

A Study on the Possibility of E-Government Procurement in China*

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Abstract

Purpose – This paper aims to study what is impacting the development of e-Government Procurement in China, the current strategies of developing Chinese Governmental e-Procurement, and to present some measures by which Korea's exporting industry could enter the Chinese procurement market.

Design/methodology – This study is to provide a systematic literatures review on what is impacting the development of e-Government Procurement in China. Hence, based on western research, Chinese literatures are used for this study.

Findings – To penetrate the e-procurement of the Chinese government, the acquisition of government procurement certification is necessary. Secondly, the qualification of "Made in China" is one way to join the market. And finally for Korean companies to enter the procurement, it is necessary to provide products to the public institutions such as universities, hospitals and social organizations and to the state-owned enterprises.

Originality/value – This paper aims to study what is impacting the development of the e-Government Procurement in China, the current strategies of developing Chinese Governmental e-Procurements, and to present some measures by which Korea's exporting industry could enter the Chinese procurement market. These originalities can be expected to give understanding of Chinese e-govenment procurement and insight for strategy for both Korean enterprise and relevant academic circles.

Keywords: China, E-procurement, Export, Market Entry

JEL Classifications: D12, F23, M52

1. Introduction

The development of Information and Communication Technology has triggered radical changes in society. A large number of innovation projects in developing countries have been generated by ICTs, and one e-Government systems. In 2001, the Human Development Report indicated that ICT should be a new partner of development (YEP, 2005). In 2002, the World Bank released an e-Government Handbook for Developing Countries, which has given an insight into economies of developing countries as a mainly an impetus to world development. Hence, powering the government of developing countries via e-Government was urgent (Chaudhry, 2002; YEP, 2005). Meanwhile, the report "Roadmap for E-Government in the Developing World" by Pacific Council also emphasised the importance and significance of e-Government and how to implement e-Government in developing countries (World Bank, 2002).

Moreover, World Summit on the Information Society (WSIS) Conferences in Geneva in 2003 and Tunis in 2005 also discussed how to improve governmental operations by ICT in developing countries (YEP, 2005). ICT gives more opportunities for governmental administration, reduces the cost of operations, and power the government to collect and share

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database information. Further, public services are faster and easier for public citizens, and public citizens are encouraged to anticipate in decision making to improve the relationship between the government and public (Guanghua, 2009).

As the largest developing country, China adjusted the structure and operations of government administration through technology. More and more public services can be delivered faster and easier without the limitations of time and location. The operations of administration are considered a more efficient. e-Government Procurement was one of the outcomes that played a key role in promoting the economy growth.

Government Procurement of the Chinese Central Government was established in 2003, which followed the policies and regulations from the Ministry of Finance of China. The government procurement of goods and services were boosted from RMB 3.1 billion in 1998 to RMB 213.5 billion in 2004, and from RMB 292.8 billion in 2005 to RMB 1.13 trillion in 2011. In 2010, government procurement was 9.4% of the annual financial expenditure (China 2013/2014; Wang, 2011). From the 2006-2020 National Strategy for Information Development, investment on research and development will account for 2% of GDP in 2010, and 2.5% of GDP in 2020. A government revolution is one of the aspects mentioned in the report, which also emphasised a strategy to power the procurement system of e-Government (China government, 2006).

Administration operations are concise and more efficient, and e-Government Procurement was one of the outcomes which played a key role of promoting economic growth. Recently the Chinese government has built the policy and regulations, published the procurement schedule, bidding announcement, successful bid information, expert information resource, and vendor-product information. With constant web-site improvement, the government procurement online market (G to B) system including bid documents download, online price inquiry, online bidding, and online payment is operated by the government. As a result, Korean exporters can easily access the procurement market of the Chinese government, enabling them to explore the possibility of new exports to the government sector in addition to the private sector. For these reasons, the topic of Chinese e-Government Procurement is more significant and useful for Korean enterprises and researchers.

This study provides a systematic literatures review on what is impacting the development of the e-Government Procurement in China. What are the current strategies of developing Governmental e-Procurements in China, what are the barriers to development, and what are the strategies of future development? In order to have a deep understand of the key question, this paper studies what is impacting the development of e-Government Procurement in the current strategies in literatures review. Through this approach, this paper is expected to find strategies for entering e-government procurement in China.

