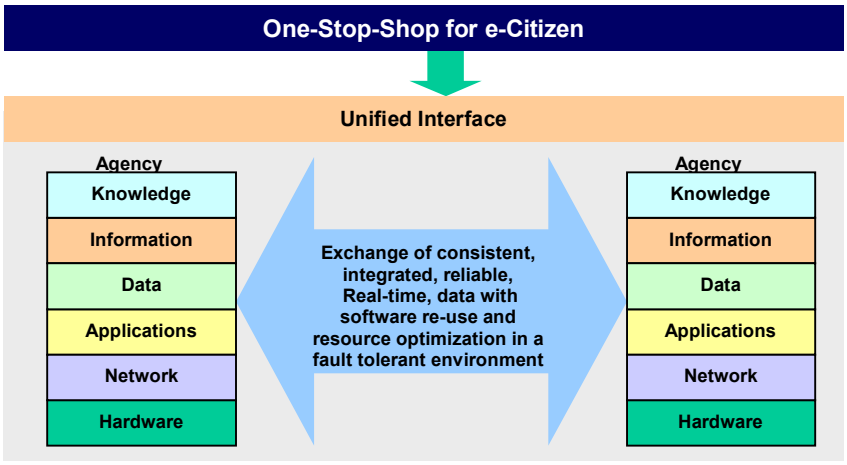
e-Government to e-Citizen: Narrowing the Gap

'Integration of systems across agencies is the foundation for a unified portal and a single service window for the citizen. Before we get there, we need to know what we have and where, in order to share or integrate with others'.

The Internet revolution has transformed industries across the world and the government is no stranger to this movement. The daunting task of transforming the government is challenging to say the least. The initiatives launched by various agencies at different levels and a concerted effort by the administration to bring focus in this effort is a move in the right direction. However the lingering questions one has in mind are: 1) Can we e-transform the government? 2) If so, how do we enable such transformation?

The Ideal World

Here is a simplified graphical representation, which attempts to bring out the ideal environment for an e-Citizen. The objective of such a portal is to 'Conduct business with the government anytime, anywhere: Seamlessly'. In an ideal scenario I, as a citizen log onto the portal through my ISP and I am greeted by a personalized MyGovernment home page. I am alerted that there are several time-bound activities to be completed: file Federal and State taxes, renew my vehicle registration, Oh, my drivers license will expire in 30 days. I am also a business owner so I need to renew my business license. I had applied for my passport renewal and I have an update on where it stands. My county wants to conduct a survey on school age children. I had subscribed to a customized travel alert service from the State Department for selected countries and I received alerts for two Asian countries. I tend to procrastinate, so I prioritize my tasks and decide to set the 'Remind me Later' option for all the pending tasks except my Vehicle Registration which can be completed now. I click on a link in the DMV email that takes me to an online transaction for completing my vehicle registration. Oh, by the way before I log out I take a quick look at my social security statement and the status of the I-Bonds I had purchased online. The conveniences: a single username and password, personalized pages, reminders and one time data entry of key and reference information such as Name, Address, SSN and preferences.



This will be an ideal world where all agencies communicate with each other in the background at the federal state and local level. The benefits are not only in terms of convenience to the citizen but providing timely, consistent and accurate information. In addition there will be significant cost savings due to sharing of hardware, network, applications, licensing software and support costs.

The Real World

Let us get real! We are far away from this ideal scenario. Despite the constraints and inconveniences governments have made major strides in providing basic services on the Internet also had its share of failures in e-Commerce ventures when Dotcom failures were perceived as disasters contained to the Silicon Valley. The failure of the USPS PosteCS email service venture is an example of an inadequate research on the 'Revenue generation model'.

On the success side, we can conduct business with the government via the Internet that was unthinkable a few years ago. Some of the prominent examples are paying federal taxes on line, state motor vehicle registration & renewals, procurement activities and so on. Vast amount of information, that had to be requested by mail earlier, is available on the Internet today. The new improved FirstGov web portal is a good start. The formation of the Office of Homeland Security and its emphasis on information sharing and security are some of the major initiatives and are beginning to have an impact. In addition, several agencies such as IRS, US Customs, HUD have embarked on massive projects to revamp the entire IT landscape.

The transformation is not yet apparent to the constituent and citizen. Paper forms are required to be filled for several services, face time is essential to avail some services and there is a serious disconnect between the federal, state and local agencies particularly in the areas of law enforcement.

