

# **SINGAPORE- AN E-GOVERNMENT DELIGHT AND MANAGING THE SAME FOR INDIA**

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India in the past decade has come a long way as far as opening up its economy, introducing competition, globalisation and liberalization are concerned. The telecom and IT revolution of the country is a case in point. Yet we continue to lag behind in terms of economic indicators such as per capita income. The civil services and public sector in India should be the engines of growth but are perceived by the public as being obstacles to rapid economic development. As a civil services officer, the author is keenly interested in the subject of public sector and civil services reforms. Recently, the author had the opportunity to attend a course on e-Government organized by the Singapore Government. Singapore's economic development has been and continues to be orchestrated and implemented largely by its government. Exposure to e-government as it has been implemented in Singapore was an eye opener. It is felt that e-Government, holds the solution to many civil services and public sector ailments. E-Government is an ideal tool to:

- accelerate public sector reforms
- improve government services radically,
- improve the image of the government in the eyes of the public
- spur economic development
- attract greater foreign investment to the country
- encourage domestic investment and entrepreneurship
- boost tourism
- vastly improve the quality of life of our citizens

It is also felt that implementing e-governance would ensure that the correct type of people join the civil services. The civil services in an e-government set up would no longer be a ticket to unlimited power and wrongly acquired wealth.

It has been amply demonstrated by e-government success stories, such as Singapore, that the effective implementation of e-government apart from improving service delivery, and civil servant's performance, also increases transparency and reduces administrative corruption. With greater public access to government rules, procedures and performance data, transparency is enhanced. Implementation of e-government makes it possible to monitor government officer's decisions online, brings about automation of procedures, reduces the discretionary powers of public officials and eliminates intermediaries, thus lowering the scope for corruption.

## GOOD GOVERNANCE TRANSLATES INTO CALM CITIZENS

The first thing that strikes one about Singapore is its cleanliness, orderliness and calm efficiency. These virtues hit you the moment you complete your five hour journey from India by air and step on to Singapore Airport. A Zen like calm descends upon you and you automatically begin to “do as the Singaporeans do.” The people of Singapore are not impatient and irritable as in India. No body honks loudly on the roads or overtakes rudely. People queue up by themselves and patiently await their turn in any situation. No body pushes and shoves. All queries are answered politely by the public, regardless of your being an outsider. In general, people do not con or cheat. This public tranquility has a lot to do with the high quality of life enjoyed by Singaporeans and the smooth way in which things are done in Singapore i.e. the e-way! Most government-public processes are automated for example, payment of road taxes and parking fees through smart cards. Their Mass Rapid Transport system is extremely efficient and highly convenient.

### E-Government: If Only We Could Be As Good!

There is no doubt that in comparing Singapore’s e-governance success with India’s performance, one has to account for certain basic differences. Singapore is geographically miniscule (less than 700 sq kms) in comparison with India, it’s population is limited (4.185 million) and there has been a single political party in power for several years, leading to a consistent policy and planning approach. This of course does not mean that one can take away the credit from the Singapore Government for its resolute determination to make their economic development and e-governance efforts a success or from the residents of Singapore for being astonishingly obedient, cooperative and disciplined in the nation’s interest. (Singapore has for the past four years been amongst the top three nations in the world as far as exploitation of ICT is concerned.)

The Singapore Government has arrived at its present stage of “one stop”, “non stop” e-government services at the end of a fairly long journey. At each stage the government formulated the national IT plans, e-g Action Plans and e-Government Strategic Programmes in keeping with needs of rapid economic development and the prevailing international ICT trends. This included ensuring appropriate changes in education syllabi and deciding the thrust areas in education to create the needed manpower resources. This deliberate control over manpower development and skill creation, so as to make human resources the driving force behind

economic development continues to lie at the heart of Singapore Government's strategy.

Of course, a perusal of India's Five Year Plans, the Tenth Plan Document, IT Strategy, National e-Governance Action Plan 2003-07(NEGAP), the IT Act 2000 and Right to Information Act 2005 makes it clear that our country too has a very fine perception of the exact needs of the hour with respect to e-governance in the context of our own development efforts. However, perhaps what is lacking is the single minded determination and extremely focussed and coordinated manner in which Singapore Government has gone about in implementation of their IT plans to convert their dreams for their country into reality.

### **One Government, Many Agencies:**

India is one of the leading countries venturing into e-governance and has several successful and innovative e-government projects to be proud of. However, in India the e-government effort tends to get highly fragmented over several central and state government departments and agencies with needless duplication, lack of standardization, coordination and interoperability leading to a few islands of excellence while the vast majority of government-to-citizen (G-to-C), government-to-business (G-to-B), government-to- government (G-to-G) and government-to-employee (G-to-E) interface continues in the old cumbersome way. There is a near total lack of communication and mutual learning from each other's successes and failures. In fact it is often seen that different wings of the same department have office automation software which do not permit even mutual exchange of data.

