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Public-Private Partnerships for E-Government Services: Lessons from Malaysia

Maniam Kaliannan
Faculty of Administrative Science and Policy Studies
Universiti Teknologi MARA
Email:
maniam@salam.uitm.edu.my

Halimah Awang
Faculty of Economics and Administration
University of Malaya
Email:
halima@um.edu.my

Murali Raman
Faculty of Management
Multimedia University
Malaysia
Email:
murali.raman@mmu.edu.my

Abstract: Implementation of e-government is seen as a tool to improve government service delivery to citizens, businesses and within government agencies. The benefits could be more transparency, greater convenience, less corruption, revenue growth and cost reduction. However, lack of financial resources, and low levels of skills and limited capacity of governments are some of the main obstacles faced in pursuance of e-government nationwide. The introduction of Public-Private Partnerships (PPP) is seen as a solution to overcome many of the obstacles and challenges faced by governments in realizing the objectives of e-government projects. PPP model is expected to increase opportunities for both the public and private sectors to serve their customers more effectively and efficiently. The main aim of this paper is to explore the need for PPP in e-government service delivery. This is done by discussing some success stories and looking at lessons learned by the Malaysian government to serve the stakeholders better in line with its vision and mission.

Keywords: public-private partnership, information, communication, technology, e-government

JEL classifications: H83, L86, L88, L96

1. Introduction

In the fast globalizing world economy of today, governments the world over are recognizing the importance of Information and Communications Technology (ICT) in development. An increasing number of Electronic Government (e-government) initiatives are being employed to improve the delivery of public services to the people, and to tap the potential synergy from the interaction between new technologies, an educated population and an enabling environment for the attainment of knowledge-based economies (Ramlah *et al*., 2007; Murali *et al*., 2007; Lawson-Body and Miller, 2006; Ebrahim and Irani, 2005). The waves of e-government are rising through

public organizations and public administration across the world. More and more governments are using ICT, especially Internet or web-based networks, to provide services between government agencies and citizens, businesses, employees and other non-governmental agencies (Zaharah, 2007; Ndou, 2004).

The Malaysian government has envisioned a technologically advanced society and implicitly, a technologically enabled government through its Vision 2020 (Hazman and Ala-aldin, 2000). The move towards a digital government is progressing slowly along the government-to-government (G2G) route and also along the government-to-citizen (G2C) and government-to-business (G2B) paths. Alongside the launching of the Multimedia Super Corridor (MSC) in 1996, the government has lined up several flagship e-government projects namely; Project Management System, Human Resource Management Information System, E-procurement and General Office Environment intended to transform the government from the paper-based, un-integrated islands of agencies and departments to an integrated and networked government.

Over the past several decades, governments have turned increasingly to PPPs as one means of financing and maintaining infrastructure and providing public services in the face of budgetary challenges (Center for Democracy and Technology, 2006). Recently, this trend has extended to e-government. PPP can broadly be defined as "partnerships between the public sector and the private sector for the purposes of designing, planning, financing, constructing and/ or operating projects which would be regarded traditionally as falling within the remit of the public sector" (OECD, 2002). PPPs can and do take a number of forms but essentially they entail a sharing of responsibility between government and the private sector (Sandoz *et al*., 2008). They are widely used for the provision of infrastructure such as roads and bridges but have also been used to provide other infrastructure including schools and differing facilities. A key argument of proponents of PPPs is that they enable different levels of government to provide infrastructure more quickly and cost effectively than more traditional funding models.

This paper discusses the implementation of e-government initiative in Malaysia as one of the Multimedia Super Corridor's (MSC) Flagship projects. The next section will highlight the country's experience in PPP and its relevance to e-government projects. The paper also presents some case studies of e-government projects which were implemented using the PPP model. The last section discusses the *e-perolehan* project and the application of PPP and proposes the way forward to adopt a PPP model in the context of Malaysian e-government projects. The paper is based on secondary data and is, therefore, descriptive in nature. Information was collected based on documents published by other researchers as well as government official documents. This article

focuses only on PPPs in providing e-government services even though there are other applications such as Public-Civil Society Organizations (Public-CSOs) partnerships.

