Course:
Government Process Re-engineering

Optimization of the Process – Process Re-work & Self service, Outsourcing & Automation
Reworking existing processes

Here the focus is on changing the way a process is executed (where and how) rather than changing the process itself

• Converting services which required visits to department offices, to self services which the citizen can avail anywhere / anytime
• Standardizing and simplifying the processes and process tools (forms, documents, checklists etc)
• Changing responsibilities / tasks that were completed by several personnel so that now one person completes all of the tasks
• Co-locating together personnel who complete different tasks within a process rather than having them in different locations
• Separating a task formerly completed by one individual into several logically grouped or specialist steps
Self Services example: Railway Reservation

Current Scenario

Does the citizen really need to be physically present?

Can the system be made available to the citizen over internet?

E-Payments

Over the Counter Railway Ticket Reservation

Ticket Reservation

Standards & Policies

Ticket booking guidelines/SOPs/ Fare details

Reservation form

Citizen

Visit Railway Ticket booking counter

Collect application form

Stand in submission queue

Fill application form

Submit application form

Yes

Ticket as per requirement?

Make payment

Plan alternate day / Class or drop travel plan

Initiate fresh form / drop plan

E-Payments

Does the citizen really need to be physically present?

Railway

Verify completeness of form

Capture the Request details in system

Provide ticket availability status and berth no.

Receive payment and record payment in system

Print and provide ticket to Citizen

System

Display ticket availability status

Display amount payable

Generate printable ticket
Railways Ticket booking – Total Time Taken

**Value-added activities**

<table>
<thead>
<tr>
<th>Time (mins)</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>Customer goes to booking counter</td>
</tr>
<tr>
<td>P</td>
<td>Cust fills application form</td>
</tr>
<tr>
<td>P</td>
<td>Cust submits application form</td>
</tr>
<tr>
<td>P</td>
<td>Clerk confirms details in form</td>
</tr>
<tr>
<td>I</td>
<td>Clerk books and prints ticket</td>
</tr>
</tbody>
</table>

**Non Value-added activities**

<table>
<thead>
<tr>
<th>Time (mins)</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>Transport / Handling</td>
</tr>
<tr>
<td>P</td>
<td>Preparation</td>
</tr>
<tr>
<td>I</td>
<td>Inspection</td>
</tr>
</tbody>
</table>

Average time taken to book a ticket: 120 minutes
Self Services example: Railway Reservation
Re-engineered Scenario

Average time taken to book a ticket: 5 minutes
Benefits of converting department service to self services

• Anywhere / anytime service delivery at the place and time of convenience to the customer
• Lower costs to the department on office space, consumables, manpower etc
• Reduced queues at department offices
• Officials can concentrate more on value added service delivery, as they are relieved from no value added tasks
• Opportunity to explore new channels of service delivery – like railway reservation through Common Service Centres (CSC)
What kind of services can be converted to self services? (1 of 2)

- Any service which does not require the citizen to be physically present at the service delivery point
  - Information services – e.g.: checking status of passport application, looking up past transactions on a particular property (encumbrance)
  - Compliance services – e.g.: Filing of returns, Filing of company information (MCA21)
  - Payments – payment of property tax, self assessment Income Tax etc
What kind of services can be converted to self services? (2 of 2)

- In cases where there is requirement of physical presence of the beneficiary, part of the processing can be made self service:
  - e.g.: Physical verification of the originals of supporting documents is a mandatory requirement in case of passports. The citizen should produce these documents physically at the RPO / Facilitation counter
  - Process re-engineered to allow citizen to upload scanned documents, do basic data entry and book an appointment for physical verification. This reduces the total time taken for physical verification
Pre-requisites for end to end Self Service

• For end to end self service electronically, the following pre-requisites need to be in place
  - Equivalence of electronic transactions with manual transactions
  - Recognition of electronic records at par with paper records
  - Recognition of Digital Signatures and Digitally signed documents at par with handwritten signatures
  - Electronic payment infrastructure

