



## Defining e-Governance Services

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### ABSTRACT

*The goal of democracy and a demand that is already being made and will be made by the citizens with increasing urgency is to speed up the transition from being ruled to being governed and then to direct participation of citizens in Government. E-Governance is the only practical way to achieve the above. For any scalable e-governance initiative, which should be delivered with reasonable “technical” cost and minimum rework, standardization is a must. Governance Services can be factored and generically described for a substantial fraction of the total number of services offered by governments if we separate the commercial activities required to deliver the services themselves. In this second paper in the series on standardization of e-Governance we explore the process of standardization of services and describe an approach to the next step in standardization –viz standardization of Governance Services.*

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### 1. Governance Services

Before we explore the process of standardization of services, it is essential to understand how Government functions are delivered, to separate Governance Services from the commercial activities of Government, and to see if we can find common threads and explore if we can standardize and modularize the processes

#### A. Delivery of Government functions.

##### i) Steps normally used in the delivery of governance functions:

- Achieve Policy Consensus
- Legislate the principals and norms for provision of services and specify financing
- Determine the Central Government’s role in production / delivery of the service
- Determine the local Government’s role in production / delivery of the service
- Role of Civil Society and NGOs
- Actual delivery thru interfaces.

##### ii) What is being delivered

- Taxation for delivering government
- Public Infrastructure
- Regulatory Services (Licenses, Permissions, IDs etc)

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- Health Care
- Other Citizen Services
- Defense, Security, Foreign Trade etc.

The first five impact public perception and account for a large portion of the total activities much more than the last, though the items in the last bullet are equally important in the long run. This paper explores the first five items above. Government is run thru departments which are charged with delivery of the above functions. The activities of the departments can be divided into three clear categories and to define the broadest possible generic functions it is necessary to separate these:

- Delivery of the function – should be the primary activity of the department
- Commercial activities to resource the delivery
- Administrative activities to run the department itself – this is a clear overhead

The relative proportions of items 1 & 2 above can vary substantially. For example in the building of public infrastructure commercial activities dominate while in the area of regulatory services, the delivery of the function itself is of prime importance. This separation provides us with some insight and we introduce the hypothesis based on this in the next section:

#### B. What do people want of Governance?

Citizens are most interested in the delivery of the function itself and the time, cost and ease of access

Key issues in Governance are:

- Publicity - Those who deliver and those who receive governmental services should be aware of all the key deliverables.
- Equity - The delivery should be equitable across regions, demographic segments, communities etc.
- Transparency – One of the biggest concerns of the citizen is that he has no information or say in the process (Delivery is unacceptably mixed up with the departmental administrative issues linked to bureaucracy)
- Inclusiveness
- Affirmative action
- Reach / Accessibility - Another big concern which causes dissatisfaction
- Simplicity – Both in terms of delivery and in terms of understanding without ambiguity as far as possible. This is a key issue and a key requirement

A report by The Center for Technology in Government at the University at Albany is conducting current practice research into several areas of e-government. According to this report, quite surprisingly there is a substantial difference of opinion between citizens and government officials. “citizens see the biggest benefits as increased government accountability to citizens (36%), greater public access to information (23%), and more efficient/cost-effective government (21%). Finally, 65 percent of the public felt that government should proceed slowly in developing communication between citizens and government. This was due in large part to issues with security and privacy of information. Government managers, by contrast, believed the effort should proceed quickly.”

#### C. Activities in Delivery

Departmental administrative activities – Best practices from both Governmental and private organizations should be applicable here (e.g clarity of assignment of tasks and roles, training etc.)

Commercial activities – Best practices from large commercial organizations should be theoretically applicable to government departments.

Delivery of governance functions usually involves

- Policies
  - Input information
  - Verification of identifiers
  - Verification of declarations / claims
  - Validation of eligibility / establishing status
  - Providing the benefit / permission / license etc. Or
- Determining rates applicable (e.g Tax rates)
- Physically delivering the service
- Recording / Providing information to authorized information seekers
- Tracking compliance
- Tracking Validity

Some of the above steps e.g. steps 3; 4; 5 etc. may be repeated and / or iterative and may involve multiple steps of physical and / or documentary verification. The above represents a good basis of factorization of services in Governance and provides the definition of a Generic Governmental Service and leads to a generic definition of a large proportion of governance services.

Such a construct and data standardization enables us to scale up delivery at a reasonable cost through a process of migration to e-Governance. In a pilot exercise done with IEG for 8 departments of the government of AP we developed a robust conceptual framework, which integrates the concept of data standardization with the key purpose of defining the standards by the government viz. providing a well-delivered set of governance services.

