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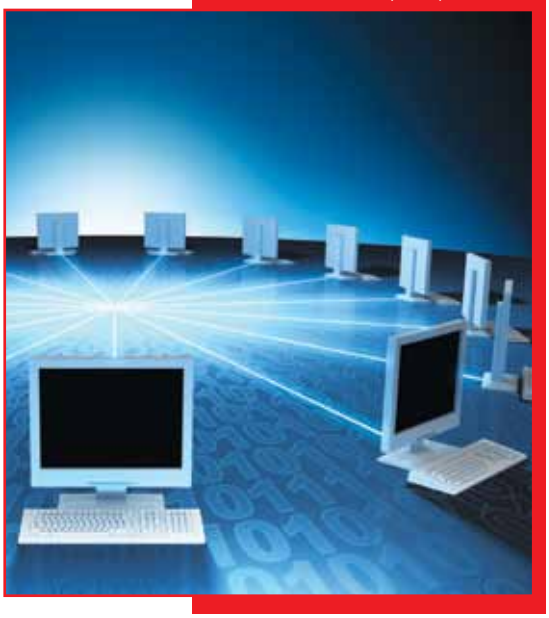
THE CATALYTIC EFFECTS OF e-GOVERNANCE

e-Service delivery in our country is fragmented due to multiple entities. e-Governance initiatives in different departments are carried out independent of each other, which dilutes the impact. One-window citizen services can be a reality–the first step is to set up an inter-departmental data exchange



Though National e-Governance Plan (NeGP) started in 2004, the history of e-governance in the country dates back to 1976 when National Informatics Centre (NIC) was established. With the formation of NIC, Government of India strategically decided to take effective steps for the development of information systems and utilisation of information resources and also for introducing computer based decision support system (informatics-led development) in government ministries and departments to facilitate planning and programme implementation to further the growth of economic and social development.

Since then NIC has conceptualised, developed and implemented a large number of projects for various Central and State Government Departments and Organisations. Some of these are noteworthy projects which offer the citizens a glimpse of the multi-faceted, diverse activities of NIC, touching upon all spheres of e-Governance and thereby influencing the lives of millions of citizens of India.

The intent of e-Governance is to accelerate the current processes by automating the same and making them accessible to the end-user.

While these initiatives are continuing even today, it is worthwhile to take a look at the extent of fulfillment of customer expectations. For a user of e-Services in India, there are some basic requirements which are referred in process-oriented initiatives as "Critical to Quality" (CTQs) for the service under consideration. These essentially are the "Voice of Customer" (VOCs). In the context of the subject where the final aim is to deliver an improved service, the improvement measures need to be based on end-user requirements. The solutions need to be complimentary for the user requirements which come out from such VOCs. There is significant gap in this regard which is becoming a challenge for acceptance and faith of the customer i.e the ctizen in the system.

Situational analysis

The National e-Governance Plan launched has induced a wave of automation in procedures in government departments. IT implementation has found a place on agenda of almost every department.

The individual service providing departments have already initiated various e-Governance projects. Most common of which is the hosting of city website which intends to serve as source of information to the users. NeGP has adequately considered these initiatives and ensured that all these get integrated to the State Service Delivery Gateway (SSDG) to provide single channel of information to end-user.

The fact remains that the individual departments have different mechanisms of identifying the concerned end users from the same set of citizens. As a result, the individual service provider departments are interacting with the same set of users independently mul-

tiple times, further the processes followed result in series of rework loops, duplication of efforts and non-value added works.

One of the key aspects missing in all the work so far is the reach of these initiatives to the common man, who is the customer for the services. The fact which stands out is, the service delivery is fragmented with multiple entities as, the e-Governance initiatives in the different departments are carried out independent of each other; as such the impact of the initiatives is diluted for the want of a user-base itself i.e. the citizens who are the customers for the service. For a citizen to avail an electronic service delivery, it takes at least basic steps as outlined in the box adjacent.

