Optimization of “One-stop” E-government Process Based on E-government Platform

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Abstract—With the continual development of information technology, building an E-government system which is adapted to actual conditions of China is increasingly becoming an important issue. In this paper, by comparing the electronic “one stop” service platform and the traditional model of government, the author analyzes how to use the “one stop” service platform to optimize the path of China’s E-government processes. It specifically includes: to implant the part of authentication to “one stop” service platform, to create a stand-alone server to establish a separate e-mail system for the government, to build a more complete system of making government affairs public and electronic databases on the “one-stop” platform with the spirit of servicing and being responsible for citizens, to aim at providing a good environment for businesses and citizens under the condition of market economy, to build a system of unified tax and monitoring of the whole society on the “one-stop” platform. According to these, the paper concludes that based on “one-stop” platform, the process of E-government would be optimized.

Keywords- E-government; E-government platform; one-stop; the optimization of process

I. INTRODUCTION

It’s been more than ten years since the theory of E-government was put forward and its process of institutional innovation was started at home and abroad. In recent years, the attempt of setting up the “one-stop” E-government and related ideas are taking shape because of the application of information technology and the concept of “service-oriented government”. From the perspective of E-government, Wimmer and Traumuller emphasize that “rebuilding the one-stop service can be deliberated from the view of knowledge management”, [1] favoring the back-end study of one-stop management. Lapre proposed “a hybrid economic mode of electronic public service considering the participation of the private sector”, where the government either outsources the whole service project to the private sector (in this case a mode of private-public division of labor), or allows the private sector providing the service to the public as a service broker (in this case a mode of private-public competition)” [2]. Thus this is a “multi-fore grounded” and “one-stop” organization arrangement. This view introduces a mode where the public and private sector participate at the same time. Kashan and Mason argued that under the current economic crisis, some disadvantaged groups are suffering from low efficiency of public service (i.e. food stamps, Medicaid, child care assistance), and in order to provide a better service to the public and save the cost of public service, a ‘one-stop’ service platform is necessary with a powerful identifying function, to ensure that only those of a certain financial situation, living condition, income level can log in such a platform to get relief or service. [3] This is actually an optimization of the “one-stop” service, and this identifying program is getting closer to a “one-stop” platform.

Currently, most scholars’ research on the “one-stop” E-government is based on the actual situations of their own country. For example, the government of China is transforming to the “service-oriented” government in order to resolve some long-existing problems such as organizational overlapping and asymmetry of informational exchange. The emergence of the 3G technology prompts several scholars of China to discuss how to apply it to electronically rehabilitate the complex government system. He Qi claimed that 3G technology applied to E-government will prove to be very effective to solve the problem of informational asymmetry among government departments. [4] E-government is currently mainly based on the web portals of government, [5] which primarily release government information instead of providing other public services. In some communities, however, as a result of a “one-window” rehabilitating of the electronic public service, a system of comprehensive management of district-street-neighborhood information has been established to provide citizens with efficient public service, as exemplified by Zhao Jianhong’s case study of Xicheng District, Beijing [6]. However, the construction of “one-stop” E-government should also learn from the advanced experience from other countries. Combining some relevant E-government theories and the actual situation of China’s E-government, this paper holds that we can optimize China’s E-government process from the "one-stop" service platform itself, so that an E-government platform can be constructed and adapted to China’s specific conditions.

II. COMPARISON BETWEEN TRADITIONAL GOVERNMENT AND A GOVERNMENT MODE BASED ON "ONE-STOP" ELECTRONIC PLATFORM

Traditional government affairs mode needs every citizen to every government department reception or front desk for his services which is required. The same is generally true of enterprise. In China, the common people always have difficult experience of “obtaining valid official seal”. There is a famous saying goes: “all lay load on the willing horse”. This situation

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often occurs in the Chinese government departments. For a business, people have already run many departments, because the agency often works low efficiency or business too big to revolving. People can't get permission. Consequently, the effectiveness of this service or business makes the great damage of the rights and interests of citizens. From another hand, to obtain business license or approved import and export goods, the enterprise often faces this situation or encounters this problem. Citizens run into buck-passing. Disputes over trifles, procrastination, frequently become plain home cooking in China. However, under the "one-stop" service platform, in the treatment of electronic government affairs, various government departments can take relevant business flow through the electronic procedures which is applied to the "one-stop" electronic platforms. Citizens or enterprise will own declaration, application to the "one-stop" platform; relevant departments enter the "one-stop" deal with these business platform. Formation the virtuous cycle of electronic approval, program compaction, E-government computerization processing, greatly improve the efficiency between the citizen and government.

III. E-GOVERNMENT PROCESS OPTIMIZATION PATH BASED ON THE "ONE-STOP" PLATFORM

In 2008, Chinese E-government development situation analysis report has also pointed out: our government websites seriously need to improve service. For the rest, we also need to improve is interaction, work, participation and the disclosure.[7] So how to use the above methods to E-government optimization process. The author views the optimization process must first based on a "one-stop" or even "one station" service platform of E-government.