This situation needs to be remedied by making a single agency in charge of the e-government implementation in the whole country. This central agency preferably under Ministry of Communication and IT would develop and decide upon the interoperability framework including ICT policies and standards. Mandatory compliance would be enforced with the accepted standards, interface and architecture to ensure complete compatibility and interoperability throughout the government. This agency, lets call it the e-Government Authority of India, should have members from Department of IT, Department of Telecom and National Informatics Centre etc. In this respect we can follow the model of Singapore's IDA or Infocomm Development Authority. (See box)

INFOCOMM DEVELOPMENT AUTHORITY & FINANCE MINISTRY  
PARTNERSHIP:THE DRIVING FORCE BEHIND SINGAPORE'S  
COHESIVE E-GOVERNMENT EFFORT

- In Singapore, the Telecom Authority of Singapore and the National Computer Board were merged to form the Infocomm Development Authority (IDA) of Singapore.
- The IDA provides technical assistance and recommendations to the Finance Ministry, defines and recommends ICT policies, standards and procedures, performs service wide ICT master planning, manages central ICT infrastructures and project manages central ICT initiatives.
- The heads of various government departments and agencies (assisted by Chief Information Officer deputed to their organization from IDA), are responsible for articulating their organization's vision in exploitation of IT, aligning ICT policies, standards, projects, systems and infrastructure with business needs and priorities and those of IDA and ensuring that appropriate management attention, manpower and monetary assistance is given to ICT initiatives.
- The Singapore Government's Public Service Infrastructure or **PSi** as they call it, has been developed by the IDA in partnership with the private sector. It acts as a central platform for different government agencies to share common components such as payment gateways, security, electronic data exchange and authentication services. As a result individual government agencies do not have to develop their own. It has an "e-service generator" tool for rapid e-service development using graphical interface tool and high level business rule language. By leveraging on these building blocks, development time is drastically reduced for individual agencies.

In India we have several e-government success stories which have been acclaimed internationally, documented and analyzed threadbare. These include Karnataka Government's *Bhoomi*<sup>1</sup>, Madhya Pradesh Government's *Gyandoot*<sup>2</sup>, Kerela Government's *FRIENDS*<sup>3</sup>, Andhra Pradesh Governments *SmartGov*<sup>4</sup>, *CARD*<sup>5</sup>, *VOICE*<sup>6</sup>, *e-COPS*<sup>7</sup> and *e-Seva*<sup>8</sup> projects, computerized interstate check posts of Gujrat Government<sup>9</sup> and CVC's website. Recently, Haryana's *e-DISHA*<sup>10</sup> (District-level Integrated Services of Haryana) and Chandigarh's *e-Sampark*<sup>11</sup> have been in the news. What we need now is to chalk out an action plan based on the lessons learnt from these projects and implement the same nation wide.

Why can't we have a single model for state level e-governance which can be applied to all the states of the country with a built in flexibility to make local modifications depending on a state's peculiar needs? For example, Gujrat's interstate check post e-project or Haryana's *e-DISHA* can be modified to suit all other states of India. Further all the e-government models developed by state and central government bodies should be reusable, scalable and interoperable. Why should every state have to re-invent the wheel? The standardization and nation wide implementation of these separate initiatives should be done by the suggested Central e-Government Authority of India.

In the proposed scenario all state/central government agencies would consult the e-Government Authority of India, to discuss their proposals for implementation of e-government and obtain their approvals and advice. At the central government level, the e-Government Authority would in consultation with each department of the Central Government decide upon an action plan for immediate process re-engineering and office automation. This would serve as the first step towards the ultimate aim of reaching the "on-line transaction stage" for that department. Compliance can be ensured by unflinchingly linking conformity (to action targets and standards) to all central government budgetary allocations and funding. (Budget 2006-07 has a provision of Rs 3,334 crores for e-governance initiatives.)

The initiatives of individual government departments and agencies (with strict adherence prescribed standards) must continue to be encouraged. Government websites with good online practices covering the areas of information disclosure, data privacy, service fulfillment and adoption of best business practices etc should be accordingly accredited by the Central e-Government Authority. (In Singapore a TrustSg seal is awarded to IDA accredited public and private websites. This also helps instill public confidence in the website.)

