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ESDLIFE OF HONG KONG E-GOVERNMENT APPLICATION WITH AN E-BUSINESS SPIRIT

Simpson Poon
Charles Sturt University, Australia

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Simpson Poon
Charles Sturt University, Australia
spoon@csu.edu.au

Abstract

So far research and discussion on establishing E-Government initiatives tend to focus on using E-Commerce technologies to support the delivery of government services. While this is a key aspect of E-Government, often ignored is the E-Business spirit within E-Government initiatives. Despite government services are often not-for-profit, but commercial lessons learned from E-Commerce can help to improve E-Government outcomes and encourage adoption of E-Government services among citizens. Unfortunately, the relationship between E-Business and E-Government are often not explicitly discussed. In this paper, I explore how an E-Government initiative being implemented in a commercial E-Business context through a case study of the Hong Kong Electronic Service Delivery (ESD) initiative – ESDLife. I conclude that the collaborative approach of working with the commercial sector when setting up E-Government initiatives can be cost-effective and an efficient way to market such services to the public-at-large. However, there might be issues of neutrality and other controversies to be handled sensitively.

Keywords: Electronic service delivery, e-government, Hong Kong, ESDLife, case study

The E-Business Mindset in E-Government

Although many governments in the Western world realise the importance of E-Government initiatives to their own efficiency and productivity gain, the planning and implementation of such systems sometimes plagued by bureaucracy. Often governments see E-Government initiatives as a way to improve their image as a progressive, IT-attuned government. Granted that all governments have a genuine intention to improve their service offerings through Information Technology (IT), this is often distorted through the lenses of political agendas. It is important to view the impact from an external stakeholder perspective to make E-Government initiatives a success.

Despite one may think E-Government has little to do with E-Business, Greunz, Schopp and Haes (2001) point out the striking similarities between E-Business and E-Government from a legal, contractual, stakeholders, and fulfilment perspective. They suggest that due to 'structural' similarities between the two types of Internet-based activities, when implementing E-Government strategies and solutions, it is essential to refer to experiences from the former to avoid wasted efforts and missed targets. In fact, at the technology architecture level, Greunz, et al. (2001) suggest one should adopt proven models in E-Business implementations to E-Government set up.

The similarities between E-Business and E-Government also suggest that one should learn from E-marketing experiences of E-Business and customise for E-Government implementations. Among the principles suggested by Atkinson and Ulevich (2000) to the implementation of successful E-Government, four are particularly relevant to the implementation of ESD and they are:

Think Customer, Not Government Agencies

One of the commonly acknowledged E-Government strategies is to be citizen-focused. Traditional governments are often organised around agencies or bureaucracies that operate as hierarchies, with little to no information flow between them. They were

set up to support the functioning of bureaucracies, not citizens. E-Government initiatives should be set up based around the needs of citizens (Atkinson and Ulevich, 2000). A similar strategic focus is also found in the UK report on E-Government suggesting electronic service delivery should be driven by citizens make of it (Cabinet Office, 2000).

Re-invent Government, Don't Simply Automate It

Often one of the temptations was to automate the current business processes. While this would work and sometime it is the best solution, this decision should be reached after due consideration of how to re-invent government processes. Given that the original set up of government processes was often targeting hierarchical integration, automating such processes might create integration problems and lack flexibility when citizens might involve multiple departments to communicate and share information.

Focus on Digital Transactions Between Citizens and Government

Although the potential of E-Government in its broadest definition is all-inclusive, the more promising applications are likely to be those contributing to efficiency and productivity gains – transaction-based activities. Transaction-based activities do not limit to financial transactions, but exchange of data, information and digital resources between citizens/businesses and governments. Examples such as secure exchanges of personal and financial information, downloading and uploading of legal documents (e.g., contracts) and accessing transaction-processing systems for data query purposes.