A. Adding email system to the one-stop service platform

All over the world, for the practice of E-government, almost join E-mail functions. In China, the government departments usually create the appearance which is called “And nations”. The government's functions are often so overlap for this reason and information exchanges often appear blocking. After SARS in 2003, because our country had no experience of dealing with such large public crisis events, so we lost at that environment. Firstly, the government departments had the difficulties in information communication. All these caused some negative effects of media. If we can build a one-stop platform that covers all levels of government and through which we can receive and send e-mails, we can effectively avoid this kind of circumstance happening again. The government can invest a “one-stop” platform and construct an exclusive E-mail server. This server cost should not be too big, have independent firewalls and antivirus function while the platform also have the function of identification. This will function in those government departments or social sectors, which usually login the government portal website. The national information security will also require establish an exclusive mail server on "one-stop" service platform. The government department or social sectors send or receive E-mail only between inside nets, which strict assurance physical isolating the internet by this independent and exclusive server at the same time. Government departments emailing, processing through the "one-stop" platform, Sometimes will transmit sensitive information contents, secret or confidential information. Therefore, we can join “Confidentiality level” which is running on independent server. Different levels of government departments can easily send E-mail with encryption (as shown in Figure 1).

![Figure 1. Email sending/receiving through the platform](image)

According to this, it is convenient for government of digital information preservation. Encountered serious financial problems, American Boeing design a virtual machine instead of physical machine to electronic operation mode by their network engineer. Through the “one-stop” platform makes the server can reference the company cost saving mode. Local governments or government departments of the lower levels use internal virtual machine which realizes the docking on "one-stop" platform, sending or receiving E-mails. High levels of government departments or ruling department, the department to handle large mail all can use powerful independent of physical machine and with the “one-stop” platform, email. For the other hand, the advantages of using virtualization server are not real the integration server integrating. The real integration is on the "one-stop" service platform. Using virtualization server can better adapt to Chinese levels governments, local governments wide distribution characteristics. When various server contact joint with “one-stop” service platform, still can add independent initiative email server. By this function, government departments can read a space which includes letters from “one-stop” initiative email server. For example, the National People's Congress passed a new law, which needing all departments to understand law spirit. Then, using active server can send mail to different departments which includes various information of this law. In conclusion, this process is meaningful to accelerate the establishment of the legal and harmonious society.

B. Establishing an improved system to make government affairs public as well as an Electronic Database on the one-stop service platform

Although the structure of managing and dealing with the state affairs based on E-government in other words, the development of theory according to this aspect, already has a prototype, because of the effect of some objective factors, such as the cutting up links among departments and regions in the administrative system, the relative lag of laws and regulations, the unperfected of standard specification, the system of E-government information remains lots of shortage, for instance, the isolation of information, the difficult of collaboration, the inconsistent of data, repeated construction and so on. Seen from the current development of information technology and E-government, China also needs to establish a “one-stop”
service platform owning the core of service, on which the citizens can easily realize the supervision and interaction with the government. While the government is supervised by citizens and have an interaction with them, it can concentrate a lot of E-government information to the “one-stop” platform. Different departments have different government affairs. Under the function of supervision mechanism; the relevant government departments release their own information to the “one-stop” platform. Adding the columns of government departments and social sectors to initial design of the “One-stop” platform, as well as accessing the advanced retrieval tool, can be convenient to query and supervise the government work (as shown in Figure 2).

![Figure 2. the supervision and sharing mode on the platform](image)

All government departments’ verification link of work permit before the collection of E-government information can also avoid the problems of coordination difficulties, repeated work and so on. Because such a “one-stop shop” circulation pattern, in turn, will promote all the government departments to have well-defined duties and functions, clear division of work, rapid response, and orderly coordination. The law of citizens supervising the government is according to article II of our current Constitution of China. Article II states that: “All the power belongs to the people in the People’s Republic of China …The people administer state affairs and manage economic, cultural and social affairs through various channels and in various ways in accordance with the law.”[8] Setting up a more perfect system of making government affairs public on the “one-stop” platform also conforms to requirements of the Constitution of China. The collection and classification of E-government information is also a kind of resources integration, so how to effectively organize the resources can become the guiding ideology of establishing the “one-stop” service platform. Through establishing a classification catalog system about E-government information resources on the “one-stop” service platform, different departments and various organs can efficiently find their own classified catalogue after logging in the catalog, and systemize their own E-government information and resources, so that the citizen will be convenient to query and supervision, and the departments owning business overlapping can consult and share the information with each other.