The Issues

The issue is not necessarily technology, but more of a mindset, process and policy. The key word is **'Integrate'** as opposed to **'Sharing'**. Integration goes beyond exchanging information selectively. Integration ties the data and transactions across systems making them appear transparent and seamless and eliminating the fundamental issues of data & process duplication and inconsistency. Hence, the question one needs to ask is 'Why can't we integrate?' as opposed to 'Why can't we share information?' Obviously, there is a tremendous amount of effort required to enable policy changes leave aside the cost of implementing such unified systems. The pressure is on the agencies to e-enable their services and make more information available on the Internet. This has and will result in underlying issues surfacing out of these implementations in the coming years.

Issue	Consequence
Growing Content	Agencies have and will continue to generate terabytes of text, images and data every year and are required to keep it online. Post 9/11 scenario demands a well thought out workflow process where content is carefully reviewed before it can be released for public viewing worldwide.
Aging Technologies	Several agencies continue to operate aging technologies and are under severe budget constraints for replacements. Reengineering the complete business of an agency is an ideal solution but is capital and time intensive. Scalability could be another likely cause for concern as the demand for web based services and information increases
Duplication of Data	This is a consequence of disconnect between various business processes and systems. Duplicated, processes & data are expensive to maintain.
Dependency on Paper	The government continues to use paper-based forms while conducting business. These forms are expected to be stored for a period of 3-10 years. There will be continued increase in physical storage and increasing retrieval times.
Inadequate Security	9/11 has brought this longstanding issue to the forefront. The internet has enabled worldwide availability of information and data on a 24x7 basis. Release of data and information without adequate review procedures could result in serious damage to the public.
Inefficient Archival	Archival of data and electronic documents is bound to be a bottleneck if not planned and addressed in the early stages. Even though disk space is cheap not having a good archival process in place could degrade the performance and increase operational costs.

Redefining the Problem

In order to get a better handle on the situation, let us attempt to redefine the problem. Several hundreds of IT systems are processing transactions, capturing data from diverse sources, using different technologies often duplicating business processes. There is a lack of clarity on the ownership of the data, its sensitivity, and data source clubbed with resistance to reengineer the processes. Providing information and services on the Internet has introduced a relatively new asset: web content. In order to share or integrate with others, we need to know what we have within the enterprise.

The Silver Bullet

There is none! Transforming the government is a slow and painful process and it has to happen. The fact of the matter is: Business has to go on while ambitious multi year projects are planned and executed. The key is to change the mindset followed by the policies and procedures while using technology as a powerful enabler. The art of getting closer to the goal is not by realigning the agency's responsibility redefining the boundaries but to start within the enterprise. The processes in place today are built on three key entities: Documents, Data, and Content. Enterprises capturing or generating any form of information end up storing the

information in Documents, Data or Web content. We need to take stock of these information assets in order to make any headway into the world of information sharing.

- ❑ Take stock of all information assets in enterprise
- ❑ Group business objects into documents, transactional data and web content
- ❑ Assign sensitivity levels to all business objects
- ❑ Develop enterprise level security access model
- ❑ Identify duplication points and processes and restructure to eliminate them
- ❑ Establish workflow processes for review and release of all

To summarize, significant strides have been made towards attaining the goal of providing a seamless access to federal systems. Good housekeeping is a good starting point to ensure that the enterprise has full control on the information assets: Documents, Data and Content. Reengineering or improvising processes around these entities will go a long way in meeting the goal of providing a seamless unified access to the world of the government.

Entity	Objective
Documents	Paper based transactions can be phased out gradually wherever possible by replacing with web based transactions. Some processes may require continued usage of paper forms. However, the objective should be store images for effective record management and separate the data from the forms by using Intelligent Character Recognition technologies (ICR). Such data can subsequently be used for transactional or analytical purposes.
Data	Hundreds of terabytes of data is residing in federal systems containing valuable information. Data will continue to grow rapidly and sound practices are required to protect and translate it into information and knowledge. Archiving of data should be a key objective in order improve performance of systems and reduce operational costs.
Content	Web based content a recent entrant, comprises of data, text, images, audio and video files. The ease of integrating these forms of data has helped create powerful web content, something unthinkable three years ago. A uniform roles & responsibilities model across agencies and tying into security clearances may not be a far-fetched idea to implement a portable and effective security model for content review and release.

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