#### G-to-C-Government-Citizen Interface:Delighting Citizens

Serving one's citizens better lies at the heart of e-government. For each citizen of India, a single *Bharat Sarkar- Aapki Seva Mien* portal should take care of all his/her needs of government interface. One click should open the District Government; similarly, one click would do for the State Government and one for the Central Government. He/she should be able to transact with the government including making e-payments by using his *Bharatvasi* identity and password). In this context Andhra Pradesh Government's *e-Seva* project<sup>12</sup> and the recently launched *Bangalore-One* (B-1)<sup>13</sup> project could be sources of important tools and lessons learnt. These projects endeavor to provide a number of facilities to citizens, which cut across various levels and agencies of the government.

It must be appreciated that for the provision of “one stop” services to Indian citizens on the lines of Singapore’s e-Citizen portal, there has to be a complete integration of services and data across various agencies and levels of government. Thus e-government must involve all the All India services, central government departments, public sector organizations, state and local government departments and agencies. In our country the required government-to-government interface and cooperation is often missing and instead, empire building and narrow interests tend to dominate the interplay between various services and levels of government. This has to be overcome by the exercise of strong leadership and control by the “Central e-Government Authority and the Ministry of Finance.

#### SINGAPORE GOVERNMENT’S E-CITIZEN WEBSITE (ANNEXURE A)

- The Singapore Government’s e-Citizen portal supports Singaporeans through life’s important events and solicits their opinion and feedback on various issues.
- It is a portal that provides over 540 online government services. (It is one of the categories available on the Singapore Government’s website (ANNEXURE B).The other 1060 services are available under Business and sinGov categories.)
- It is truly a “one stop” e-service portal. Further it is CITIZEN centric and not agency centric. There is a complete integration of services and information across agencies and Singaporeans can obtain most government services without even going to the government offices in person. Individuals can now interact online with the government on a vast range of matters. Available 24 hours a day, seven days a week, the e-citizen portal provides a single access point to all government information and services. These are organized and integrated in *intuitive* categories.
- Launched on 1 March 2003, **SingPass**, or Singapore Personal Access, establishes a nation-wide personal authentication framework for e-services. With just a single identification and password to remember, SingPass makes it more convenient and easier for users to transact online with the government. All Singapore residents above the age of 15, employment pass holders and their dependents are eligible for SingPass.

#### **Bridging the Digital Divide**

The problem of access to e-government facilities immediately comes to mind in a country like ours where the vast majority of people are poor and illiterate. The literacy rate in India is only 64% <sup>14</sup> and the internet penetration was only 4.5% of the population as on 31.12.05<sup>15</sup>. In Singapore too the problem of internet access exists, though not as acute, as in India. (The percentage of internet users in Singapore is 61% of

resident population)<sup>16</sup>To this end, the Singapore Government has set up internet facilities by way of 'e-citizen' points in public places, for example, in public libraries and community centers and NTUC Outlets (fair-price shopping centers). Trained 'cyber ushers' provide necessary assistance at these facilities.

In India the problem of universal access can be taken care of by setting up *Bharat Vasi Suvidha Centers* i.e. internet facility points across the country. The caretaker cum helper, the *e-sahayak*, could be paid a commission per transaction. These can be set up in village panchayats, public libraries, community centers, market places, BSNL customer care centers and post offices etc.

One option for funding these centers in rural and backward areas could be on the same lines as Department Of Telecommunication's current plan to set up Public Telecom and Information Centers (PTICs) and High Speed Public Telecom and Internet Centers (HPTICs) under the Universal Service Obligation (USO). At present the target is to upgrade public telephones to PTICs in villages with a population of more than 2000, for providing data applications including FAX, e-mail, internet besides voice-telephony and to instal HPTICs for providing additional facilities including tele-education and tele-medicine at Block Headquarters. Action is already on for drafting tender documents and working out the benchmarks for these activities under USO. (The PTICs and HPTICs are to be set up by telecom service operators in public and private sector. They are to be selected by a bidding process and their funding by way of subsidy support will be from the statutory Universal Service Fund).

Considering the requirement to involve outside agencies by the service providers for running and maintaining the kiosks, development of content and identification of sites for a viable business proposition, it has been decided to take up the project on a pilot basis for about 2000 villages. Discussions have also been held with the Department of IT for content development. The State Governments have been addressed on this subject. Apart from the above, the option of private sponsorship can be explored at least in urban areas. An important aspect to be kept in mind in India is the provision of content in dual language i.e. the option of access in local language must be compulsorily built in.

The Department of IT's draft framework for establishment of 100,000 Common Service Centres (CSC) dated August 2005, outlines the policy framework, strategy and financial support by the government for rapid proliferation of CSCs across the country. Chandigarh Administration has already begun work for the setting up of 18 such centres. These are aimed at providing information and government services, e-learning and entertainment facilities to rural areas.<sup>17</sup>

In India the Government has to step in to ensure that internet usage is taught to the underprivileged public, especially in rural and backward areas. Kerala's *Akshahaya* e-literacy campaign<sup>18</sup> is a good example of such an effort. NGOs and the private sector too must be roped in to play their part. Indira Gandhi National Open University (IGNOU) can be involved in spreading e-literacy through simple distance education programmes which could be made available at PTICs, HPTICs and CSCs. Interestingly cyber cafes are reported to be a very effective means of promoting internet usage.