These steps are preliminary ones for any electronic service delivery mechanism; additional steps, multi-level authorisation etc are the other complexities which vary from application to application. However for a majority of citizen-centric ones, there is a need for process level reforms with strong backing of automated decision support mechanism to be successful. The basic e-Service process value analysis is described below. It identifies the pitfalls within the delivery mechanism which prevents the end-user from availing the service

6 STEPS FOR e-SERVICE DELIVERY

For Citizen

1. Login through website or visit Common Service Centre.
2. Fill form, give delivery option-post/self collection
3. Provide Documents needed
4. Pay required amount
5. Get Receipt and document delivery date
6. Collect the document on specified date

For Official

1. Login through website. Go to work list
2. Open file, scrutinise details
3. Record Noting/comments/ Additional Requirements
4. Route file on completed Documentation
5. Second level scrutiny
6. File approval to clear service delivery

Successful implementations like online rail reservation system has seen noticeable change in user response leading to various effects on other dependent business areas giving tertiary benefits to the people linked to this business. The catalytic effects of successful e-Service delivery initiative at railways has been seen, However there are equal opportunities for such effects through other e-Governance initiatives as well

Process value analysis

As per World Bank data in 2008, India had 4.5 internet users per 100 people, with overall users totaling to 51,750,000 which translates to mere 4 percent of the total population. In such scenarios, the extent of success of e-Governance initiatives can be easily gauged. However, government has taken steps to induce the concept of citizen facilitation centers / Citizen Service Centers (CSC) to take the e-Enabled services closer to the masses specially in rural areas.

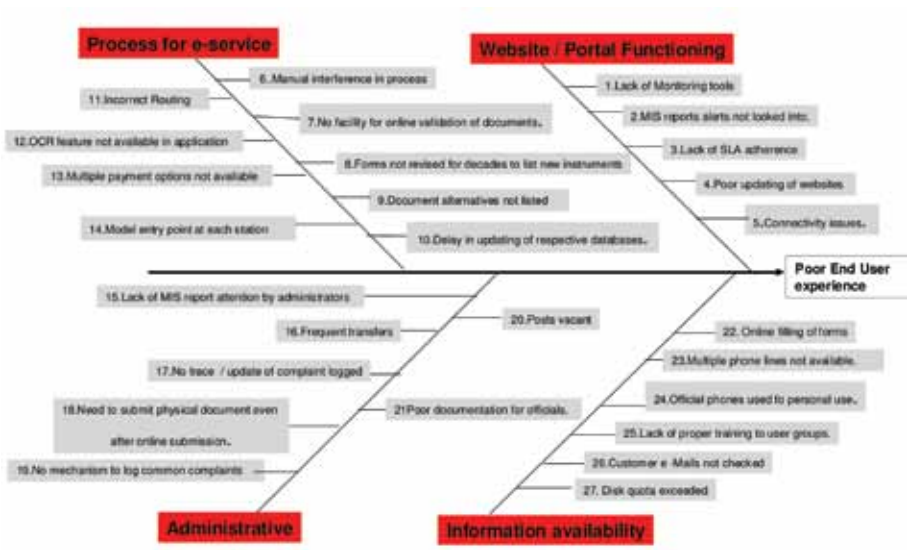
Thus the process induces a medium of CSCs where the operators are dependent on the centrally hosted IT solutions by the respective departments whose services are extended through these CSCs. In the light of this situation, it is worthwhile to see the potential failure modes of the 6 steps to e-Service delivery described above. The Failure Modes Effects Analysis (FMEA) results are shown in the table.

The above analysis brings out a striking feature that the highest risk of failure (Depicted by Risk Prioritisation Number – RPN) of the process comes from the failure modes like (1) re-works on account of resubmission of documents; (2) no optimisation of documents; (3) need to visit office to close the process; and (4)personal follow-ups.

The Process Value analysis also links the process failure modes to its potential causes outlined in cause & effect diagram depicted in Illustration II below. In some cases there is no apparent cause, it is simply on account of non translation of Voice of Customer in to system requirements.

As mentioned earlier the CTQ – VOC Link is a key to success for any online service delivery initiative. Some of the VOCs are (1) easy access to process information; (2) availability of assistance for document submission; (3) minimal travel / trips to offices; (4) assured cycle time; (5)real time update on status; (6)availability of information on "How to" and "why" etc. requirements to be fulfilled for a service to be delivered; and (7) whom to reach for questions.

For a basic service delivery process on which a common man is dependent, the answers to above requirements are key to the attainment of end-user satisfaction on delivery of service. The above



Causes for Poor End-User Satisfaction.