2. Perspectives on Public-Private Partnerships

PPP provides a unique opportunity for public agencies to partner with private organizations on government initiated projects.

The key features of a PPP infrastructure have been identified as:

- a private partner investing in public infrastructure and providing related non-core services.
- the government retaining responsibility for the delivery of core services.
- the government and private party working together under long-term arrangements.

The use of PPPs entails changes to the role of government. This often entails a shift from being the supplier to the buyer of services. A significant feature of the PPP approach is the allocation of risk to the partner, that is, a private or public institution most able to manage that risk. For example, a public agency would be responsible for environmental clearance, conceptual engineering, agency permitting and any necessary enabling legislation while the private partner is most readily equipped to handle the financial risk due to the ability to manage construction procedures, incorporate technological innovations and attract financial investment capital (Australian Government, 2002). In addition to the risk sharing between the partners, there are also other reasons governments are attracted to PPPs. They include the potential for value for money, early project delivery, gains from innovation, obviating the need to borrow to finance infrastructure investment and access to improved services.

The last few decades have witnessed the application of PPP within the implementation of e-government services. The maturing of ICT and its dominance since the dawn of the century has enabled public agencies to work together with IT partners in the private sector in providing e-services to citizens, which complements the traditional mode of the delivering these services by governments to their stakeholders.

The e-government applications require new business processes and also collaboration across different government entities. Therefore, given the vast experience in dealing with e-business and e-commerce, private partners can help governments worldwide deliver better services to their citizens. In addition, governments today are moving towards results and performance-oriented measurement. For all these reasons, it is timely for governments to partner with private sector where the former can lay the foundation using open platforms through private partnerships and build upon it (Snabe, 2005).