2. Literature Review

2.1. Information and Communication Technology (ICT)

Private Sector and Public Sector of ICT have different characteristics in practices. The private Sector is a vital distribution channel to deliver services but not policies and strategies for e-Government. It does not own the database and information but develops revenue for these databases, and information for business and governments. For e-Government, ICT also provides a network to communicate, share, and interact among different governments to generate social values (Ndou, 2004). It provides information for the government builds a portal for public citizens to interact with government, makes a transparent government, and stabilizes governmental leadership (Chaudhry, 2002).

The barriers of ICT are generated simultaneously with its development. Generally speaking, barriers could be a poor framework or structure, a failed connection with a legacy system, a lack of money, security, and a bad employee training. Specifically speaking on the governmental administration, challenges could be limited financial support, privacy and security of public information and database, cross networking between different governmental departments for sharing information, and the level of acceptability by citizens and consumers.

2.2. e-Government

During the past decades, the internet has changed the power and function of public administration by improving the interaction and transportation of information. There is no authoritative definition of e-Government (Halchin, 2004). However, after reviewing some literatures, it can be summarised as a reformation and innovation using ICTs to redesign or generate a new administration system in order to conduct a better service and connection to businesses and citizens (Meije, 2012; Force, 2003). Moreover, some of the literatures concerns relationship between the governments, customers, and suppliers (Duffy, 2000; Schneider, 2000).

The general classifications are G2C (Government-to-Citizens), G2B (Government-to-Business), and G2G (Government-to Government) which focused on the delivery of services and information (Dwivedi, 2013; Ndou, 2004; Steins, 2002). For example, G2C can be an online communication platform to provide some suggestions for citizens and collect feedback for the government. G2B can be an e-procurement system of government procurement, while G2G can be a database warehouse among different governments. However, more types of e-Government have been developed. For example, IEE (Internal Efficiency and Effectiveness) and G2E (Government-to-Employees) try to adopt the private sector to government such as supply chain management, human resources management, and internal e-Learning (Drew, 2010; Ndou, 2004). G2SC (Government-to-Civil Society Organisation) has been developed as a partner of an open government which aims to build an unremitting mechanism to communicate and provide feedback between the government and civil society organisations (Civil Society Dialogue, 2014; Yildiz, 2007).

Internet has totally changed living and working, and e-Government is one of the outcomes. There are large numbers of benefits summarised from past literatures which, by using technology, a government can increase the effectiveness on sharing database among different organisations or departments, provide a higher level of public service, reduce costs for administration, and empower operators to make better decisions (Jana, 2003; Taipale, 2013). As an environmentally friendly system, it can reduce the usage of the paper, ink, and trees to protect the environment and generate a green office (Lim, 2013). Further, corruption can be decreased with e-Government to develop more transparency and a better relationship between the public and government (Abu-Shanab, 2014; Drew, 2010; Welch, 2014).

Different governments and organisations require different information and databases. The greater the amount, the more the time needed and cost increase. The information and database should be allocated into different levels or categories for utilisation (Lee, 2001). Privacy and security are the second challenge of e-government. When people are enjoying the Internet, information is automatically collected on the network terminal, your email, your payment details, your browse history, and even friends.

As a result, the cybercrime is rampant (Drew, 2010). The third challenge of e-government is to apportion responsibility. The responsibility and ability of different organisations should be explicit and clear, without any overlaps (Lee, 2001; Ndou, 2004). Not only should regulation and policy protect the privacy of the public, but it should also have specific statements of responsibility (Drew, 2010; Ndou, 2004).

Understanding technology is the fourth challenge of practice. Access to a portal should be friendly and easily to use, and the services of the government should be classified and placed logically and clearly on the website (Dawes, 2008).