• Process options should be explored, for more inclusive service delivery considering digital divide in the country
  - e.g.: For citizens without Digital Signature, option to send signed physical copy of ITR-V acknowledgement by post

Most of these requirements are met by the IT Act 2000, discussed in detail in Day 5

Most compliance filings (Income Tax, MCA21) requires Digital Signatures
Process rework example – MCA21

• MCA21 is one of the Central Mission Mode Projects, designed for electronic service delivery by the Ministry of Company Affairs (MCA)

• Ministry of Company Affairs’ primary function is the administration of Companies Act, 1956, other allied Acts and rules & regulations framed there-under

• The following services were proposed to be made into online self services through the MCA21 project:
  – Registration and incorporation of new companies
  – Filing of Annual Returns and Balance Sheets
  – Filing of forms for change of names/address/Director’s details
  – Registration and verification of charges
  – Inspection of documents
  – Applications for various statutory services from MCA
  – Investor grievance redressal
Situation before MCA21 rollout

- Company incorporation and compliance filing was done manually at Registrar of Companies (RoC) offices in States and Union Territories.
- Each RoC also acted as the registry of records relating to the companies registered with them, which are made available for inspection by members of public on payment of prescribed fee.
- Company data in silos in RoC offices in paper form.
- Time consuming process for filing and inspection.
- Lack of transparency and reduced service levels.
- Increased non value adding workload at the RoCs.
- Investor grievances given low priority.
- Difficulty in doing any quantitative analysis of corporate information.
Snapshot of MCA21 implementation (1 of 3)

**Front Office**
- Automation of processing at RoC offices
- Centralised Repository of Company Information
- MCA21 portal as the single window for filing of information online
- Facilitation centres set up at select location to ease transition from manual to e-filing
- Processing of filings and Internal functions of MCA computerized
- Old records at each RoC digitized and made available online

**Back Office**
- e-Filing
- Facilitation centres
Snapshot of MCA21 Implementation (2 of 3)

Filing eForm

MCA Website → Select eForm → Fills eForm → Make attachment to eForm → Sign eForm and Submit it

- Digital Signature Validation
- Field/Form Data Validation
- Additional Rules

Automated Prescrutiny

Select Payment Method

- Online Payment
- Challan Payment

Send eForm for Approval → eForm stored securely until Bank confirms receipt

Each transaction uniquely identified by a Service Request Number (SRN)

Source: MCA21 Process Handbook, Ministry of Company Affairs
Snapshot of MCA21 Implementation (3 of 3)

- E-filing made mandatory, with Digital Signature Certificates
- All payments to be made through e-Payments (Online banking / credit cards / payment at designated bank branches)
- E-Stamping mandated wherever stamp duty is to be paid
- Unique Company Identification Numbers (CIN) assigned to each registered company
- Directors of Companies to obtain Director Identification Number (DIN)

Now companies can file all their compliance requirements without stepping out of office!!
MCA21 Impact

**After MCA21 rollout**

- Online registration and incorporation of companies
- Simplified and easy mode of filing of e-forms / returns
- Online registration and verification of changes
- Centralized Data repository and online inspection of documents by public

**Impact**

- Anytime / anywhere service to corporate
- Corporate centric approach
- Increased transparency
- Enhanced service levels
- MCA employees and devote more time to doing value added tasks including data analysis
- Timely grievance redressal
The Question of Digital Divide

• Not all customers / citizens may be IT savvy enough to undertake end to end self service. In such cases, certain sub processes may have to retain manual options…

• **Case of MCA21:**
  - Though e-filing was mandated, MCA realized that not all companies may have the capacity to undertake end to end e-filing and may require handholding in initial stages
  - Physical Front Offices (PFO) were opened in major locations to hand hold companies in e-filing during initial phase
  - Once the capacities were built, facilitation counters gradually being phased out in favour of filing at customer’s premises

• For most citizen self services, facilitation counters (e.g. Common Service Centre) may be necessary till necessary capacities are built up
Income Tax – Providing process options

• Case of Income Tax:
  – Though many citizens are conversant with e-filing, most of them do not possess Digital Signatures
  – Hence alternate process for citizens without DSC was designed
Standardizing work processes

• Work processes should be standardized to the extent possible, with a common understanding of:
  − Input & output expected (Quality & Quantity of content)
  − Cost
  − Sequence
  − Timing …..

