic government procurement governance.

Detail	No.	%			
Age					
< 25-30	21	14.5			
> 30-40	41	28.3			
> 40-50	52	35.9			
> 50-60	31	21.4			
Education					
Below Bachelor	15	10.3			
Bachelor	103	71.0			
Master	27	18.6			
Annual budget of e-procurement (Thai Baht) *					
less than 10,000,000	46	31.7			
10,000,001-50,000,000	51	35.2			
50,000,001 – 100,000,000	17	11.7			
100,000,001 - 500,000,000	17	11.7			
500,000,001 - 1,000,000,000	7	4.8			
more than1,000,000,000	7	4.8			
Working Level					
Operational level	93	64.1			
Management level	49	33.8			
Average duration of e-Auction adoption 4.7 years					

*30 Thai Baht= 1 US \$

Table I: Respondents profile

Items	Mean	S.D.
Strict procurement process		
Defined product/service specifications	4.72	.559
Disclose procurement results to public	4.59	.723
E-procurement committee receives no benefit.	4.44	.798
Appropriate procurement method selected.	4.34	.923
Priority of products /services procured.	3.97	.912
Selection of an online intermediary to advise e-auction.	3.60	1.05
Public managers / Staff		
No personal benefit obtained from government procurement from vendors to staff.	4.83	.532
Realize specific benefits to government from procurement	4.81	.461
Public managers has no personal benefit from e-government procurement	4.73	.748
Staff follows the product/service specifications.	4.52	.774
The public agency enforces laws.	4.33	.943
Vendor		
No collusion of the vendors	4.73	.766
No benefits between vendors and public managers / staff	4.71	.716
No benefit offers to public managers / staff	4.66	.768
Political officials		
No intervention from political officials	4.66	.836
No political nominees involve in E-GP	4.63	.799
No political involvement in setting procurement priorities	4.61	.868
Policy and regulation requirements		
Requirements limit E-GP problems	4.16	.940
Requirements reduce corruption	4.16	.962
Transparent of E-GP practices	3.95	.930

Table II: Good governance elements in electronic government procurement

Table III summarizes the multiple regression analysis to determine the impact of the antecedents of e-government procurement on good governance. A strict procurement process with good practices with specific policy and regulation have positive effects on good governance practice in terms of enhancing cost effectiveness and transparency. A strict procurement process has major impact on collusion among vendors. Vendor commitment has negative impact on collusion. Further, none of the three antecedents of good governance practices has a significant impact on penalty law enforcement except policy and regulation requirements. Public managers had a negative impact on enhancing law enforcement. Politicians have a positive impact on a strict procurement process.

	Dependent variable				
Independent variables	Cost	Transparency	Reduced	Stringent law	Procurement
	effectiveness		collusion	enforcement	process
A strict procurement process	.422**	.443**	.462**	.207	
Public managers / officers	302	316	128	381**	
Vendors	126	195	303**	073	
Policy and regulation requirements	.726**	.580**	.720	.819**	
Political officials	002	.119	.063	.132	.243**

Table III: Analysis of good governance practices

CONCLUSIONAND IMPLICATIONS

The results from the survey show that a strict procurement process has a positive impact on creating cost effectiveness, transparency, and reducing collusion of vendors. The three human factors play the important role on e-government. Firstly, public officers/managers have negative impact on law enforcement. This may imply that public managers are not committed to good governance practice in e-government procurement. Most respondents rated executives should not receive personal benefits from electronic procurement. Public managers should consider the maximum benefits to the agencies from government procurement. The government must enforce the law and punish the lawbreakers seriously. Next, vendors have a negative impact on reducing collusion among vendors. Vendors should not receive benefits or support collusion among bidders. They should not bribe the officers or the executives of government agencies. Sharing benefits with the officers or the executives of government agencies must be eliminated. Lastly, political officials have no direct impact on the four indicators of good governance but have major impact on the procurement process. They should not be involved in setting the priority needs for procurement and interference the procurement process or receive any gains from government projects, especially having delegations participating in the procurement auctions. The lack of awareness of key factors in good governance practice in e-government procurement represents a great risk to government by itself. E-government procurement is not a guarantor for enhanced governance and reduced corruption. Strong good governance procurement practices needs to be supported from the Thai government. It requires a dedicated policy of strong rule enforcement and penalty to achieve potential benefits from a successful implementation of e-government procurement. Finally, an amendment of more stringent law enforcement for corruption and fraud from government procurement has to be conducted and implemented more effectively.