Make Government Applications Interoperable with Commercial Ones

Many governments focus their E-Government efforts on Government-to-Citizens (G2C) applications. While this might generate observable results quickly, the main efficient gains often occur at the Government-to-Business (G2B) front. Similar to how B2B activities were predicted to generate bigger economic impact than B2C ones, G2B is in a similar situation. Examples such as E-Procurement, E-tendering and other high volume transaction activities between government departments and with businesses have been the prime target for E-Government initiative (Cabinet Office, 2000; Govt. of the HKSAR, 2001a). However, this can only be achieved if E-Government systems are interoperable with existing and future B2B systems (HKSAR, 2001b). To achieve this, it was necessarily to involve industry during the standard formulation process of E-Government systems.

Government Efforts Should Complement, Not Duplicate Private Sector Efforts

Since many of the E-Government services shared the similarities of B2B and B2C E-Business activities at the business process level, therefore, E-Government initiatives were likely to share similar business processes. The last decade had seen the development and consolidation of B2C and B2B infrastructures. E-Government initiatives and set up should be complementary and not to duplicate existing infrastructures and solutions. This would help to ensure E-Government initiatives, both G2C and G2B, interoperated with commercial ones. In addition, duplicating private sector efforts meant investing government resources into non-value-adding activities. This would contradict the intention of efficient use of resources through E-Government initiatives as outlined by governments adopting such direction.

Research Method

As the purpose of this study was to gain an overall insight into the positioning strategy of ESDLife, case study methodology was used. The approach I had taken was to collect information from sources including as interview with ESDLife's personnel, ESDLife's own press release from its website, the review and evaluation documents of ESDLife's operations by the HKSAR Government, project report and discussion papers by researchers who have studied the set up of ESDLife; together with my personal experience as an ESDLife patron. By triangulating the different sources of information, I managed to piece together a picture of ESDLife's strategic position and the achievement thus far.

The decision on using case study research method was based on the fact that: (1) it was a preliminary study of the positioning strategy of ESDLife and mainly qualitative data was collected; (2) the key information could not be collected via surveying a

particularly group(s) of individuals; (3) multiple sources of information in a variety of formats (e.g., reports, discussion papers, press release, etc.) needed to be collated and they were not in a standardised quantitative format.

I, however, acknowledge that the case study approach taken might be susceptible to anecdotal evidence bias, which might limit the generalisation of the results.

ESDLife in Hong Kong

Similar to many Western governments who embraced the E-Government concept, the Hong Kong Government targeted ESD as one of the key E-Government initiatives. In the 1998 Digital 21 Strategy report, the development of an ESD infrastructure (a.k.a single-window access to government services) was one of the key initiatives singled out by the HKSAR Government. The ESD infrastructure started as a joint venture effort between the Government and private sector to set up an infrastructure which included the Government as content provider through an ESD commercial service provider. Other service providers such as the financial institutions and E-Certification authorities were also connected to the ESD infrastructure (Govt. of the HKSAR, 1998). It was hoped that the ESD infrastructure would be the consolidated platform to deliver G2C and G2B services. Recently, ESDLife is a winner of the Stockholm Challenge Award (ITBB, 2001a) and it claims to be '…one of the world's first web sites that integrates both public and private sector services in a citizen-centric approach…'

Based on the vision of the Government, the ESD infrastructure would:

•   Enable the public to obtain services through various channels, including but not limited to personal computers, interactive public phones or television sets;
•   Be an interoperable, secure and reliable way to obtain services from different government agencies;
•   Use market-based interface standards to ensure the adoption of later technologies when they come in place; and,
•   Be bilingual (English and Chinese).

Subsequent to the public tendering process in early 1999, ESD Services Limited (ESDSL) was awarded a contract by the HKSAR Government in November 1999 to operate the ESD services. As the five-year contractor of the project, ESDSL was charged to build, develop and operate the ESD platform and the application services. At the time of the award of contract, ESDSL was a joint venture between Hutchison Global Crossing Limited[1] (85%) and Compaq Computer Limited (15%).

After one year of development, the platform and infrastructure were launched in October 2000. The bilingual portal www.esdlife.com became the *de facto* ESD centre - delivering G2C and G2B services anytime, anywhere to the people of Hong Kong. Figure 1 illustrates the basic architecture of the ESD system.

As of the end of 2001, there were about forty government departments or related organisations had some of their services made available via ESDLife website (www.esdlife.com).