• Avoids different regions, units, people delivering the same service working on their own agenda

• Detecting abnormality vs. standards helps exposing waste

• If standards are not set:
  − Abnormality cannot be detected
  − Hinders a learning & improvement culture
Use of Standard Templates and Forms

• Standard Templates to be created and used for repeated tasks…
  – e.g. : Standard Bidding Documents, Standard requisition forms etc
  – Standard templates reduces the time required for the creator to prepare
    the work product and for the user to comprehend it (as he already knows
    which section to look for the relevant content)

• Forms to be re-designed, with the following considerations…
  – Are all the information captured, really required for our purpose?
  – Are we re-capturing information which we already have?
  – Are the forms self explanatory for the users and unambiguous?
Removing Process Steps

- In some circumstances, re-examination of the drivers behind initial process design or comparison with best practices within and external to an industry may drive the design of the process through:
  - Elimination of steps that do not contribute much to the final work product or the policy / legal constraints governing it
  - Comparing an agency’s performance to internal and/or external peers, competitors or world class organizations
  - Determining potential opportunities for improvement through application of leading / best practices
  - Generating ideas for improving performance
  - Comparing roles - function, mission and structure of an organization
  - Comparing processes and practices
  - Benchmarks and performance measures
Removing Process Steps – Passport Seva example

Start:
Citizen visits RPO

Citizen Visits RPO
Citizen fills up form & submits along with docs
Officer verifies documents
Payment of fee by citizen
RPO sends request for police verification
Police visits citizen and conducts verification
Police send report to RPO
Passport approved
Passport printed and sent by post

End:
Citizen receives passport

Submitting application
Verification and Receipt of appl.
Police Verification
Deliver passport
The existing process took about 40 days

Start: Citizen enters RPO

Submiting application

2-3 hours

Verification and Receipt of appl.

20 min

Police Verification

25-38 days

Deliver passport

2-3 days

End: Citizen receives Passport

Major part of the delay is caused in delay in the police verification

~ 40 days
Is the police verification absolutely necessary…

- The delays in police verification is due to the delays from the police department, which is completely outside the control of the passports department….

- Can police verification be completely done away with?
  - No… But the process of police verification can be shifted in some cases to post issuance of passport

- The solution…
  - Pre-verification (verification before passport issue) is carried out only in certain cases. Post verification done in other cases, after passport issue
  - If the applicant presents three of the fourteen documents, passport granted on post verification basis
  - Minors with both parents holding valid passport require only post verification

- This business rule change resulted in majority of applications requiring only post verification
Revised process ~ 3 days

- Submitting application: 2-3 hours
- Verification and Receipt of appl.: 20 min
- Deliver passport: 2-3 days
- Post Verification by police: 20-30 days

Start: Citizen enters RPO

End: Citizen receives Passport

Time taken for citizen to obtain passport ~ 3 days

This process rework along with other steps (online submission, facilitation centres etc) improved the overall quality of service.
Outsourcing of government process components

**Outsourcing** is an arrangement in which one organization provides services for another organization that were originally provided in-house - services that have usually been regarded as intrinsic to the organization's business.

- In considering outsourcing, the following questions need to be considered:
  - Why would you outsource?
  - What would you outsource?
  - What would you NOT outsource?
  - What are some risks of outsourcing?
Why Outsource?

• Government may outsource a process due to the following considerations…
  
  - Capacity constraints within the government (skills, manpower, technology etc), which can only be bridged by outsourcing some part of processes
  
  - To put in place additional service delivery channels (24*7 channels)
  
  - Non value added process steps (collecting forms, data entry etc) can be done with much lower costs to citizen and department if outsourced
  
  - Ability to provide better service levels, as it is easier to have formal Service Level Parameters governing the outsourcing relationship..
  
