A STUDY ON PUBLIC-PRIVATE COLLABORATION IN E-SERVICE DELIVERY

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Increasingly e-governments are turning to public and private partnerships as an alternative option to fund IT projects. There is a common belief that such partnerships to e-enable public service could encourage innovation, lower transaction costs and even contribute to a more complete customer-centric online experience for the end users.

Locally in Singapore, private companies have been constantly exploring new ideas and approaching our public agencies with various types of e-government collaboration proposals, so we embarked on a study in February this year to understand the motivation, the extent of collaboration, the business and policy considerations and any other lessons that we can draw from the local and international experience.

[slide] My presentation today will look at the various collaboration models that we have studied, draw some relevant lessons and discuss the conclusions from the study. I will also share the experience of two agencies and the key lessons for public-private collaboration.

[slide] For this study we focus on collaboration examples that help to achieve citizen centricity by linking related public and private sector e-services and/or to derive our cost efficiency from an optimum business model.

[slide] After identifying the local examples that met our study objectives, we approached various public agencies and the private sector partners for an interview. RCB and SLA were two such public agencies we approached and I will elaborate on the experiences of these two agencies later on.

We also supplemented our interviews with a scan for international experience and the notable ones that we studied were the collaboration examples from US ServiceArizona, Hong Kong’s ESDlife and Denmark’s public procurement portal.

Let’s begin by looking at the motivation for embarking on collaboration ventures.

[slide] Most of the public agencies that we talked to chose to embark on such ventures because they believed that the government collaboration of private companies’ agility, focus, competence and marketing to meet increasing end user demands and expectations. Indeed our study shows that some private companies could offer the repackaging of public data for online service delivery at a lower cost if they could leverage off the existing aggregator advantage.
For example, as you will see in the RCB example, private companies such as Dun & Bradstreet could easily offer better value-added services based on RCB’s business and company data to the customers.

Our study also shows that sometimes public agencies can embark on such partnerships for the greater good, especially if the agency has the mandate to promote ICT adoption to domain industry partners, through leadership in ICT exploitation, to raise the overall competitiveness of industry or community specific services. The Land Transport Authority is one such agency which considers the needs of the motor industry such as agencies undertaking vehicle inspection, road tax and driving insurance.

[slide] From the private company’s perspective the ones we talked to were motivated by the potential additional profit stream and an opportunity to gain market share and domain knowledge of the public agency’s user base. For example, in the MIW.com project of the Ministry of Defence, the vendor deemed this target audience was a huge customer base with good potential. In addition, the partnership with the Ministry of Defence offers the vendor a spectrum of e-services that would draw in a steady base volume of transactions with active NSmen, which is the target audience of the Ministry of Defence.

[slide] From our interviews we have developed a collaboration framework consisting of three underlying fundamental attributes which differentiate the collaboration models. These are, firstly, who is to fund the capital costs of the project; how to fund operational costs, and who should front the e-service delivery.

[slide] Based on the three attributes we looked at six broad collaboration models which represent six different ways in which the agencies could collaborate with private companies in the delivery of e-services.

Let us look at the three attributes in more detail.

[slide] Firstly, we observed that public agencies typically finance the capital development cost in one of three ways. It could be funded totally by the government, and in some cases a joint venture private company is set up for the project. One such example is TradeNet by IE Singapore.

The project could be funded totally by a private company, which is something that typically does not happen in Singapore.

Thirdly, it could be funded jointly by the government and the private sector, with each contributing to the ownership of different parts and intellectual property rights of the system.

In looking at how these online service delivery projects are funded for the development costs, one of the assumptions we made was that we did not consider the sunk costs of the government in having developed the legacy systems that needs to be linked to the e-service delivery.

Funding the capital costs is of course the easy part. A more pertinent question is how we can sustain the operation of the online service delivery.

[slide] From our studies it appears that there are two basic business models for financing the operational costs.
In the first model, on the left of the slide, which we term “fixed base plus variable”, the government pays the operator a regular fixed base fee regardless of transaction volume. In addition, the government shares a revenue percentage, or a fixed quantum per transaction with the operator. The operator is responsible to provide and own the hosting environment for the e-service delivery.

In the second model, on the right, which we term “self-funding”, there is no base fee for the operator. In this model the operator assumes higher risk than in the first one and typically the operator in the second model will take a higher percentage share than in the first model.

The collaboration examples that we have seen suggest that public agencies typically consider a variant or combination of these two basic revenue-sharing business models.

[slide] In terms of business viability, the business model that the public agency adopts eventually needs to take into consideration five main factors, as listed in the slide.