Marketing a Change of Lifestyle

The approach that ESDLife has taken when marketing its services is a hange of lifestyle This is in line with the *hink customer not government agencies* principle. As one of Asia busiest cities, one daily challenge is to spare time for activities which are not work-related or mundane. Despite being a hi-tech city, many of the   aily chores such as paying bills, banking and other transaction-based activities are accomplished through physically presenting at the counter. It is ironic to observe the long queues at banks and government offices counters during lunch hours which are often the only time people have time to pay bills and lodge forms. Although face-to-face contact has its strength, essentially, how much you can accomplish in a thirty-minute time slot during the lunch hour was limited.

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[1]Hutchison Global Crossing Limited was a joint venture between Hutchison Whampoa Limited and Asia Global Crossing. It was a 50/50 joint venture which combined Hutchison Whampoa's fixed-line and Internet networks in Hong Kong with Asia Global Crossing's international fibre-optic broadband network, Internet applications and data services.

Basic Architecture of Electronic Service Delivery (ESD) System
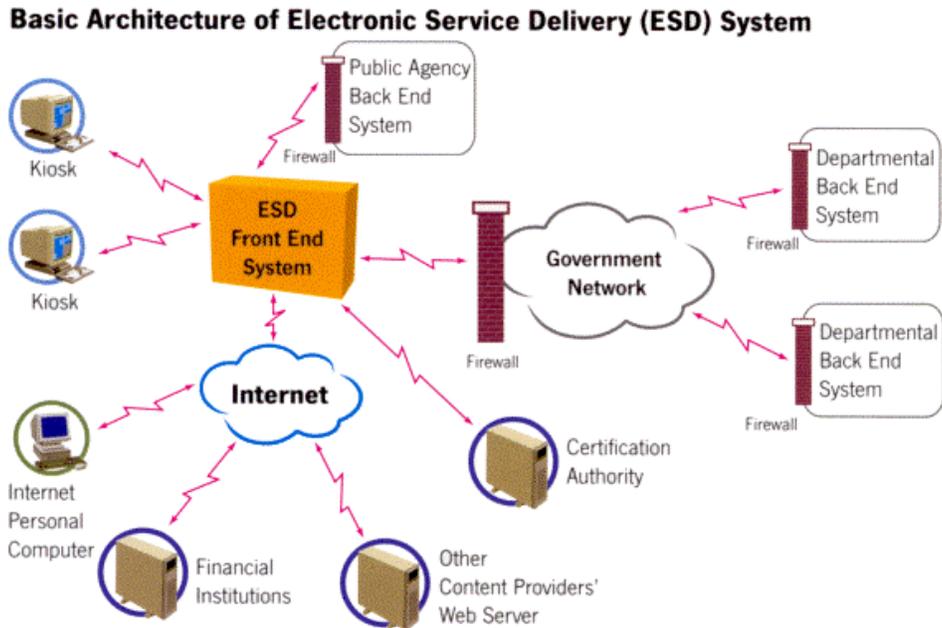
Figure 1. Electronic Service Delivery architecture of the HKSAR
Source: http://www.itsd.gov.hk/itsd/infra/eesds.htm

Hong Kong people deeply feel such rushes everyday and when ESDLife was launched, the slogan was pend more time for yourself It instantly triggered the reasons for adopting its services for some people. Being able to spend more time with loved ones is almost everyone prayer when working longer hours is increasingly expected.

Customer- Not Services- Focused

Another approach taken by ESDLife, although ESDLife is not the only E-Government initiative to do so, is adopting a customer-not services-focused approach. Instead of asking users hat services or which department you want? ESDLife asks users hat do you want to accomplish? The latter approach was important because users no longer need to know which government department offers what services. Instead, they only need to select their ntentions and be led to services of one or more government departments, sometimes transparently. For example, getting married in Hong Kong (possibly anywhere in the world) would involve a complex organising of many activities, among them, booking an appointment with the Marriage Registry. Not only the booking and payment could be done online via ESDLife, but also activities related to organising the wedding could be organised online as well.

Often customers do not have the understanding the different departments and procedures one they have to go through when trying to accomplish certain activities. So E-Government initiatives should at least address, and possibly overcome, the *ost in bureaucracy* situation often encountered in working with physical government departments.