#### PREPARING CITIZENS FOR e-SERVICES

- Singapore has launched innovative ways to educate and encourage the public to use e-services. For example, courses are held by school and college students during summer holidays for general public and older generation, e-competitions are held and discounts and prizes given for making e-payments for government services.
- It was also learnt that when government departments upgrade their computer facilities, the old equipment is donated to e-learning centres. All these measures form a part of their National IT Literacy Programme, E-Citizen Helper Programme and Infocomm Education Programme.
- Another striking feature of Singapore's e-government efforts is their concentration on quantity vs. over emphasis on quality in the initial stages. This means that their first priority was to get the system of e-government on road and get the maximum number of citizens on board. The idea was to reach a critical mass of e-government. Thus even today for almost all non financial government to citizen interface, a simple e-Citizen identity and password--the **Sing Pass** forms the base. There are no elaborate security measures but the system works satisfactorily and is widely used by their citizens today. Now, the Singapore Government having come this far has, the luxury to introduce better security features apart from constantly trying to improve the quality of its e-interactions.

In India, we tend to be over ambitious, going in for very complicated and elaborate software and hardware that finally never take off in terms of practical results. However, in the Indian context, one has to accept that the building in of foolproof authentication and security is critical (It was heartening to read in the newspapers that the Indian Government plans to give its citizens smart cards which will use biometrics for identification purposes.<sup>19</sup>)

## G-to-B, Government Business Interface

For the business community transacting online with the government and having a “one stop” access to all government agencies, 24x7, translates into convenience and time and cost savings. Such a pro-enterprise environment would naturally act as a great facilitator of economic growth.

### SINGAPORE GOVERNMENT’S G-to-B SERVICES:EMPOWERING BUSINESS

- The G-2-B portal in Singapore (Annexure C) is the first entry point for all local and international businesses to a full suite of integrated information and services, presented according to business life cycle. Pertinent topics such as government assistance programmes, protecting business ideas and market research, provide useful information to business.
- Bizfile** enables the business Community to file all prescribed business or company forms and their supporting documents required to register companies and fulfill statutory disclosure requirements, at any time, over the internet. It has successfully reduced the time needed for incorporation of new business entities to 15 minutes!
- The Online Business Licensing System (OBLs): Using OBLs, an applicant needs to complete one integrated form for many licenses and make a single online payment for multiple license fees. Processing of licenses is done concurrently thereby drastically saving precious time for the businessman.
- In Singapore, **GeBiz** is an integrated one stop electronic business centre that provides for online procurement of goods and services by government agencies. It also allows registered suppliers to conduct business with the government. Local and international companies can therefore check out or participate in business opportunities with the government in an efficient, transparent and secure environment.
- It has three components; GeBiz partner for the supplier community to source and respond to government wide business opportunities, GeBiz professional designed for procurement executives in administering complex tenders and GeBiz enterprise for decentralized procurement by government officers. It is mandatory for government agencies to come on board Gebiz for purchases.

The Indian Government too is making a commendable effort to stream line the entire investment process as can be gathered from the Department of Industrial Policy and Promotion’s (DIPP) report on ‘Reforming Investment Approval and Implementation Procedures’ The

report very aptly stresses on process re-engineering across several government agencies including enactment of legislations and reframing of business rules so as to arrive at the ultimate stage of 'single window' system and 'single composite application form' to facilitate the issue of all approvals from a single point, in a time bound manner. A perusal of the report drives home the point that the transition from complicated, multi-agency, delay ridden manual systems to e-government is tedious and tough as it involves re-thinking, simplifying and redesigning government processes, rules and laws. However, as the old adage goes, where there is a will there is a way! The National Institute of Smart Governance (NISG), Hyderabad is working on the Indian Government's e-Biz project which is also sponsored by the DIPP. It aims at providing a single window government to business portal, offering services for the complete life cycle of business. In the pilot stage it is to be implemented in the states of Andhra Pradesh, Haryana, Maharashtra and Uttar Pradesh. It is one of the integrated services project under the National e-Governance Action Plan(NGEAP).