## 2. Some observations

- Based on the application of the service centric approach (See our Paper “Data Standardization for e-Governance a Practical Approach”) we came up with a standardized model of a government Service which was converted into a standard Schema
- We were also able to categorize data elements into specific groups viz:
  - Identifiers
  - Declarations
  - Output
  - Payments
- So we now have a grid to completely describe a service and to indicate the elements of delivery of the services.

Data Classification ↓ Standard Service	Identifiers			Declarations			Output			Payments	
	Person	Comp any	Loca- tion	License / Permit	Physic al	Person Based	Entitle ments	Constra ints	State of Dept	Amounts	Instru ments
<b>Inputs</b>											
Completeness											
Validations											
<b>Process</b>											
<b>Verification</b>											
Physical											
Documentary											
<b>Signoffs</b>											
<b>Recommendations</b>											
<b>Outputs</b>											
Documents											
Actions											

A framework of this nature not only describes a service but provides us with a few very important insights:

- Is there a natural progression into e-Governance
- Can there be a simplification of process
- Is there a natural architecture for e-Governance

Fortunately the answer to all these questions seems to be yes! The rest of this paper describes our hypotheses.

### ***A natural progression into e-governance***

A look at steps 3 and 4 of the steps in the delivery of a service (section II 3 b) and the common experience of most users of the services indicates that a substantial effort and time goes into verification of data which is established by other departments. For example identities are established for a person or entity through a governmental service. Similarly claims by applicants most often refer to permissions granted by governmental departments. Naturally the first and simplest services which can drastically reduce time and effort would be simple “look-up” services.

#### *i) Simple look up services*

Published look-up services will enable authorized persons (or programs) to look-up and verify claims or identities. Summary services can be built to generate simple summaries on additions to the system etc. Directory services would enable citizens (or programs) to ascertain where something is available. This is a natural beginning step in transition to e- Governance and involves no change at all in current processes for implementation. When a reasonable number of such services are available the natural next step would be to offer bundles of these services as verification services.

#### *ii) Verification services*

Look-up services can be bundled into verification services which can usually combine multiple claims and follow defined workflows. With these types of services the major causes for delays and disputes are removed. Simultaneously there can be a concurrent process to improve transparency and analysis. During the process of building and maintaining look-up services the information generated can be used to build more complex information services viz.

#### *iii) More complex information services*

- Information for correlation between policy initiatives / interventions
- Information on schemes
- Information for economic analysis
- Information on health etc.

Information services can be built by using a process similar to building verification services using summary look-up services and workflows to provide data ready for analysis.

#### *iv) More complex services based on rules and acts*

Here points on Eligibility, Applicability etc can be provided thru automated rules which are directly linked to Government acts / policy. The services can be designed to ensure that normal issues are resolved thru automation and exceptions are thrown up for manual resolution. Such a process can be built incrementally with each stage being piloted and then scaled up while the next stage is being piloted. This process also ensures proper factorization and allows groups of data to be analyzed, standardized and catalogued. This leads to a natural simplification of processes as described in the next section.

### ***Simplification of Process***

As services are added, natural groups of elements of data are thrown-up enabling recommendations to be made for simplification. For example if personal identities are being established differently for different

services, the differences and the possible best identifier set will be thrown up for adoption greatly reducing the variability of delivery.

Keeping in view the major concerns for privacy and security, it is not recommended that information is centralized. The best solution by our hypothesis is a decentralized network based on Web Services with standardization across the board incrementally built using a well architected gateway / directory to be delivered first from designated offices and then gradually delivered directly to the citizens via internet. During this process the security and privacy concerns, data integrity and process rigor can be addressed and adequate safeguards established and legislated.

### **3. Concluding Remarks**

Governance Services can be factored and generically described for a substantial fraction of the total number of services offered by governments if we separate the commercial activities required to deliver the services themselves. Before we do this it is necessary to clearly separate the three types of activities of governmental departments viz. Departmental administrative activities, Commercial activities, Delivery of Governance Function. The first two types of activities are common between commercial and governmental organization and it is our hypothesis that best practices from any organizations of comparable size may be appropriate to adopt for governmental departments. Governance services are the key activity of Governance and impact public perception most. These services can be described in generic terms. Our hypothesis is that the key delivery aspects that affect effective delivery are the steps of verification – with most verification steps requiring verification of items established by other statutory bodies. There is a natural, modular, scalable and replicatable process of progression which can minimize risks and applied effectively.

### **References**

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