Sr.No	Process Step	Failure Modes	Effects	Severity	Occurrence	Detectability	RPN
1	Customer accesses website	Website not functional	Time loss for customer	9	6	5	270
	Customer looks for contact for official	Name of official , email address not available	1.Rework cost to customer 2.Customer givesup Online services 3.Customer faith on system goes down. 4.Govt investment in e-governance fails to give returns	9	8	7	504
		email sent is not acknowledged , replied , most of times bounces.		9	9	7	567
		No one answering call on mentioned phone number		10	9	7	630
2	Customer sees information & tries to access	Links on website leads to "page not found" error		9	8	7	504
3	Customer availing service	Need to submit physical document even after online submission.		10	9	10	900
		No optimization of required documents	Harasment of citizen	10	9	8	720
4	Payments	Payment made but not updated in system	1.Arrears in next bill despite payment. 2.Service Charge on Payments. 3.Minimal choice for user for payment option.	10	8	6	480
		No facility to pay after due date	Department looses potential cashflow	10	10	6	600
5	Follow up on service	Requirement of personal visit to close the process.	Duplication of effort	10	8	10	800
		Personal followup difficult as paper document is required in offices.	Additional printing costs	10	9	10	900
6	Feedback / Grievance	Everytime different helpline attendent as such repetation of information	Rework cost to both customer & agency.	10	9	5	450
		No mechanism to log common complaints	1.Customer annoyance. 2.Dependency on agents 3.Customer Pays Speed Money	7	5	5	175
		No response to logged complaint		9	9	5	405
		No trace of complaint logged		9	5	5	225
		If trackable - contact of concerned official not there		8	9	5	360

Severiability / Occurrence Ratings
1 - Lowest - Signifies Low impact of Failure
10 - Highest - Signifies High Impact of Failure

Detectability Ratings
1 - Highest - Signifies very low means of detectibility of Failure
10 - Lowest - Signifies high means of dectebility of failure

Failure Modes & Effect Analysis for e-Service Delivery

discussion brings out some key aspects of current online service delivery which have led to poor end user satisfaction and reduced faith in the online system. The Failure Modes & Effect analysis has brought out the areas of concern to be addressed to ensure acceptance of the service.

The intent of e-Governance is to accelerate the current processes by automating the same and making them accessible to the end-user. The part of making the processes accessible to end-user is at infancy stage in majority of cases. However this very aspect if coupled with inter-departmental information sharing has a potential to transform the process performance. The catalytic effect induced with this shall lead to value enhancement for both process owner department and the customer of the process.

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The portability of data across departments is important for efficient e-Governance mechanism with scalability to cover variety of services for citizens across the country.

Catalytic effects

e-Service delivery in our country is fragmented due to multiple entities. In addition the, e-Governance initiatives in different departments are carried out independent of each other, which dilutes the impact of the initiatives. One-window citizen services can be a reality—the first step is to set up an interdepartmental data exchange

Even though IT is on the agenda of all departments, an integrated approach to its rollout and effective sharing of information and IT infrastructure is lacking. The present e-Governance initiatives need to be looked at from a service management perspective where information exchange among various departments is a vital element for service delivery and support assurance to the end customer, the citizen.

The ground work for the type of data exchange visualised here is reasonably in place with IT implementation across majority of departments providing citizen service. The need of the hour is to bring these services under one single window for user to avail those. It is equally important to provide seamless navigation and maintain the linkage of identities created for a user with each provider.

Considering the fact that the IT solutions exist at various service providers the need is to leverage the existing infrastructure already in place and build over the same. It is equally important for extending the service where in a user gets to use the service himself or through an agency without being forced to visit the departments for service fulfillment. The key links of inter-departmental information exchange is missing and is left to end-user leading to rework at customer end.

In event this link is established the catalytic effects shall start showing up through the value adds which the transformed process shall bring in. The table above gives some of the potential areas of information exchange, their source and recipient departments and the beneficiary of the shared information.

Such an information exchange can cut the cycle time of individual process to the extent of 75 percent and also minimise the same on inter-linked processes. It also triggers the effects on non-IT areas like reduction of travel trips, less congestion on roads etc.

Conclusion

Successful implementation is a key to the realisation of benefits of concepts like the one proposed which brings in multiple stakeholders on a single forum. Careful planning, selected piloting and ease of replication of solution are the key success factors.

The dynamic nature of demographics is a challenge for all the major service delivery providers worldwide. The portability of data across departments is important for an efficient e-Governance mechanism with scalability to cover variety of services for citizens across the country. egov