C. Government purchasing and bid inviting on the “one-stop” service platform

“The enterprise must master the resources to create wealth, in order to achieve the aim that it can create a customer. Consequently, one of the important management functions of enterprise is to make effective utilization of all of the resources to create wealth.”[9] Drucker maintains that if the enterprise can make effective utilization of most of the resources of creating wealth, it will have a high probability to make the enterprise’s profit, in other words, contribution values come true. Therefore the enterprise using the “one-stop” service platform to cope with the competitive bidding, sealed bidding and so on selected and purchased by the government, is also a kind of means to make effective utilization of resources. Especially with the development of market economy and information technology, this method may be used more and more by the enterprise. The definition of government procurement, according to the government procurement law put forward in 2002, is a behavior that the state organs, public institution and incorporations at all levels use the financial fund to purchase, or intensively purchase cargo freight, engineering and service within the catalog or beyond the standard of limited quantity of purchase. At present, our government implements the government purchase mainly by manual operation. But from the view of electronic commerce, it will be a new trend for the current development of government procurement that the government information, commercial information, capital flow and part of goods flow will come true (as shown in Figure 3).

![Figure 3. the interaction between enterprise and government on the platform](image)

In order to create a convenient “one-stop” service platform for the public, we can start with the government looking for customers, and then do the negotiation, order payment (receive) online, invoicing and up to the electronic customs application, tax revenue and so on. To achieve such a complete “one-stop” service platform requires the participation from numerous aspects, as well as the technical support. For example, except the buyers-government and sellers-enterprise, the participation from the banks, other financial institutions, government agencies, authentication institutions and distribution center will be in favor of achieving such a complete “one-stop” service platform. But when these departments operate on the “one-stop” platform with each other, they can’t face with each other in physics. So the whole process and is no longer the republication of the ordinary activity of physical level. Not only the application of the technology of data encryption and electronic signature on the “one-stop” platform, but also the adjunction of the precondition of electronic banking and electronic payment on the “one-stop” platform, make the government procurement which is often regarded as a vast program become simple and orderly. From the perspective of enterprise, in order to access to the government approval to make the government collect and accept the information of their own on the “one-stop” service platform, the enterprise which copes with the quotation and competitive bidding of the government procurement on
“one-stop” platform, usually does something of the enterprise itself, for example, improving the efficiency and the quality of product, costing the cut, strengthening the image of enterprise, in order to obtain the accept from the government, survive on the “one-stop” service platform, and get a big contract cooperating with the government for a long period of time. The platform itself can also identify the size, level and market competition of the enterprise through a set of stated standard of procedures, and look for the cooperative partners automatically through the information database of enterprise. Under the background of current economic crisis, the Chinese government not only needs to expand domestic demand to stimulate the growth of economy, but also needs to respect the market rules so that the government will provide a more convenient service. Dealing with the commercial relationship between the government and the enterprise on the “one-stop” platform can save a lot of time, improve the efficiency of the government, and at the same time improve the production efficiency of the enterprise. When the enterprise login the link of sealed bidding and the government procurement on the “one-stop” platform, the tache of authentication and the verification of government can avoid the unfair phenomenon of cutthroat competition, such as “rent seeking”, “rent created”, and so on.

The taxation is the basic source of income for one country. If the system of tax-reported and tax-paid of one country is unobstructed, and the monitoring system is perfect, the country would have a good level of national economy. If we establish such a system based on the “one-stop” service platform, it can greatly improve the efficiency. Taking the Internal being Service of American for example [10], the interface of the whole site is rather simple and clear, and the integration of resources oriented the “service” is just in place. In this website, the interface induced by “I need……”is extremely easy and convenient. This website provides plenty of tax services, such as “Get a taxpayer ID Number”, “Set up a Payment Plan”, “Change My Address”, “Find Form & Publications”, and so on. Such website can be regarded as the prototype of “one-stop”, and it is worth for us to learn. The mode of establishing websites oriented by the service has totally express the government concept based on “service the citizens” (as shown in Figure 4).

![Figure 4](image_url)

With respect to this, China can follow their practice to establish a complete “one-stop” tax platform. It can also make the supervisory departments successfully login to the “one-stop” platform using the key technology to supervise the enterprise or citizen’s actions of tax-reported and tax-paid, different levels of the tax authorities, such as the State Administration of Taxation, Internal Revenue Commission(IRC of provincial-level, Local Taxation Bureau(LTB) of provincial-level, IRC of prefecture-level, LTB prefecture-level, IRC of county –level, LTB of county –level, have different levels to access to platform, and it can carry out the tax supervision of different administration areas.

IV. CONCLUSION

“One-stop” E-government platform to optimize the government affairs is a relatively new theory. Along with the development of information technology, electronic government will continue to mature. This paper considers: identity verification is from information security Angle; the establishment of a more perfect openness system and electronic databases is from responsibility for the citizens; making the unified social system of tax-reported and tax-paid is from the spirit of market environment; Public or bidding can take this spirit. However, if we want to optimize the government affairs by electronic procedures, we should use the predominant idea of “one-stop” platform. Only by constantly strengthen the concept service-oriented government and efficiency of administrative, through “one stand” platform, we would constantly optimize the E-government process and political legitimacy by electronic procedures.

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