2.3. e-Procurement

E-procurement has been recognised as a vital part of e-Business, not just ICT (Palmer, 2003). E-Procurement technology includes e-Procurement software, Business to Business exchanges, and purchase alliances, which are used to build an automated data flow, a faster research system for new opportunities, and a balanced and transparent relationship between suppliers and purchasers (Affairs, 2011). The benefits of e-procurement have been summarised as reducing administrative costs, shrinking the duration of purchasing and transactions, decreasing the level of inventory, and flexible integration with partners (Croom, 2006; Pablos, 2014; Viswanthan, 2007). Secondly, it can help participants develop a favourable price and make decisions with better resources (Emiliani, 2000; Tully, 2000). Moreover, e-Procurement can prevent corruption practices and increase the image of the government (Auriol, 2006).

The relationship of suppliers and buyers is changed in an e-Procurement system, which will lead to a new method of communication and integration. However, it may be difficult to match standards (Pablos, 2014; Palmer, 2003). Security is another issue in e-Procurement. The open infrastructure of the internet may discolour information on price and transactions (Arcy, 2012). Moreover, a lack of transparency and understanding of local policies can be barriers as well (Pablos, 2014; Palmer, 2003).

3. The e-Government in China

China decided to reform the Chinese administration from the late 1970s because of bureaucratic problems from the traditional cadre management system. The most important change of the reform was to shift the central planned economy to socialist market economy with Chinese characteristics (Li, 2011). In 1987, a State Information Centre was established as a nation-wide government information system for planning and constructing a State Economic Information System. A State Economic Information System has been developed as a network-based information system which covers all levels of government departments at the state, province, central city levels (Lin, 2003; Qiao, 2003). In 1993, the government adopted Provisional Regulations on State Civil Servants in order to generate a modern civil service system. With this system, personal issues can be addressed, such as job categories, tax payments, and retirement (Liou, 2007).

Since 2002, the e Government in China started implementation. Most implementation projects used the special governmental network to collect and deliver information and databases (Lin, 2003). After joining the World Trade Organisation, the Chinese government has developed further operations and regulations to meet new requirements. Some industrial economy administrative departments have been transformed from the department of the State Council to local governments (Liou, 2007).

3.1. Strategies

China was trying to reform governmental administrations in three ways: transforming government function, reengineering government processes, and improving government

transparency (Thorson, 2005). For a long time, China was managing some issues of enterprises by special departments which ended in inefficiency and abuses of authority. Hence, China decided to separate these functions from the enterprises and reform the government system into G2B and G2G areas using information technology, which also clearly divided the authorities of the central and local government (Thorson, 2005; Zhang, 2002a). Reengineering government processes aimed to improve the efficiency of administrations and operations, and increase communications between the central and local governments (Thorson, 2005). Improving transparency means that the general information should be accessed easily and cheaply, which could help in establishing an honest government and controlling corruption (Bonham, 2003).

China developed two projects to reform the government administration: the Golden Project and the Government Online Project. In 1993, the Golden Project was released to develop a national information system, which included a tax and customs system to encourage the usage of credit and debit cards. There were three main stages of the Golden Project. The Golden Bridge was the first stage, and was an information infrastructure which is allowed data flow. The Golden Card, the second stage, and was widespread economic infrastructure for credit and debit cards to improve the clearing system. The Golden Custom, the third stage aimed to power Chinese Customs with a specific network of administration such as trade, tariff payment, and exchange settlement (Holliday and Yep, 2005; Ma, Chung and Thorson, 2005; Seifert and Chung, 2008). In 1999, the Government Online Project was launched by the State Economic and Trade Committee, which meant the real start of the implementation of e-Government in China, and most this project was trying to build specific networks for the government to collect and share information. A central administrative system was established for the public and enterprises to share the information through the internet. Apart from the central system, government websites were also developed to improve automation and efficiency (Chen et al., 2009; Shan et al., 2004).

3.2. Achievements and Problems in the Early Stage

In 1999, the Golden Project in China protected Chinese Customs from criminal and smuggling problems valued around RMB 0.8 billion, and the tariff payment in 1999 was RMB 0.7 billion higher than 1998 (Zhang, 2002a). From 2001 to 2009, the large scale of card network was reformed. At the end of 2009, the network reached RMB 1.35 million in business, 211 million units of POS equipment, and 18 million ATM machines (Shenzhen Jianhe Smartcard Technology, 2009). One year after launching the Government Online Project, Chinese "gov.cn" domain names increased from 982 to 2,479. At the end of 2002, there were 7,796 gov.cn domain names (Yan, 2003). From the 16th Survey Report of the Government, there were more than 19,000 gov.cn domain names by 2005 (Zhang, 2006). Even as one of the main developing countries, China has faced barriers in the progress of generating an e-Government system.