- Firstly, the projected transaction volume and customer base. This is the piece of information that a vendor will need to know to determine the risk and revenue of the project.
- Secondly, the length of the collaboration relationship. This helps to determine the period of time that the operator has to recoup his investment cost, especially in the setting up of a hosting infrastructure.
- Thirdly, the fee structure of existing services. Typically, if there are chargeable service fees to the consumers of the services, then the transactions are priced at the same price, if not lower, as in the counter transactions.
- Fourthly, the price elasticity of new services. If there is not an existing fee structure, then the prices of the new services are typically negotiated on a case-by-case basis, since the research and development costs of the new service or channel are unknown. While pricing should not be too high to discourage demand, it should be meaningful enough to deter abuse of the services.
- Lastly, capacity for growth. The revenue-sharing model should be designed to either motivate the private company to innovate and add value to the public service or to deliver the basic services at an optimised cost. If the latter, then the expectation on the private company to invest more resources needs to be balanced against the viability of the operation.

[slide] A third and last consideration for a collaboration model is the fronting strategy. This relates to the issue of branding and public image. The majority of public agencies that we talked to adopted a public fronting strategy. This is useful when the agency provides e-services with time-sensitive transactions or when there is a need to provide to the public the assurance that they are dealing with the government and not with a commercial company.

If a private sector front is chosen, then the public agency needs to manage the user perception if the private sector has an unfair advantage over the privacy, the use and control of public agency data, as well as to protect the government’s legitimacy of the public agency.

[slide] What are the conclusions from the study?
Our study shows that the sale of rights to package government data, with the potential for the private sector value-adding similar to the one adopted by RCB, presents the best opportunities for public agencies to move forward. This is by far the simplest model, in which the public agencies are not required to front substantial capital development and yet co-share in e-services revenue collected. It also incentivises the private sector to create more innovative and value-adding services for the end users.

However, if there is a need to dictate the pace and quality of e-service development and operation, then public agencies could consider adopting joint ownership and development of e-services with a “fixed base plus variable” revenue-sharing business model.

Lastly, if the public agency is not a dominant player vis-à-vis other parties in the value chain, then the agency could collaborate with other agencies so that the government as a whole becomes a dominant player. As one of many agencies to complete a transactional process, the agency prefers focus on contributing towards an integrated service package because individually it is difficult to make the private sector co-invest but as an integrated package the value of the private sector will be considerably strengthened.

[slide] Some other considerations will include safeguarding the agency’s responsibility and accountability for the e-services. For example, public agencies will need to ensure that user data is collected for the purpose that is stated.

In choosing to list private companies alongside public e-services on government web pages, public agencies will also need to make public the selection criteria and to ensure the transparency of the process.

Other considerations in negotiating a partnership project will include the ownership of rights and intellectual property and non-exclusivity.

[slide] I will now share the experience of one of our agencies, the Registry of Companies and Businesses.

RCB chose to collaborate with four private sector companies: Crimson Logic, Dun & Bradstreet, Singtel Yellow Pages and DP Information Network.

[slide] RCB’s mission is to cultivate a conducive and dynamic corporate and business regulatory environment. RCB does so by providing timely, accurate and value-added information on registered corporate and business entities in Singapore, among other things.

[slide] There are two main reasons for RCB to work with a private sector company in providing online information services. Firstly, it was not a core mission and competence of RCB to develop, deploy and maintain online information services. On the other hand, companies such as DP Information built their business of providing credit and business information in Singapore over the years. A strategic collaboration with RCB provides the critical base on which other value-added information and services are developed.

Secondly, RCB felt that the increasingly sophisticated demands of the end users could be better met by private sector companies that had the resources to sense, react and cater to this demand speedily via value-added services. For example, the private company can easily turn the RCB information into different formats to meet the needs of the various customers.
RCB chose to enter into an alliance with four private companies because it felt that having more than one was beneficial. There are two main reasons.

Firstly, more competition leads to the creation of new and better services for current and prospective end users. Secondly, more vendors reduce the dependence on one specific vendor, so that both RCB and the end users now have more than one choice.

In this collaboration example, RCB owns all the data. The alliance companies are given rights only to replicate the database and to sell the information. RCB on the other hand does not own the alliance companies’ infrastructure although it owns the rights to access the duplicate databases.

In terms of funding model, RCB pays the vendor for the maintenance of its own data repository and it receives statutory fees which are calculated on a cost-recovery basis. The alliance company pays for its hosting infrastructure and keeps the revenue after paying RCB the required statutory fees.