Another initiative in this area is the ambitious MCA21 project of the Ministry of Company Affairs, perhaps the largest e-governance project and one of the mission mode projects under the NEGAP. MCA21 project is designed to fully automate all processes related to the proactive enforcement and compliance of the legal requirements under the Companies Act, 1956. Apart from obvious benefits to the business community as it would enable them to register a company and file statutory documents quickly and easily, the public at large would benefit from online access to the centralized data base of relevant company records and the effective investor grievance redressal mechanism provided by this project.<sup>20</sup>

In the context of GeBiz one is often confronted with the commonly held view that civil servants would resist e-government initiatives as they result in greater accountability, transparency and reduced discretionary powers. In fact it is for these very reasons that many civil servants would welcome e-government! In the present system, very often rules and regulations are rather outdated and no longer exactly applicable to ground realities. While as a civil servant one does not want to be rigid to the point of ridiculousness, at the same time one is aware that no matter how trivial, any deviation from the written code (or the auditor's interpretation of the same), would invite unwanted attention from the Controller & Auditor General (C&AG). Further such 'lapses' will be cashed upon by ill wishers to call forth vigilance enquiries. Imagine a scenario where such ambiguities do not exist because one's work is automated. The civil servant is no longer afraid of decision making and bogged down by routine work. The latter becomes e-asy! Instead she/he can concentrate more on administration, management, development and nation building.

As a financial advisor in the Government of India, the author feels that that introducing e-procurement is imperative. The C&AG, Finance Ministry and the CVC in interaction with the NIC could give government departments the ideal framework for e-procurement software which would serve as the (audit proof!) e-procurement system for all central and state government ministries and departments. The Andhra Pradesh government's e-procurement portal boasts of an impressive figure of Rs 14,600 crores of transactions in 2005 as well as a savings of Rs 960 crores due to tender discounts in the same year. It has been reported that A.P Government officials feel that e-procurement helps avoid cartel formation, besides reducing inventory costs. It also creates a level playing field for suppliers and buyers<sup>21</sup>. Among the central government ministries, Indian Railways has switched over to e-procurement.

### Designating e-Champions

In India, e-government projects, (as they are officially patronized by ministers or very senior level bureaucrats), are often high profile affairs. The actual implementation is of course handled by mid to junior level officers. Unfortunately for the very reason that they are high profile, instead of an *e-champion* to lead the implementation effort of the project, what we often end up having at the helm of affairs is an *e-trumpeter* who tries to bulldoze the department into implementation without bothering to understand or solve problems faced by grass root level implementers. The result is that the project comes to a groaning standstill once the trumpeter has achieved his confidential report other recognition. For an enduring and genuine implementation, an administrator with understanding of field level problems, human resource management skills, a high emotional quotient (EQ) and plenty of IT skills is needed. Further, every e-project must have built into it, exhaustive training and post implementation support so as to make the transition from the laboratory to the pilot and then to various actual implementation sites easy. Often big private sector companies develop the software, pressurize for payments and then turn their backs on the hapless department.(Unsuccessful implementation of course leads to a lot of finger pointing within the department which is further aggravated by the entry of the C&AG audit who diligently swoops down to highlight the colossal wastage of government monies.)

As all civil servants are aware, to this day, most office records are maintained manually and even the manual data is not complete. When faced with the prospect of implementing an e-government project the two most bothersome aspects at grass root level are the huge task of data entry and the problem of gaps in manual data. In this regard, firstly, data entry should be allowed to be outsourced while clearly making the concerned public servant responsible for sticking to time schedules and ensuring accuracy of feeding. Secondly, if some bold decisions need to be taken regarding gaps in manual data in the interest of getting the project

under way, then so be it. (Once it has been reasonably established that the effort and time needed to fill the gaps would be out of proportion compared to the benefits accrued or that it is impossible to find missing records). These decisions should not ordinarily be subject to “post mortem” by auditors.

### **Government to Government, Towards a Networked Government**

In order to serve the public seamlessly and effectively, ICT has to be used by the government, as the key enabler in transcending organizational boundaries, to collaborate, share information, and leverage on the collective knowledge to deliver value added, integrated and responsive services to citizens who are to be treated as valuable customers.

#### **G-to-G in SINGAPORE**

- To meet this challenge, the Singapore Government is continuously evolving into a knowledge enterprise where collective knowledge is harnessed to deliver greater value services. They are constantly enhancing their service wide ICT management and governance capabilities while leveraging on common architectures and infrastructures to promote cross agency collaboration and optimize resource allocation.
- They are also continually addressing security risk, in an integrated, proactive and preventive approach.
- Singapore Government’s Service Wide Technical Architecture (SWTA) is a technical framework of principals, standards and guidelines on the use of technology components. This helps to facilitate inter-operability and information sharing across agencies, leading to seamless, integrated e-services to the public.
- The domain architectures within the SWTA framework seek to reduce integration complexity, promote greater economies of scale, and increase re-use of components amongst ICT systems.