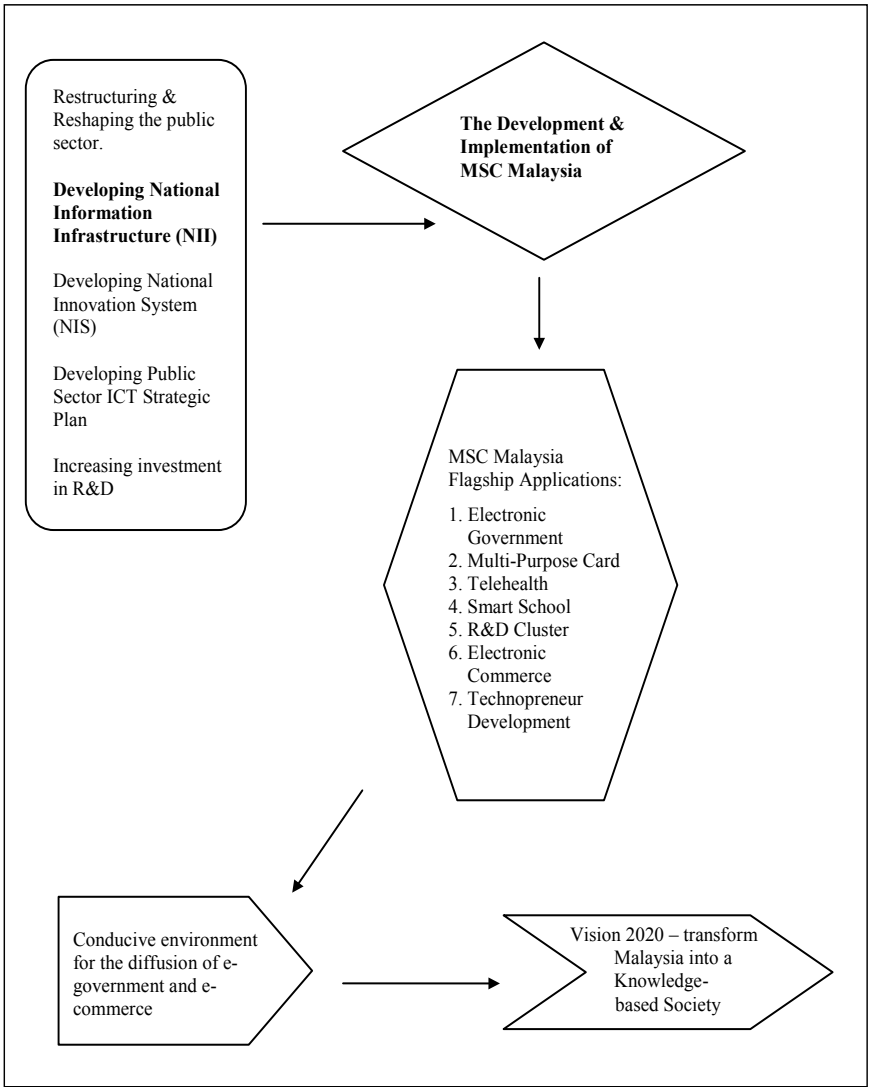
3. E-government Landscape in Malaysia

The public sector in Malaysia is going through a period of rapid change. The government's leading role in spearheading the surge forward into the information-rich digital age has compelled the public sector to lead the way (Government of Malaysia, 1997). The government of Malaysia launched e-government with the aspiration to employ multimedia technologies to re-invent the way the government operates. E-government will improve both how the government operates internally as well as how it delivers services to the people of Malaysia (Maniam *et al*., 2007). The e-government implementation seeks to improve the convenience, accessibility and quality of interactions with citizens and businesses; simultaneously, it will improve information flows and processes within government to improve the speed and quality of policy development, coordination and enforcement (Reddick, 2004; Moon, 2002; Layne and Lee, 2001). The objectives of e-government are to reinvent government and to catalyze MSC. Reinventing government would address the following areas:

- improving connectivity between all parties that deal with government be it public, inter-government agencies, private companies, and foreign country interrelationship. This gives better access to government.
- high quality services are expected to be assured.
- better processes or systems are also crucial in terms of improving the government services.
- create greater transparency and governance.
- empowering government officers in both the administration and implementation levels.

Successfully realizing the vision for e-government means fundamentally changing how government operates, and implies a new set of responsibilities for public servants, businesses and citizens. The new services, information and e-government will encompass the entire gamut of government operations, impacting citizen-to-government (C2G), business-to-government (B2G) and government-to-government (G2G) transactions. The important benefits from implementing e-government are the applicability of services to a large cross section of end-users, improvement in the quality of services, cost-effectiveness and the demonstration of real productivity gains for government. E-government stresses ICT development in government agencies, but more than that it involves transforming the way the government operates internally as well as how it delivers services to the people of Malaysia. It seeks to improve the convenience, accessibility and quality of interactions with citizens and businesses. Figure 1 shows the overall model of e-government for development in Malaysia.

Figure 1: The Malaysian Model of E-government Development



Source: Authors.

There are eight projects launched to date under the e-government Flagship since it was started in 1997. All these will use ICT and multimedia technologies to transform the way the government operates in terms of coordination and enforcement. Table 1 summarizes the projects and their characteristics.

Table 1: Projects under the E-Government Flagship

Projects	Characteristics
Generic Office Environment (GOE)	Provides a new paradigm of working in a collaborative environment where government agencies communicate, interact and share information.
Electronic Procurement (EP)	Links the government and suppliers in an online environment. Government agencies as buyers procure goods/services by browsing catalogues advertised by suppliers. Aimed at best value for money; timely and accurate payment.
Project Monitoring System (PMS)	Provides a new mechanism for monitoring implementation of development projects, incorporating operational and managerial functions, and knowledge repository.
Human Resource Management Information System (HRMIS)	Provides a single interface for government employees to perform HRD functions effectively and efficiently in an integrated environment.
Electronic Services (E-services)	Enables direct, online transactions between the public, the government and large service providers via electronic means.
Electronic Labour Exchange (ELX)	A one-stop-centre for labour market information, accessible to government agencies, the business sector and the citizens.
E-syariah	Introduces administrative reforms that upgrade the quality of services in Syariah courts to enhance the Islamic Affairs Department's effectiveness – better monitoring and coordination of its agencies and 102 Syariah courts.
E-land	Introduces an online administration of land records nationwide. It helps the farmers, especially those in rural places, in getting legal records and truncations over their land.