Heavy Involvement of the Commercial Sector

As compared to other ESD services established by other governments (e.g., in Australia), the HKSAR Government is only a user of the ESD platform rather than the owner of it. This is inline with the philosophy of *omplement but not duplicate private sector efforts* The Government formed partnership with ESDSL, which is contracted to build and manage the ESD platform and infrastructure. This approach has several advantages:

1. There is a relatively low outlay for the development from the Government perspective because the private sector is wearing most of the development and equipment costs.

2. Government applications can be co-hosted with commercial application on a third-party server. This provides the opportunity for users to access both public and private services on one platform.
3. The involvement of the private sector to build the ESD platform means it was built based on commercial market interoperability standards which enable G2B developments without worrying about many of the interoperability issues. This is inline with the principle of *aking government applications interoperable with commercial ones*
4. A variety of value propositions for user to visit the site, either for government or private services or both.

However, there might be sensitive issues in such private sector government collaboration models:

1. The issues of liabilities and obligations regarding any violation of privacy or losses due to use of the ESD platform.
2. Although there are disclaimers stating the Government neither owns nor endorses any commercial offerings hosted on the ESDlife site, the Government at least is not object to offering its services jointly with them. This might give an impression to the unaware that the commercial services hosted are endorsed by the Government (e.g., the wedding gifts and professional services listed on the same page as the Wedding Registry site).

Staged Development to Manage Expectation

Managing customer expectations could be difficult when come to E-Commerce services. One reason is because E-Commerce service level, as compared to other traditional consumer services, is less predictable. Network problems, unexpected increase of access demands and third-party technical faults (e.g., other linked sites) can be a source of user frustration. The Government has adopted a staged development strategy which make sure users has time to understand the way ESDLife works while ESDSL has the opportunity to gauge the usage patterns. This is a win-win situation and which so far has maintained the steady uptake of the ESDLife services. In addition, there are plans and implementation schedules for multiple accessibilities. So far access to ESDLife services can be done via the Internet and information kiosks in Mass Transit Railway (Hong Kong underground railways) and Kowloon-Canton Railway (Hong Kong China railway connection) stations as well as major shopping malls and exhibition centres (Hutchison Global Crossing, 2000).

Security as a Guarantee of Confidence

Security has been a major barrier to further adoption of E-Commerce in some sectors and it was an area the HKSAR Government addressed upfront while planning for the ESD initiative. The Electronic Transactions Ordinance was enacted in 2000 and the Hong Kong Post (i.e., Hong Kong Postal Service) was charged with the responsibility to set up the local Public Key Infrastructure as well as the Certification Authority (ITBB, 2001b). All transactions with the ESDLife site are secured using two technologies Secure Socket Layers (SSL) and Secure Electronic Transaction (SET). Recently, ESDLife adopted the VISA 3-D Secure Interoperability Standard that also has been deployed by VISA International in Singapore, Taiwan, South Korea and Australia (Luk, 2001). Currently, ESDLife accepts mobile digital certificates and by 2003, smart ID card will be used as well.

Companion Programs to Market ESDLife

Apart from using traditional media to market and advertise the functions and benefits of ESDLife, there are a number of companion programs which help citizens to either brush up their IT skills or raise their awareness of ESDLife through hands-on experiences. For example, IT awareness courses are organised for citizen groups with special needs such as the elderly, the disabled and women (ITBB, 2001b). These programs together with exhibitions and on-site demonstration at more than 2,000 public ESDLife information kiosks provided the eep-impact marketing effect.

Lessons Learned and Implications

As at the end of 2001, almost a year from ESDLife has been implemented, it development has been progressing according to the original plan in terms of adoption rate, bringing key stakeholders on board and raising awareness. However, there are lessons learned and some of these can be useful to other ESD initiatives elsewhere.