Careful thought has to be given as to the composition of the single agency responsible for laying down and enforcing the parameters of common infrastructure, architecture, standards etc for the implementation of e-government across all government agencies. As mentioned earlier, it would be best to follow the pattern of Singapore’s IDA and entrust this responsibility to an e-Government Authority of India under the Ministry of Communication and IT which should work closely with the Finance Ministry. The combination of Telecom and IT expertise available in Ministry of Communication and IT with the effective power and control

wielded by Finance Ministry has yielded rich results in Singapore with regard to e-government implementation.

GOVERNMENT TO EMPLOYEE: LAYING THE FOUNDATION FOR A  
NETWORKED GOVERNMENT

- The Singapore Government continually trains and equips its employees with relevant ICT skills and competencies to take advantage of the growth in IT capacity, to revamp internal processes and external service delivery. Each government employee, depending on his position and department/agency has to complete a minimum number of core courses and electives in ICT every year. Training can be through internet, full time or part-time courses.
- This falls under the Infocomm Education Programme developed jointly by the IDA and Ministry of Finance.
- A Technology Experimentation Programme encourages and facilitates the public sector to achieve new levels of excellence and improved delivery of public services through the innovative use of infocomm technologies.
- The IDA also gives financial grants to public sector agencies who pilot knowledge management projects with the aim of encouraging and supporting government agencies to embark on knowledge management initiatives.

In India too training of government employees in ICT skills is a must at every level. It is good to see that a National Institute of Smart Government has been created at Hyderabad as a not-for-profit company incorporated in 2002 with NASSCOM (National Association of Software and Service Companies), central and state governments being the principal promoters. NISG is being shaped as an institution of excellence in the area of e-governance with focus on developing appropriate architectures and standards, providing high-level consultancy services and capacity building at the national level.

NISG is constituted under a public private partnership model with a view to combine the immense potential and resources of the private sector with the principles of accountability and transparency of the public sector. The goal of NISG is to lead the nation to a preeminent position in providing integrated online services to the citizens and businesses. It has already commenced training programmes on e-government.

It is hoped that NISG would play an important role in training and actively involving all civil service officers and not only the IAS in e-government, as any comprehensive endeavor to implement e-government in our country cannot afford to concentrate on only a select part of the

government set up. The entire civil services and public sector must be united and pulled along in a huge cohesive effort, if we are to convert our goals and dreams for our nation into reality. This unity and cohesion between government services and departments lies at the heart of G-to-G, which in turn is the foundation for provision of comprehensive and convenient e-government services to the public.

It is aptly said that for e-government efforts to be successful, 90 percent of the effort must be directed towards changing the mindsets of the stake holders (very tough) and simplifying and streamlining of government processes (tough), while the 10% constituted by ICT is relatively easy!

### Conclusion

One of my e-government course mates at Singapore who hails from a tiny island nation had enquired about the progress of e-government in India. I had explained to her that in comparison to her country or even Singapore, India was like a huge elephant. It is huge, so necessarily a bit slow, but it is powerful and has tremendous potential. (I had also been asked during the course, whether people in India still ride on elephants!). I was however deeply inspired by Singapore's progress. While acknowledging that our country too is doing a very good job in this sphere, one cannot help but re-emphasize the need for a unified and coordinated 'single agency entire government' approach to the implementation of e-government in India.

## SOME IMPORTANT DEFINITIONS and CONCEPTS

Singapore's Definition of e-Government: A government that recognizes the impact of ICT on governance in the digital economy, and exploits ICT in government workplace and internal processes for the delivery of citizen centric public services.

1. The Stages of e-Government:

- a. Web Site with Information
- b. Basic Services such as forms
- c. Full government to- citizen, business and government transactions
- d. Transactions such as tenders and e-payments
- e. Integrated services across the government

3. G-to-C: Government to Citizen Interface: Includes all interactions between Governments and citizens which can take place electronically. The aim is to offer citizens faster, more responsive, more convenient and less complicated means to public services.

4. G-to-B: Government to Business Interface: The objective is to enable businesses to interact, transact and communicate with government online with greater convenience and speed.

5. G-to-E: Government to Employee Interface: The aim is to cultivate IT capabilities amongst government employees to deliver efficient and cost effective services.

6. G-to-G: Government to Government Interface: It is anchored on trust and interdependence and allows for information sharing across agencies, regions and even nations.

### DISCLAIMER

IT IS HEREBY STATED THAT THE VIEWS EXPRESSED IN THIS ARTICLE ARE PURELY THOSE OF THE AUTHOR AND DO NOT IN ANY WAY REFLECT THE GOVERNMENT OF INDIA'S POLICY OR STAND ON THE SUBJECT.