  - Improving the 8P’s of service delivery for citizen
  
  - Bringing in the focus on professionalism and quality of the private sector..
What to outsource / What not to outsource?

• What to outsource?
  – Non value added, but incidental services like collection of forms, data entry, scanning documents etc
  – Non-strategic and administrative functions (facilities management, helpdesk support, network management etc)

• What not to outsource?
  – Strategic processes / sub processes, which are
    ▪ e.g.: In the Registration department, scanning of deed for registration and data entry can be done by the outsourcing partner, but the verification of completeness and signing off the registration has to be done by the Sub Registrar…
  – Services involving confidential data / legal implications..
Outsourcing – Risks and Considerations…

• The overall outsourcing approach should address the process related issues that may come up once a process / sub process is outsourced, and may include:
  − Definition of inputs and outputs to and from the outsourced processes
  − Changes to process boundaries
  − Roles and responsibilities for managing the outsourcer relationships
  − Monitoring, reviewing and paying the outsourcer
  − Ongoing changes to outsourced processes
  − Impact of cessation or removal of outsourced processes

• Service Levels for the outsourced services should be defined, and the Service Level Agreement should have penalties / incentives based on non achievement / exceeding of the service levels
Outsourcing example: e-Seva

- E-Seva was envisioned by the Government of Andhra Pradesh to be a one stop shop for the delivery of a bouquet of citizen services...
**e-Seva: Overview**

- One-stop-shop for citizen/ business services
  - Open 8 am to 8 pm
  - Open 8 am to 3 pm on Holidays
- Over 150 services
  - Any service at any centre, any counter
  - G2C, G2B, B2C services
- Efficient Service
  - 3 to 5 minutes per transaction on non-peak days
  - 20 to 30 min on peak days in some centres
- Good ambience for citizens
  - No more standing in line
- Electronic Queue Management system

- Services delivered through e-Seva
  - Payment of Utilities Bills (electricity, water, telephone..)
  - Receipt of Applications (Passport)
  - Application for certificates (birth & death, encumbrance)
  - Transport department services
  - Ticket reservations
  - Application for Licenses & Permits

Non-value added sub process of application collection shifted to e-Seva centres
e-Seva: Benefits

- Departments now have more time to concentrate on value added tasks
- Cost of services have come down because of aggregation of services and resulting economies of scale
Existing Situation

- Regional Passport Offices were the only service delivery channel for issuance of passport
- Citizen had to submit passport application at the RPO, after standing in queue for long hours
- In many cases, citizen had to take appointment for a later date for submission – resulting in 2 visits just to submit the application
- The workload on the RPO employees were high, and they did not have time at hand for value added tasks..
- The number of RPOs were very low – 48 across the country, resulting in more travel for citizens
Can we outsource some of the non value added tasks?

- The application collection is a major non value added task undertaken at the RPO. This can be outsourced without compromising on the sanctity of the passport process.

The Solution..

- Additional service delivery channels called facilitation centres were set up, to be outsourced to private partners
- The outsourced centres would allow citizens to:
  - Submit Applications and pay requisite fees
  - First level of verification of the documents
  - Grievance redressal
  - Assistance for filling the application form
Benefits from outsourcing front-end operations

• For citizens:
  − The citizen can submit/verify the applications at a nearby location
  − Better infrastructure facilities at the facilitation counters
  − Quicker submission/Verification of application and also at a convenient time for the citizen

• For Passports department:
  − Reduced workload, and enhanced work environment
  − Ability to concentrate on value added tasks, including continuous improvement of processes and analytics
Replacing / Automating processes

The existing process / sub process may be replaced completely by another process / sub process. In many cases, this would imply complete automation of the process / sub process.