China used to focus too much on reforming the central government and implementing change with a top-down approach, and a weak legal system also dragged the reformation backward (Wang, 2010). A successful e-Government system is comprised of the knowledge of technology, financial support, and human factors (Liou, 2007). Due to the enormous popularity and territory, it was difficult for China to develop a full range of public service systems. Most e-Government systems are separate. For example, some specific e-Government systems can only be used by government employees in specific departments, while some other e-Government systems can only be used to serve public citizens.

As a result, the information and databases are not shared and altered directly and

automatically among different governmental departments, and integration and connectivity between the government and public citizens are actually meaningless (Li, 2011; Zhu, 2009). Further, the weakness of the legal system did not provide good protection for information security and government transparency. Information security should embrace knowledge of IT infrastructure and related policies, regulations and rules. The rapid economic development of China demonstrated that China has a sufficient financial ability to support an IT revolution; hence, the legal system and policy loopholes became key problems (Liou, 2007; Zhang, 2002).

3.3. Recent Development

In Chinese government procurement, a new bidding system has been developed. An online auction is a new leading government procurement scheme that can increase purchasing efficiency, reduce purchasing costs, and increase transparency. This is a market with almost unlimited possibilities since it ensures fairness and transparency in spite of high entry barriers of tough competition. On-line auctions are generally comprised of the government setting of a price cap and applying companies offering the lowest price, and this scheme is frequently used among large-scale government and enterprise procurement projects. In the case of online platforms, simultaneous procurement announcements are made to online stores selling comprehensive products on large online platforms, operated by the government, so that various products can be collectively purchased.

Because of the high-speed development of information technology and the internet in China, and the integration of electronic procurement, electronic bidding tools have developed significantly over the past few years. China's government also introduced policies to encourage the introduction of e-sourcing in the procurement bidding process before June 30, 2017 (Chen, 2017).

In China, more than 500 local companies provide applications based on internet procurement platforms, mainly starting from E-Auction, expanding to end-to-end procurement with different models, such as demand planning and procurement project management, and the vigorous development of China's "Internet +" procurement software has brought new opportunities and challenges to procurement leaders in China. Exactly how to utilize the advantages of these "Internet +" procurement software systems, and help enterprises to realize the maximum benefits of procurement, will become more and more important.

In examining the regional procurement of imported goods, Shenzhen which was selected as the '2015 National Government Procurement Invention System', has simplified the process of government procurement in importing inspections and noticed medical equipment, education and scientific research items worth less than 500,000 yuan.

Shandong Province announced 'The importable products listing system by the government procurement (2014)' which allows the importation of various equipment such as office machines, sound and imaging effect equipment, TV broadcasting and movie equipment, fire-fighting equipment, experimental materials and medical equipment and simplifies the process of procurement (Lee Je-Hong, 2018).

Zhejiang Province also announced in importable products list by government procurement', and implemented the listing system in the field of medical facilities, environmental measurement, education and medical facilities, education and scientific research.

As shown in the table, Chinese government procurement has been increasing, and Chinese e-procurement is also expected to increase.

Table 1. Chinese Government Procurement Market

(Unit: 100 million yuan)

Year	Total purchase	Proportion of government's financial expense	Proportion of Chinese GDP
2004	2,136	8.00	2.00
2005	2,928	8.69	1.60
2006	3,682	9.11	1.80
2007	4,000	9.40	1.90
2008	5,991	9.60	2.00
2009	7,413	9.80	2.20
2010	8,422	9.40	2.10
2011	11,333	10.40	2.40
2012	13,978	11.10	2.70
2013	16,381	11.70	2.90
2014	17,305	11.40	2.70
2015	21,504	11.70	2.70
2016	25,731	11.80	2.80
2017	32,100	24.80	3.90

Source: Chinese Government Procurement Yearbook (2016).