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## End Notes:

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<sup>1</sup> Under the prestigious Bhoomi e-governance project of the Government all 20 million land records of 6.7 million land owners in 176 taluks of Karnataka have been computerised. This system works with the software called "BHOOMI" designed fully in-house by National Informatics Center, Bangalore. While the project is largely funded by Government of India; some critical components of this project are funded by State Government.

<sup>2</sup> Gyandoot is an intranet in Dhar district of Madhya Pradesh connecting rural cybercafés catering to the everyday needs of the masses. It's portal is <http://gyandoot.nic.in>

<sup>3</sup> FRIENDS (Fast, Reliable, Instant, Efficient, Network for Disbursement of Services) a single-window delivery of government services, is operational in Kerala with the involvement of poor women's groups. FRIENDS delivers easy and efficient services through a single point interface. It promotes improved coordination between government departments and simplifies interaction between the citizens and the departments in paying bills, obtaining applications, remitting registration fees, and so on. Such activities are done through a single window.

<sup>4</sup> The SmartGov project is aimed at making interactions between government and citizens (G2C), government and business (G2B) and agencies within the government (G2G), more friendly, convenient, transparent and inexpensive.

<sup>5</sup> The CARD project of Andhra Pradesh, has transformed Government to citizen interaction through application of ICT in delivery of citizen services.

<sup>6</sup> VOICE provides single-window services, from online payment of municipal dues, issue of trade licenses, building permissions, and birth and death certificates. Day-to-day operations are computerised, improving operational efficiency. VOICE also provides a powerful community information network providing procedural and general-purpose information useful for the citizens.

<sup>7</sup> E COPS primary purpose is to maintain and monitor information to enhance departmental performance. The focus of eCOPS is the computerization of investigation activities and administration and support services across the state, to enable easy access to information throughout the department..

<sup>8</sup>An e-government project initiated by the state government of Andhra Pradesh (GoAP) in India, the eSeva project is aimed at integrating and offering a wide range of government to citizen (G2C) services at a single location. Its portal is <http://www.e sevaonline.com/>.

<sup>9</sup> The inter-state transport system in Gujarat has been revolutionized by the setting up of computerised inter state check post which have reduced harassment faced by the transporters while reducing the arbitrariness that existed earlier in the imposition of excise duty.

<sup>10</sup> The e-DISHA is an IT driven electronic interface between the Government and citizens. The application software for various public services has been developed by NIC-HRSC as a Citizen interface on D-NET in collaboration with the Department of Information Technology for implementing at e-DISHA Centres.

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<sup>11</sup> Chandigarh Administration has set up Electronic Citizen Service Centers in the city by the name 'eSampark' at different location, under the e-governance programme, which is part of its I.T. policy. eSampark Centers envision providing different government services under a single roof eliminating the problem for citizen to go different government offices. These are multi-services single window system providing integrated, efficient and quick services.

<sup>12</sup> E Seva is a citizen centric e-government project. It aims at integration of departments, central and state governments, integration of services and of G2B and G2C. For more information see A.P online at [www.aponline.gov.in](http://www.aponline.gov.in).

<sup>13</sup> The Bangalore one project has been successfully launched on 2 April, 2005 with 14 service centers providing 24 different services to citizens of Bangalore. From BCC, BESCO, BSNL, BWSSB, police, RTO, passport, stamps and registration - all these services are provided under one roof. The official portal for Bangalore one is [www.bangaloreone.gov.in](http://www.bangaloreone.gov.in).

<sup>14</sup>Information from "The Numbers Game" by Seetja, 27.3.06 at [http://: dnaindia.com](http://dnaindia.com).

<sup>15</sup> Information taken from <http://www.internetworldstats.com/stats3.htm#asia>.

<sup>16</sup> Information taken from [www.ida.gov.sg](http://www.ida.gov.sg).

<sup>17</sup> From "A step ahead: Extending e-governance to rural areas," The Indian Express, Chandigarh dated 10.3.06.

<sup>18</sup> Akshaya is a government-sponsored community campaign in socially and economically backward district of Malappuram in Kerala. The campaign proposes to have at least one member in every family in the district to be IT-literate in three month's time.

<sup>19</sup> "You Can't Touch This," p-3, Times of India, dated 24.7.05.

<sup>20</sup> Information from [www.mca.gov.in](http://www.mca.gov.in).

<sup>21</sup> From the Times of India, Hyderabad, 20.4.05 as posted at [www.eprocurement.gov.in](http://www.eprocurement.gov.in).