Source: MDeC (www.mdc.com.my, 2009).

4. Public-Private Partnerships in E-government

Basically, a PPP is a contractual agreement between a public agency i.e. national, state or local and a private company to supply infrastructure assets or services that traditionally have been provided by governments (Center for Democracy and Technology, 2006). There are many reasons for developing partnerships with the private sector in developing e-government projects. Some of these reasons are:

- possibility of cost-sharing projects, with a possible return on investment for the private sector,
- tapping the invaluable expertise of the private sector by government in the areas of customer satisfaction, work productivity gains and personnel efficiency,
- possibility of technology transfer from the private sector to the public sector,
- possibility of risk reduction using other business models such as build, operate, transfer (BOT) and build own, operate (BOO). Government personnel may not have the chance to learn about the technology or work processes and as such, the project remains with the private entity,
- risk transfer to private sector in terms of commercial know-how and managerial skills, best-practice technologies and innovation,
- enhancing government accountability and performance,
- promoting entrepreneurship and local enterprise promotion,
- reducing need for public sector borrowing,
- giving incentives for replication in other contexts.

In addition, private sector participation in providing e-government services can help in promoting better governance since they are:

- better organized and better managed,
- more customers focused,
- entrepreneurial and innovative,
- more efficient and effective,
- better in financial management, and
- possess better corporate governance practices.

Table 2 summarizes the benefits of the PPP model to various stakeholders.

4.1 Public-Private Sector Cooperation in Malaysia

Collaboration between the public and private sectors to realize the country's aspirations to push for international competitiveness combined with these partnerships can ensure realization of the national dream (Muhammad,

Table 2: Benefits of PPP Model

Benefits to Government	Benefits to Citizens/Users
• Financial participation from outside sources • Better risk management • Government can concentrate on core business • Better feedback from the users • Eased technological hassle	• Time and cost savings • Greater confidence in the service delivery • Best of the state-of-the-art delivery • Empowerment of citizens • Better customer care
Benefits to Private Partners	**Benefits to Society/Community**
• Exposure and learning experiences • Knowing government-customers, who are different • Serving wider community • Development of additional competencies and skills • Boost employment opportunities • International trade	• Better utilization of government funds • Close relationship with government and community of users • Better quality of life • Development of a competitive IT industry • Improvement in e-readiness • Promotion of knowledge society through e-government

Source: Authors.

1996). Through close cooperation and collaboration, the public and private sectors can pool together their scarce resources, skills, technology and all other critical factors to strive for optimal growth and development and hence, sustain the competitive edge needed to preserve and enhance Malaysia's role in the international economy. The Malaysian Government introduced in 1983 the "Malaysia Incorporated", which calls for closer cooperation and collaboration between the public and the private sectors, and perceives the nation as a corporate or business entity jointly owned by both sectors.

The concept is based on the philosophy that public-private sector cooperation is a key ingredient for successful national economic development. The rationale for seeking such closer cooperation and collaboration lies in the recognition of the inherent interdependence between the public and private sectors. The private sector forms the commercial and economic arm of the nation, while the public sector provides the major policy framework and direction to enable the private sector to perform well. Thus, this is a smart partnership since it yields results which are shared without exception by

everyone, not only the public and private sectors as partners in development, but the people and the nation as a whole.