REFERENCES

Ampratwum, E.F. (2008) The fight against corruption and its implications for development in developing and transition economies, *Journal of Money Laundering Control*, 11, 1, 76-87.

Amit, R. and Zott, C. (2001) Value Creation in eBusiness, Strategic Management Journal, 22, 6-7, 493-520.

Aizawa, Keiichi (2008) SECOND REGIONAL SEMINAR ON GOOD GOVERNANCE FOR SOUTHEAST ASIAN COUNTRIES: CORRUPTION CONTROL IN PUBLIC PROCUREMENT", Co-hosted by UNAFEI the Office of the Attorney General of Thailand, and the UNODC Regional Centre for East Asia and the Pacific, July 23-25, Bangkok, Thailand. Available at http://www.unafei.or.jp/english/pdf/2nd_Regional_Seminar.pdf (accessed November 30, 2011).

Arbin, K. (2003) E-procurement Maturity in Industry, International Journal of Electronic Business, 1, 396-407.

^{**} Sig p < .01

ADB, ASIAN DEVELOPMENT BANK (2004) INTER AMERICAN DEVELOPMENT BANK. WORLD BANK. STRATEGIC ELECTRONIC GOVERNMENT.PROCUREMENT - STRATEGIC OVERVIEW: AN INTRODUCTION FOR EXECUTIVES, Available at

www.unpcdc.org/.../strategic%20electronic%20government%20procurement.pdf(accessed February, 2010).

Almeida, Marcos Ozorio de (2006) Role of ICT in diminishing collusion in procurement, *International Public Procurement Conference Proceedings*, September 21-22.

Ararat, M. and Ugur, M. (2003) Corporate governance in Turkey: an overview and some policy recommendations, *Corporate Governance*, 3, 1, 58-75.

Bedi, K., Singh, P.J. and Srivastava, S. (2001) Government@net: New Governance Opportunities for India, Sage Publications, New Delhi.

Belwal, Rakesh and Al-Zoubi, Khalid (2008) Public centric e-governance in Jordan A field study of people's perception of e-governance awareness, corruption, and trust, *Journal of Information, Communication & Ethics in Society*, 6, 4, 317-333.

Bhatnagar, S. (2003) Administrative corruption: How does e-government help?, Global Corruption Report 2003, *Transparency International*.

Casaki, C. and Gelleri, P. (2005) "Conditions and benefits of applying decision technological solutions as a tool to curb corruption within the procurement process: the case of Hungary, *Journal of Purchasing and Supply Management*, 11, 5-6, 252-259.

Chopra, Sunil, Dougan, Darren and Taylor, Gareth (2001) B2B e-commerce opportunity, *Supply Chain Management Review*, 5, 3, 50-62.

Cox, A. (1999) Power, value and supply chain management, Supply Chain Management, 4, 167-175.

Croom, S. (2000). The Impact of Web-Based Procurement on the Management of Operating Resources Supply, *The Journal of Supply Chain Management*, 36,1, 4-13.

Croom, S. and Brandon-Jones, A. (2007) Impact of e-procurement: Experiences from implementation in the UK public sector, *Journal of Purchasing & Supply Management*, 13, 294–303.

Croom, S. and Johnston R. (2003) E-Service: Enhancing internal customer service through e-procurement, *International Journal of Service Industry Management*, 14, 5, 539-555.

Davila, A. Gupta, M. and Palmer, R. (2003) Moving procurement systems to the Internet: the adoption and the use of E-procurement technology model, *European Management Journal*, 21, 1, 11-23.

de Boer, L., Harink, J., Heijboer, G. (2002) A conceptual model for assessing the impact of electronic procurement, *European Journal of Purchasing and Supply Management*, 8, 1, 25–33.