4. Impact Factors and the Current Case of Chinese E-Procurement

After the rapid development of e-Government and e-Business, China paid more attentions on e-Government Procurement development. E-Government Procurement has brought several benefits to China, such as improving efficiency, reducing the cost of operations and time, balancing the relationship between suppliers and buyers, reducing corruption, and standardising the government behaviours. The Clean Production Law of the People's Republic of China was released in 2002, which intended to reform the Government Procurement System into a "Green" system (Qiao and Wang, 2011).

In 2003, the Asian Development Bank progressed a China's Readiness for Electronic Government Procurement Survey which indicated that e-Government Procurement has increased rapidly and attracted more investment and attention from the public (Wang, 2011). At the end of 2008, more than 60% of the government procurement departments of China were able to release procurement regulations, procurement announcements, and procurement results online. 57.4% of the departments allowed the download of tender documents, and 30% of the departments implemented an e-tendering system. The eGovernment Procurement System can follow procedures from finance budget, approval, procurement, payment, and information announcement to expert management, supplier management, market management, e-tendering, online tracking, and online supervising. Some of the big cities can even operate the bidding procedure online (Lv, 2013).

4.1. Impacting Factor

4.1.1. Characteristics of e-Government Procurement in China

The characteristics of e-Government Procurement in China can be summarised as follows:

Firstly, Website. From the central government to different levels of local governments, websites are the channel to release announcements, information, procurement procedures, procurement results, and supplier information. Some websites even have a specific catalogue to discuss the trends of international procurement. All statistics of different levels of government are in the same application from the ministry of Finance, which made a basic collection database.

Experts are recommended by themselves or related authorised organisations. These experts provide significant advices during the procedure of tending which helps the government in making better decisions. All export information can be found on the website and they also have a specific measurement approach.

Government procurement has a complicated procedure, spectacular references, and documents. In order to implement a green office, e-government procurement has been developed in recent years. For example, the Shenzhen Government Procurement Centre implemented an online tendering system in 2005. All documents and references can be downloaded online, and tendering documents are allowed to be uploaded by the suppliers with a password. The Centre downloads all documents after the deadline, analyses the documents with experts, collects and stores the database on the specific platform with a specific format (Lv, 2013).

4.1.2. Legal Framework

“Temporary Provisions on the Initiation and Protection of Socialist Competition of October” in 1980 was the first governmental document on public procurement in China. In 1981, as one of the pilot reform cities in Guangdong Province, Shenzhen was the first started to implement open bidding (Chou, 2006). According to the economic system of China, the government has played a key role in boosting market economy growth as a purchaser in social and economic administrations (Geng and Doberstein, 2008). Government procurement was not included as a part of the pre-reform phrase (1949-1978). However, after launching economic reform in 1978, economic decisions at different levels of governments have taken important responsibility for market growth (Huang and Duncan, 1997; Wang, 2011).

The current legal framework is operating under the Tendering Law and Government Procurement Law. The Tendering Law was officially released and became effective in 2000, and classified tendering entities and tendering agencies. According to the Tendering Law, opening tendering and restricted tendering are ways of Government Procurement in China (Bovis and Hu, 2011). The Government Procurement Law of China was promulgated in 2003 as the first national procurement law in China to establish a transparent and integrated government procurement system, which indicates that government procurement is an action of purchasing goods, services, and work with fiscal financing by the level of government and organisations.

Methods of government procurement are also classified in the Government Procurement Law as public tender, private tender, competitive negotiation, signal source procurement, inquiry, and others (Wang, 2011). Moreover, the Implementation Regulation of Government Procurement Law was released in 2010 by the State Council of China to support the two national laws. Some local government rules started earlier than the national laws. The Shenzhen Special Economic Zone has promulgated its own government procurement regulations and rules in 1998, which required public bidding when the purchase contracts were over RMB100,000. The Beijing Municipal Government published The Measures of Beijing Municipal Government Procurement in 1999 (Congress, 2014).