The successful implementation of Malaysia Incorporated depends a great deal on the ability of both sectors to establish and maintain a relationship based on the spirit of cooperation, mutual understanding and consensus. The public sector has introduced various initiatives to ensure that its partner, the private sector, would play the leading role in development. The thrust of these efforts is to create an environment that will spur economic growth and at the same time improve the country's competitiveness in the international market. Some of the successful organizations under this policy include Telekom Malaysia, Tenaga Nasional Berhad, and Petronas. Guided by the government's articulated Malaysia Incorporated Policy, the civil service undertook four major initiatives to facilitate private sector development and they are:

- strengthening public-private sector working relationships,
- improving the quality of public services rendered to the private sector,
- improving information dissemination,
- enhancing the understanding of the Malaysia Incorporated Policy among public service personnel.

Therefore, the public-private partnership in e-government is an extension of what the government introduced back in the 1980s under the Malaysia Incorporated Policy. Given the vast experience working with private organizations, implementation of PPP within the e-government project is seen as possible and feasible cooperation between government and private organizations.

4.2 Case Studies on Public-Private Partnerships in E-government Projects

The public-private partnership in e-government projects have been practiced by many developed and developing countries since early 1990s. There are many types of partnerships, most of which have been formed based on the project needs analysis. The following sub-sections will provide some insights to two successful e-government projects in India, i.e. the e-seva project and the e-procurement project, both of which made use of the PPP model in its implementation.

The E-seva Project in Hyderabad, India

The state government of Andhra Pradesh in India has developed the e-seva Project (www.esevaonline.com) consisting of 28 community one-stop shops all over the state where citizens can pay taxes and utility bills; register

births and deaths; and apply for drivers' licenses and passports, among other transactions with government. The e-seva centres are a partnership between the government and private firms: the latter provides the hardware and software in return for transaction fees, while the former provides the staff. The project has been a successful pilot project due to this partnership, providing for a business model that will sustain the operations, while at the same time allowing the government of Andhra Pradesh to meet its objectives of "transparency, accountability and speediness" and reducing the interface between government and citizen.

The E-procurement Project in Andhra Pradesh, India

The Government of Andhra Pradesh (GoAP) set up an e-procurement Marketplace in the year 2000, linking government departments, agencies and local bodies with their vendors. The main objectives of the e-procurement initiative are to reduce the time and cost of doing business for both vendors and government; realize better value for money spent through increased competition and the prevention of cartel formation; standardize the procurement processes across government departments/agencies; increase buying power through demand aggregation; provide a single-stop shop for all procurements; allow equal opportunity to all vendors; bring transparency and ultimately reduce corruption. Prior to the introduction of an e-procurement platform, procurement in Government departments was carried out through a manual tendering process. The manual tender system was suffering from various deficiencies such as discrimination and delay in issue of tender schedules to suppliers; cartel formation to suppress competition; physical threats to bidders; tender boxes at multiple locations; tampering of tender files; delays in finalization of tenders; human interface at every stage and lack of transparency.

Therefore, the launch of e-procurement was expected to solve many of these challenges. The government decided on the PPP model wherein the private partner would bring expertise in technology; invest upfront in setting up the exchange; and recover the costs by charging the user departments for completed transactions. The PPP model was selected because the private partner takes on the risks related to changes in technologies and return on investment. This model combines accountability with efficiency, as the services are governed by strict service level contracts. Moreover, the government of Andhra Pradesh had experienced success with the PPP model in some other projects. The initiative has transformed the procurement process in government departments. The automated processes and work flows have improved internal efficiency within the departments; shortened tender cycle times; eliminated subjectivity in the evaluation of tenders with system based auto bid evaluations; and reduced corruption.

4.3 E-perolehan Project in Malaysia

The Malaysian government embarked on the e-perolehan project in 1999 to transform the public procurement landscape. Given the huge amount of money spent annually to procure government supplies (RM35 billion), e-perolehan is seen to be an effective and efficient tool to bring about better governance of government procurement besides ensuring transparency and accountability of the government in spending the tax payers money. Moreover, with e-perolehan, the government aspires to re-invent the way in which it operates to the needs of the Malaysian Business Community (G2B). To date, six e-perolehan modules have been developed to cover supplier registration and all procurement modes. The business model used in the e-perolehan is via PPP, i.e. build, operate and transfer (BOT). The main reason for a PPP is to improve service delivery, i.e. to create better value for money. A private organization was engaged for a given period of time to establish and maintain the online procurement systems while government officials are expected to learn and transfer the technology of what and how to manage the e-perolehan system.