Deeter-Schmelz, D., Bizzari, A., Graham R. and Howdyshell C. (2001) Business-to-Business Online Purchasing: Suppliers' Impact on Buyers' Adoption and Usage Intent, *The Journal of Supply Chain Management*, Winter, 4-10.

Evenett, S.J. and Hoekman, B.M. (2005) Government procurement: market access, transparency, and multilateral trade rules, *European Journal of Political Economy*, 21, 63–183.

Granados, E. and Masilungan, M.E. (2001) Philippines Pilot E-Procurement System, World Bank: http://www1.worldbank.org/publicsector/egov/philippines_eproc.htm

Hui, W.S., Othman, R., Omar, N.H., Rahman, R.A. and Haron, N.H. (2011) Procurement issues in Malaysia, *International Journal of Public Sector Management*, 24, 6, 567 – 593.

Hardy, C.A. and Williams, S.P. (2008) E-government policy and practice: A theoretical and empirical exploration of public e-procurement, *Government Information Quarterly*, 25, 155–180.

Harris, R. and Rajora, R. (2006) Information and Communication Technologies for E-governance and Poverty Reduction – A Study of Rural Development Project in India, UNDP-APDIP, Regional centre, Bangkok, available at: www.apdip.net/publications/ict4d/empoweringthepoor.pdf (accessed January 18, 2008).

Hasan, S. (2004) Introducing E-government in Bangladesh: problems and prospects, *International Social Science Review*, 78, 3/4, 111-125.

Heywood, J.B. (2002) e-Procurement: managing successful e-procurement implementation, *Financial Times* – Prentice Hall, Harlow.

Holmes, D. (2001) eGov: ebusiness strategies for government, Nicholas Brealey, London.

Iqbal, M.S. and Seo, J.W. (2008) E-government as an anti-corruption tool: Korean Cases, *Journal of Korean Association for Regional Information Society*, 1, 2, 51-78.

Kalakota, R. Robinson M. (1999). e-Business: Roadmap for success. Addison-Wesley, Reading, MA.

Kennedy, K. N. and Deeter-Schmelz, D. R. (2001) Descriptive and Predictive Analyses of Industrial Buyer's Use of Online Information for Purchasing, *Journal of Personal Selling & Sales Management*, 21, 4, 279-290.

Leipold, K. (2007) Electronic Government Procurement (e-GP) opportunities & Challenges, *Modern Law for Global Commerce, Congress to celebrate the fortieth annual session of UNCITRAL*, Vienna, July 9-12.

Neef, D. (2001) E-Procurement: From strategy to implementation, Prentice Hall.

Pillay, S. (2004) Corruption – the challenge to good governance: a South African perspective, *The International Journal of Public Sector Management*, 17, 7, 586-605.

Radics, A.G. (2001) Cristal: A Tool for Transparent Government in Argentina, *World Bank:* http://www1.worldbank.org/publicsector/egov/cristal_cs.htm (accessed May, 2011).

Rai, A., Tang, X., Brown, P., Keil, M. (2006) Assimilation patterns in the use of electronic procurement innovations: A cluster analysis, *Information and Management*, 43, 3, 336-349.

Rotchanakitumnuai, S. (2010) Tacit knowledge sharing for good governance of E-Government Procurement, *The Tenth International Conference on Electronic Business*, December 1-4, Shanghai, China.

Saxena, K.B.C. (2006) Toward excellence in e-governance", *International Journal of Public Sector Management*, 18, 6, 498-513.

Subramaniam, C. Shaw M. J. (2004) The Effects of Process Characteristics on the Value of B2B E-Procurement, *Information Technology and Management*, 5, 161-180.

RanaTassabehji, (2010) Understanding e-auction use by procurement professionals: motivation, attitudes and perceptions, *Supply Chain Management: An International Journal*, 15, 6, 425 – 437.

Wu, F., Zsidisin, G. A. and Ross, A. D. (2007) Antecedents and outcomes of e-procurement adoption: An integrative model, *IEEE Transactions and Engineering Management*, 54, 1, 576-587.

Zsidisin, GA. And Ellram LM. (2001) Activities related to purchasing and supply management involvement in supplier alliances, *International Journal of Physical Distribution and Logistics Management*, 31, 629-646.