- Automation facilitates the government to derive the following benefits:
  - Most of the automated systems incorporate accepted best practices from across the world, which becomes part of the new process by default (e.g. Finance and Accounting ERP modules, e-Procurement)
  - Significant reduction in turn around times due to automated processing
  - Ability to enforce greater controls (automated error checking, validations at source etc)
  - Reduction in costs (manpower costs, cost of service delivery)
Some considerations before automating processes

- Process design for automated process should take into account:
  - Selecting transaction types to be automated
  - Deciding on using off the shelf system and tailoring inputs and outputs, or customizing the system
  - Following the system and transaction flow
  - Determining data sources, availability and timing
  - Understanding how calculations are performed
  - Selecting validation options for data quality
  - Tailoring screens and reports
  - Creating input documents to meet input needs
  - Creating a pilot (or “sandbox”) system to understand how various types of functionality work
  - Designing, balancing and reconciling
Bid Evaluation in e-Procurement - Automation example (G2G)

• **Scenario:**
  
  - The Health department in a large state in India, floats Tender annually for the finalization of Annual Contracts for more than 600 essential drugs. Bidders submit their bids in response to the tender, in paper form.

  - Bidders can submit bids for one or more (or all) of the drugs, based on their capabilities. Once bid submission closes, the department undertakes the evaluation in the following way:
    - Department identifies the eligible bidders based on criteria in Tender documents
    - The commercial bids of the eligible bidders are examined, and for each drug, the list of bidders who have bid for the drug is drawn up, along with their prices
    - From the list of bids for each drug, a comparative list is drawn up showing the ranks of the bidders (lowest quote to highest)
    - The lowest bidder in each essential drug is awarded the contract
Problems with manual bid evaluation

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<tr>
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<td>Drug1</td>
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<td></td>
</tr>
<tr>
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<tr>
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<td></td>
</tr>
<tr>
<td>Drug211...</td>
<td>26</td>
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</tbody>
</table>

- Large number of bidders (in hundreds)
- Each bidder on average bids for more than 30 drugs
- Significant efforts in manually sifting through the bids and preparing comparative tables
- High chance for manual errors
- Process takes **more than 2 months** on an average
Scenario under e-Procurement

Bidders submit bids in the e-Procurement system
Eligible bidders short listed in the listed by department officials
System auto generates comparative statement from commercial bids
Department selects best value bid from the comparative statement

• E-Procurement system auto-generates the comparative sheet immediately after the eligible bidders are shortlisted by the department
• The step which took months earlier is now completed within a couple of hours
• Benefits to the department:
  ➢ Huge time and administration cost savings, by use of shared platform
  ➢ Increased transparency in the procurement process and in the department among vendors
Technology aids in Process Re-design

- Process re-design should take into account the latest technology aids, which can reduce time and cost parameters significantly. These technology aids include:
  - Handheld devices: Collection of data at remote location, digitizing data at source
  - Shared databases: Real time updating of data by multiple systems, one stop service delivery possibilities
  - GPS Technologies: Allows remote tracking
  - Biometric Technologies: Authentication, Identification of duplicates, de-duplication
  - Smart Card / RFID Technologies: Authentication, tracking, account management

- Best practices from other environments are a good starting point for identifying what technologies are relevant in the current context…
Documenting the process design

• Once the process design is completed, the re-engineered process should be documented in the form of “to-be” process maps.

• The documentation of “to-be” process should include the related changes and implications in:
  − Policies and Procedures
  − Technology
  − Organization
  − Facilities
  − Data
  − Target metrics for key parameters
  − Performance Measurement
  − Benefits
  − Security and Controls
Taking stock…

• Before finalizing the process design, one should look back to ascertain whether all the problem areas identified in the previous stages have been addressed adequately:
  – Is the new process inline with the vision defined for GPR and overall organization vision?
  – Does the process design address the service quality parameters that we had set out to achieve?
  – Does it address the Problems, Issues and Expectations?
  – Does it address the root causes identified in the cause-effect analysis adequately?
  – Has the process become less complex, with lesser “waste”?

• If any of these parameters are not met, the process design should be refined accordingly
End of Session