4.1.3. WTO Guidelines

After joining WTO, China promised to open domestic Government Procurement Market

to foreign suppliers until 2020 and provide more government transparency. Hence, more and more domestic investment rules and environments will be impacted by the international rules and environment. China will be closer related to the international market, which requires a reformation of the Government procurement system to guarantee the benefits and challenges the competition of globalisation from the domestic and international market (Chou, 2006; Rothery, 2003).

However, it is not easy for China to follow all the rules of the WTO. Firstly, the WTO required that tender notice should be clear and formatted in the official languages of the WTO, but Chinese is the only language of the government procurement system in China. Secondly, the GPA from the WTO displays that state-owned enterprises are included in the procurement entities. However, this was not included in some local governments in China, such as Shenzhen. Thirdly, all the levels of governments in China may have different procurement policies, and the Central Government Procurement System was not connected with all local governments. For example, in Shenzhen, the Government Procurement Centre is a subordinate unit of Shenzhen Municipal Finance Bureau, however, the database systems of these two are different and not connected. Hence, when they need to share or collect some database from each other, it will cost them more time and reduce the efficiency (Chou, 2006; Rothery, 2003).

4.1.4. Guanxi (Illicit Relationship)

Guanxi is playing an important role in the society of China, and decides many of the issues in China instead of the rules or regulations. There is a large amount of literature on Guanxi, which has impacted every aspect in China for more than 2000 years, and most of the studies are focusing on how business is affected by Guanxi. The discussion of Guanxi in this paper is not the same as Confucianism which indicated a harmony and loyalty relationship in society, but a relationship under the table. With this kind of Guanxi, the government administration and business transaction are under the sway of corruption. In the past government procurement system, the bidding and tendering processes were controlled by the relationship between the suppliers and government operators.

Hence, government finance was used in unethical activities and the efficiency of the government administration was unproductive. Different prices in government procurement and the general market is a platitude in China. Basically, the product price for government procurement is always higher than the price for a general market business, which is a result of Guanxi and corruption. E-government procurement is the main approach to increase the efficiency and transparency of government administrations. Enforcing the structure of law to maintain conflicts during the government procurement is auxiliary to control corruption. (Chang, Wang and Chiu, 2008; Millington, Eberhardt and Wilkinson, 2005; Zhang and Zhang, 2006).

4.1.5. Environmentally Friendly

E-Government Procurement is a relatively new issue in government administration in China. As one of the main economic entities in the world, China has realised that government procurement should be environmentally friendly by saving the resources and protecting the environment to develop a sustainable government, which includes green products, green procurement, and green technology. Developing sustainable government procurement can benefit the environment and economy. The competition of green products and service can be increased and the price can be reduced, which can encourage and innovate the suppliers to develop more environmentally friendly products and services.

Hence, in order to build more a sustainable government procurement capacity, the following approaches are identified: establishing a friendly legal environment, enhancing green procurement leadership, promoting communication and integration between suppliers and procurement departments, updating standards of green procurement, providing policies of tax preferences to suppliers to encourage the innovation of green products, and using technology to develop and implement an e-government procurement system (Schwerin, 2012).

Because of the technical effect of e-Business, the marginal cost of information integration is on the verge of zero, which can decrease the procurement cost (Lu, 2014). There are three important laws in China supporting green government procurement. The sixteenth article of the Clean Production Promotion Law of China in 2002, the ninth article of the Government Procurement Law of China in 2003, and the first article of the Circular Economy Promotion Law of China in 2009 required all levels of government to consider environmentally friendly products to save energy and resources. Meanwhile, all levels of governments should promote green procurement among public systems (Qiao and Wang, 2011).

4.2. Shenzhen

Shenzhen is the first city that launched an e-Government Procurement System in China, and it is the one that can reveal the outcomes of the reformation. The Government Procurement Centre was established in 2002, and is ranked as a leader in China. At the end of 2012, the Shenzhen Government Procurement Centre has operated RMB 313.99 billion of procurement, which saved RMB 30.86 billion from the finance budget (Centre, 2012). This centre is co-operated with 26,610 suppliers, including 16,432 goods suppliers, 8,757 project suppliers, and 11,535 service suppliers (Centre, 2014). Shenzhen has adjusted in order to follow the GPA, which can be summarised in 4 points.