## ANNEXURE A

### SINGAPORE GOVERNMENT E-CITIZEN WEBSITE

The screenshot shows the Singapore Government eCitizen website. At the top right is the Singapore Government logo with the tagline "Integrity • Service • Excellence". Below this is a navigation bar with tabs for "GOVERNMENT", "CITIZENS & RESIDENTS" (highlighted), "BUSINESSES", and "NON-RESIDENTS". The main header features the "eCitizen" logo and the tagline "Your Gateway to All Government Services". To the right of the logo are links for "Contact Info", "Feedback", and "Sitemap". Below the logo is a search bar with a "Go" button and the text "powered by Google". A secondary navigation bar contains links for "Home", "About Us", "Useful Links", "My.eCitizen", and "A-Z Government List".

**HIGHLIGHTS**

**Happy Birthday Singapore! website**  
The Happy Birthday Singapore! projects are a series of nation-building projects to commemorate the nation's 40th year of independence.

**Why Q? e-Pay**  
Make your government payments with eNETS between 1 Jul - 31 Dec 2005 and stand a

**Government Services • Do it Online!**

- Culture, Recreation & Sports**  
Arts Calendar, Holiday Facilities, Parks, Learn a Sport, Sports Facilities, more...
- Defence & Security**  
SAF Exit Permit, SAF Overseas Notification, Foreigner Status, NRIC, Report Crime, Passport, more...
- Education, Learning & Employment**  
School Information, Library, Employment, Government Jobs, Skills Upgrading, more...

**QUICK LINKS**

- Pay Fines, Fees, Taxes and Licenses
- Check CPF Account
- Enquire PARF/COE Rebates
- Enquire Road Tax Payable
- Enquire Car Transfer Fees

## ANNEXURE B

### SINGAPORE GOVERNMENT WEBSITE

**Singapore Government**  
Integrity • Service • Excellence

**GOVERNMENT** | CITIZENS & RESIDENTS | BUSINESSES | NON-RESIDENTS

**SINGOV**  
Government Information

Contact Info | Feedback | Sitemap

Search  **GO** Powered by **Google**

Home | About Us | Careers | Useful Links

**What's New** [more >>](#)

- Minister Lim Hng Kiang's speech at launch of the Competition Commission of Singapore
- PMO statement on Singapore's representation at the funeral of the late King Fahd bin Abdul Aziz Al Saud
- PM Lee's condolence letter on the demise of His Majesty King Fahd bin Abdul Aziz Al Saud

**SPOTLIGHT: ADVANCE GDP ESTIMATES Q2 2005**

**ADVANCE GDP ESTIMATES**

Economic growth picked up in Q205. Advance estimates show that real GDP grew by 3.9% compared to the same period in 2004. On a quarter-on-quarter seasonally adjusted annualised basis, real GDP expanded by 12.3%. [more >>](#)

**A-Z Government List**

Find websites of Government agencies. Browse by :

- Alphabetical Order
- Ministries
- Organs of State
- Statutory Boards
- Others

**Releases & Speeches** [more >>](#)

- SPRInter (Current Press Releases)
- STARS (Speeches Archives)
- Ministries' Newsrooms
- Key Agencies' Releases

**Information & Policies** [more >>](#)

- Arts and Creative Industries
- Family and Community
- Finance and Economy
- Defence and Security

**Govt Who's Who** [more >>](#)

- The President
- The Prime Minister
- Cabinet Ministers
- Government Directory (SGDI)

ANNEXURE C  
SINGAPORE GOVERNMENT'S BUSINESS WEBSITE

The screenshot displays the Singapore Government's Business Website. At the top right is the Singapore Government logo with the tagline "Integrity • Service • Excellence". Below it are navigation tabs for "GOVERNMENT", "CITIZENS & RESIDENTS", "BUSINESSES" (highlighted in red), and "NON-RESIDENTS". A secondary navigation bar includes "Contact Info", "Feedback", and "Sitemap". The main header features "BUSINESS.gov.sg" and a search bar with a "Go" button and "Powered by Google" text. A dark navigation bar contains "Home", "About Us", "Services", "Events", "Newsletters", "FAQs", "Links", and "A-Z Government List".

The main banner features a cityscape of Singapore with the word "SINGAPORE" in large blue letters, followed by the tagline "where entrepreneurial minds meet unlimited opportunities".

Below the banner is a "WHAT'S HOT" section with four featured items:

- [Enterprise Development Centre @ ASME](#)**  
With SPRING Singapore's support, the Association of Small and Medium Enterprises (ASME) has set up Singapore's first
- [Government Info Bits](#)**  
Government information that may interest the business communities. Refreshed on 1 Aug 05, this instalment features: Zero GST Warehouse
- [Online Business Licensing Service won UN Public Service Award 2005](#)**  
 This award winning service allows you to
- [Business CARE Programme](#)**  
Sign up for discounted PC & Broadband packages and/or courses on how to use Government online