The basic services that RCB provides are available over the counter so all the companies can exit from the partnership together without hurting the service level that RCB is regulated to provide. RCB currently collaborates with more than one company and the exit of one company will not have any huge impact as there are alternative venues for the end users.

The pricing of services to end users is decided between RCB and the service provider. There are three general guidelines.

- Firstly, if similar services are available from RCB over the counter, then the online service should be cheaper, to ensure that there is more online consumption of the service. This shifting of demand is in line with RCB’s goal of having minimal counter services over the long run.
- Secondly, if the service is currently not available from RCB or any other service provider, then RCB will work out an appropriate statutory fee for this service which is benchmarked against prices of relevant product groupings. This statutory fee is made public. In consultation with RCB the vendor can add on a margin for profit and determine the final price to the end users. The aim is to provide transparency on all fees so that end users can know how much they are paying for the services rendered by the service provider.
- Thirdly, as mentioned before, while the pricing should not be too high to discourage demand, it should be meaningful, to deter abuse of certain services.

What are the lessons that RCB has learnt?

They have learnt that we should keep the alliance relationship simple, so RCB should focus on providing the data while the vendors should focus on selling the information. It is also key to make sure that the value proposition of the vendor is clear. In the collaboration it is important to make sure that everybody has a win-win position and public agencies should listen to the private sector on how things could be improved. RCB is also open to anyone in the private sector who wants to sell this information. Most importantly, RCB ensures that all the services that are being offered from the private sector meet its overall mission and purpose.
Now we move on to the experience sharing from Singapore Land Authority.

The INtegrated Land Information Service (INLIS) was launched in 2001 by the Ministry of Law as a one-stop information service infrastructure with payment facilities to deliver integrated land information to the public via the internet and broadband. Geographical and textual land information were integrated and delivered over this platform. In 2002 the system was enhanced with more services and incorporates online electronic payment.

With this service, land information that is being offered includes property owner, land tenure, land area, last transacted price, survey plans and things like that.

The first phase of INLIS was managed using a standard IT outsourcing project. SLA paid the capital and recurrent operational funds to build and operate a pilot system, including a help desk. Having determined the system requirements through the pilot, SLA decided to call for an open tender with an option to collaborate and share revenue. The intention was to co-share the capital and recurrent costs; to leverage on the private sector expertise in the use of the latest and most appropriate technologies to develop and operate a service, and to leverage on the private sector’s expertise in managing the hosting infrastructure, help desk and in marketing, so that the SLA resources could be freed up to focus on its mission.

As in the RCB example, SLA owns the data and does not control the operator’s infrastructure. In this case, SLA owns the application, retains the data licensing rights, decides royalties and controls the fees.

In terms of funding model, SLA pays for the application development and enhancements and receives royalties on a revenue-sharing model. Because SLA owns the application, if SLA decides to terminate the operator, contractually SLA can transfer all the application software to another operator.

In terms of the lessons learnt, SLA finds that it is important to ensure that there is economy of scale, and the agency is discussing with other public agencies that have land information to provide more e-services to bring in a higher transaction volume. This will help to ensure that the infrastructure is a viable operation.

It is important to focus on the strength of each partner, and to focus on core competencies such as the private sector understanding marketing and the market better than the public sector.

So the conclusion is that collaboration with the private sector is probably the way to go.

Questions

Tan Eng Pheng: We have about 10 minutes so I just want to open to the floor. If you have any questions, please direct them to the speaker.

Yitshak Cohen, Israel: A question for Bob Assirati.

What is the difference between BOT (build, operate and transfer) and PFI?

Bob Assirati: Build, operate and transfer. I think it’s the same principle. PFI may or may not incorporate the full transfer of operational responsibilities. Sometimes it’s a joint operation.
environment. But if you take projects like the prisons, which I referred to, that’s complete operation by the private sector, with just some regulation by our prison service. So I think probably we mean the same thing.

Imre Sill, Estonia: I have a question to Miss Lim.

I am interested in your mention of the problems in disputing ownership rights. What are the most common problems in defining the ownership rights in public-private partnership projects?

Lim Siew Siew: Can I check with you, did you mean the ownership rights or the pricing of the services?

Imre Sill, Estonia: I mean ownership rights, not pricing.

Lim Siew Siew: Typically in the collaboration, the public sector owns the data and the private sector owns the hosting infrastructure, so it’s a matter of writing the contract clearly, who is responsible for what and what is the liability of each person.

Tan Eng Pheng, Singapore: I think we have come to the end of this afternoon’s session. Please join me to thank the three speakers.