4.2.1. *Ensuring the Scale of Government Procurement*

GPA requires the market of the government procurement should be decided by procurement entities and procurement budget, not procurement methods. Because of the dispersed market and scale, Shenzhen has adjusted procurement finance and methods. When the procurement budget is under 200 thousand RMB, the institutions or the departments can purchase the items by themselves from the specific product and service list. Otherwise, procurement should be generated by the Government Procurement Centre.

4.2.2. *Ensuring Consistent Finance Budget Achievement*

Under the background of state laws, Shenzhen has developed some local regulations which are suitable with the local situation.

4.2.3. *Classifying Responsibilities*

As a subordinate department of the Shenzhen Municipal Finance Bureau, the responsibilities and obligations of the Government Procurement Centre should be distinguished from the Shenzhen Municipal Finance Bureau. The intersection will arouse more divergence and difficulties during operations.

4.2.4. *Centralising the Government Procurement Platform*

Basically, different local governments are using different procurement system which are not convenient to connect with each other to share databases. Establishing a centralised

platform for the database and information is more and more urgent and necessary (Centre, 2014).

As an innovative leader in China, Shenzhen is always trying and developing new policies and approaches for administrative operations. Government procurement has been the focus of attention in recent years. Most of the government developed an electronic platform for government procurement for supplier management, procurement online announcements, and latest information releases, but not an online transaction system. Shenzhen is trying to implement an e-Commerce website for government procurement. All the suppliers will indicate products or services on the website after the authorisation of the Shenzhen Government Procurement Centre, and buyers can select items on the website. As mentioned before, when procurement budget is under RMB 200 thousand, buyers can make a decision by themselves without e-tendering or e-bidding. With this website, they can finish purchasing online without any face to face negotiation.

5. Conclusion

E-procurement through online bidding such as online auctions and online platforms is a new procurement method promoted by the Chinese government, which can improve transparency while improving purchasing efficiency and reducing purchasing costs. This is a growing proficient market of excessive competition and high entry barriers, but its fairness and transparency are guaranteed. Online auctions are frequently used in large government and corporate procurement projects in a way that the procurement entity sets the highest price limit and awards the company that offers the lowest price. A large online platform operated by a government has the advantage of being able to offer multiple products comprehensively by simultaneously posting advertisements to an online store selling integrated products.

To penetrate this Chinese government e-procurement, Korean enterprises should focus on three aspects (KOTRA, 2015). Firstly, the acquisition of government procurement certification is necessary. Products distributed in China require certification based on product classification. In the case of goods, a CCC certificate is required, and for medical devices, medical device production permits are required. Government procurement bids also asks for these basic certificates from bidders. Certification is one measure of the ongoing policies promoting CCC certified products, priority purchases of environmental products, and compulsory purchases of energy saving products. Currently, most of the central and local government internet bids are open to companies awarded a CA certificate. Therefore, companies should obtain a CA certificate first to explore the China procurement market.

Secondly, the qualification of "Made in China" is one way to join the market. Since China's "government procurement law" allows priority procurement rules for domestic products, the use of the domestic companies is promoted by processing Korean semi-finished products to finished products in China. This needs to be confirmed by the relevant organizations as to the specific processing percentage of semi-finished goods to be eligible to certify as "Made in China". Thirdly, local Chinese companies with excellent capacities should be surveyed. It is almost impossible for foreign companies to directly enter the government procurement market because of the uncertainty of the Chinese government procurement process.

However, Korean companies sell and provide products to local companies to indirectly enter the government procurement market. In 2014, the size of China's public procurement market was estimated at 20 trillion yuan, of which 13 trillion yuan is the portion of state-owned enterprises which is quite open, and of which 1.7 trillion yuan is for the government procurement market. Also, there are possibilities for Korean companies to enter the pro-

curement market by providing products to public institutions such as universities, hospitals and social organizations and to state-owned enterprises.

Therefore, based on these three strategies, enterprises should cooperate and correspond to growth of e-procurement market in China, which should lead the Korean industry forward.

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