Build Critical Mass Through a Cause to Use

Building a critical mass, the holy grail of E-Commerce success applies here. Choosing applications to be offered via ESD which would attract a high volume of transactions (not just traffic) is critical to ESDLife success so far. More importantly, these applications should have a trong value proposition to the users, such as saving time, doing away inconvenience and providing flexibility. It is not how pretty the website is to attract users, at least not in the long term, but how much users could benefit from using it based on their own evaluation criteria. Subsequently, a user-centric portal from user-interface to reasons of continue usage is of paramount importance.

Establish a Win-Win Scenario with the Commercial Sector

Often due to political or other reasons E-Government initiatives are government-centric. This means the commercial sector has little or no part to play in the strategy of the initiatives. Governments have to wear all the promotion and sometimes establishment costs for their E-Government initiatives. In a climate of favouring small governments and lean infrastructure, resources are likely to be rare for such activities. The ESDLife initiative has taken a different approach. Rather than resisting the deep involvement of the commercial sector, the commercial sector was welcomed and was charged to develop, advertise and maintain the ESDLife portal as its own property. The HKSAR Government is only a user of the portal, similar to other advertisers and businesses using it. The portal is aiming to become a user-pay service even though revenues are generated through advertising and marketing.

The commercial sector often has strengths in marketing and advertising, plus the resources to do so. Therefore, the Government has been gaining leverage when commercial activities lead to the indirect advertising of ESDLife. Since, there is no competitor to offer government services on, this means the Government ESD services were being marketed and advertised will little ut-of-pocket expenses by the Government.

Integration of Government and Commercial Services on ESDLife

The approach of co-hosting government and commercial services went well beyond just putting hotlinks together. Themes (e.g., getting married and planning for the wedding) are set up such that government and commercial services can be put together in a rocess flow manner. For example, the marriage plan starts with booking a date with the Marriage Registry by choosing a date from the online electronic booking system, followed by exploring dresses and gowns services, then visiting the jewellers website linked to ESDLife, making arrangements with caterers and photography services. All these can be achieved on ESDLife through a step-by-step set up. Users could, if so wished, plan their wedding functions using ESDLife as a one-stop-shop.

Such tight integration of services requires the trust and willingness to co-operate of both the government and the commercial sector believing that they are working together for the benefit of the end-users of ESDLife.

Continuous Renewal of Services and Delivery Mechanisms

One of the factors contributing to the failure of many B2C portals is they might have spent vast amount of money on advertising and marketing, followed by the set up of a lashy website, but eventually failed to keep up with renewing their services and delivery mechanisms. Users could not gain further benefit from the dated information and services and they left.

Lessons from B2C portals failures are critical to G2C portals too. ESDLife so far has demonstrated that it is renewing and expanding its services continuously. Also, the delivery mechanisms are expanding from the Internet to mobile devices. Given HK has the one of the world highest penetration rate of mobile devices (phones and pocket-PC) and many people are not always next to an Internet-connected computer, making ESDLife services available over ecure mobile devices will bring further benefit to the users.

Customer Feedback Give Them What They Wanted

Finally, something arcane but always work. In advertising or marketing, do it according to what the customers want to listen and see. No difference in the case of G2C services. ESDLife has been carrying out annual and continuing surveys on customers

experiences. Campaigns and prizes are offered as incentives. By collecting customers feedback and integrating them into further enhancements, ESDLife should be able to maintain its relevance to its users. Eventually, time will tell if this had work but if traditional marketing wisdom of istening to your customers had worked so far, this should.

Conclusion

The mega-trend of delivery government services through ESD is here to stay. Economic, political and competitive reasons will continue to drive such developments. Often governments focused too much on strategy, technology and political correctness but neglected the users. I have shown in this article using the Hong Kong ESDLife portal as a case showing how ESD services can be offered through a commercial-government collaboration arangement. Granted, it is an anecdotal example and it is early days of the system. The geographic proximity between different service providers and the close-tie between Government and the commercial sector could have also contributed to the current setup of ESDLife.

As of the end of July, 2001, seven months after its launch, ESDLife has almost 13 million visitors visited the site, generated 184 million hits and conducted over 610,000 transactions. This compares favourable with any government portals worldwide. Finally, ESDLife future will lie in providing a convincing answer to its user when asked: **How can it value-add to my daily life?** If this ceases to happen, so will the success of the portal site.

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