The main challenge faced by the government is its minimal involvement in the project since its inception in 1999. The government via the Ministry of Finance and the Department of Procurement is in charge only for issuing licenses and renewal. All other activities are under the care of the private partner. As a result, the citizens (users and businesses) are not benefiting from this business model as the private partner is only interested in profit making and not on the enhancement of service delivery at a minimum cost. This is based on the feedback received from the suppliers that anything and everything is chargeable. Since most of the suppliers are small organizations, the cost is becoming a burden for them and is one of the main obstacles to them getting into the business (Maniam, 2008). Therefore, redefining some of the existing models that are in practice is vital in order to reap the actual benefits of the PPP model. Government agencies and departments should play a more active role besides policy making in ensuring the objectives and vision of e-government are realized.

5. Discussion and Implications

While it is clear that the PPP model in the context of e-government projects is critical and necessary, re-defining the model, especially the scope of government participation is vital in ensuring the attainment of the project objectives. Therefore, governments all over the world should consider the PPP model as an innovative way forward for effective collaborations with private organizations in providing quality service delivery to both citizens and the business community.

According to Farlam (2005), PPP offer opportunities for the transfer of economic power to the local population through greater participation in and ownership of businesses. However, not all PPP models will become successful in achieving their desired objectives. For example, note the following possible arguments against PPP in the case of government procurement (Jomo and Anis, 2009):

- Real costs are higher than traditional government procurement (may not meet the value for money objective).
- Design and service quality often fail to meet standards of publicly delivered services over time.
- Reduced transparency and unclear lines of responsibility mean PPP is less accountable.
- There is reduced public sector flexibility to respond to public demands.

In order to achieve enhanced value for money, three variables are usually invoked, namely, the nature of the project; a government with effective project and contract management skills; and clear and effective risk allocation. Four conditions should encourage public officials to favour PPP (Jomo and Anis, 2009):

- The services provided respond to a clearly identified and measurable public need.
- The public sector has the expertise to assess and manage risk.
- Delivery of high-quality services is efficient and responsive with optimal risk allocation.
- There are clear lines of accountability and redress.

A lot of stress is being placed on these partnerships because of the value addition they provide to people and ultimately to the economy. Some of the important issues that need to be addressed with regard to PPPs are (Shekar, 2005):

- The various models for PPPs – the model chosen must favor effective short and long-term development, and at the same time be viable and cost-effective.
- The role that the government should play for facilitating the private sector to rapidly develop ICT – the regulatory body of the government must ensure that policies and procedures are well defined and properly implemented. Also, there must be clear levels of accountability and transparency to deter misuse and mismanagement of the defined policies and procedures.
- How the private sector initiative and enterprise could be encouraged and channelized for achieving maximum benefits – there could be good

return on investment for private sector companies if they provide the government and people with their cost-effective products and services.

- How private sector companies could collaborate with each other to achieve win-win situations - the possible outcomes resulting from these collaborations could range from better quality products, cheaper prices and continual innovations.

6. Conclusion

Based on the success stories and experience in the Malaysian Incorporated Policy and case studies presented, it is the right time for the government to consider the PPP model in the implementation of e-government projects in Malaysia. However, the government needs to pay careful attention to defining the degree of its involvement in the project in ensuring the achievement of the project objectives. In addition, the main concern of all e-government projects is to enhance the service delivery besides minimizing the operation costs. Therefore, provision of relevant partnership agreements is necessary to reap the real benefits from the PPP business model. In short, the use of the PPP model will not only ensure transparency and accountability in delivering government services but also, at the same time, enhance the efficiency and effectiveness of the services provided.

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