Course: e-Governance Project Lifecycle

Day 2: Session 1

Government Process Re-engineering
Agenda

- Introduction to ‘Quality’ in Government Processes and services
- Introduction to Government Process Reengineering
- Approach for Government Process Reengineering
- Introduction to Process Analysis & Process Reengineering
- Introduction to ‘To Be’ Process Definition
- Introduction to Process implementation and validation
Understanding Business Processes

Every government **service** is supported by a set of **business processes**, which provides approach and guidance to deliver the service.

But what is a process/business process/government process?

- Business system is a collection of processes that take one or more inputs and create output that is of value to all stakeholders.

- Business processes move information and / or materials across several units and functions, to accomplish a specific end result.
<table>
<thead>
<tr>
<th>Process</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Any set of activities performed by a business that is</td>
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<td></td>
<td>- produces an output (delivery of <strong>Service</strong> to Citizen / Business of</td>
</tr>
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<td>Government)</td>
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</tbody>
</table>
Understanding Business Processes – contd..

**G2C Service:** Providing a Passport to a Citizen

**Process:** all activities carried out by the Government & its agencies

- From: Receipt of a passport application form
- To: Delivery of Passport / Communication of Rejection

**Sub-Process:** The Passport process can be sub-divided into

- Passport Application Collection
  - Document Verification
  - Fees Collection
- Passport Processing
- Passport Delivery

**Activity:** various steps in the process, e.g.

- Receipt Issuance: Printing a receipt for the Fee collected
Understanding ‘Quality’ in Government Services

Information is correct or not?

- Name & Photo are correct
- Personal information like sex, date of birth, address etc are correct
- The passport is stamped / signed and is valid
- Physical passport is as expected
- Not torn or damaged

• Does not have pages missing / has correct number of pages

But even if all of the above are correct, does that mean that we have met the “Service Quality” parameters for the passport?

The answer is NO`
So what else is important? …

The entire Passport Issuance Process as seen by the citizen

What if

- Citizen waits for hours in queue (despite having an appointment)
- Receives the passport six weeks after dispatch
- The police verification is delayed
- Citizen has to come multiple times to log in application
- Citizen needs to use an agent to get hassle-free service
- Citizen is asked to pay extra money to get it processed fast
- Citizen faces rude behavior by the Security guards / counter staff
- Citizen does not get correct information from helpline/inquiry counter
- Counter accepts incomplete form and rejects it later
- Counter does not accept documents defined in the requirement checklist (e.g. letter from Army Officer)
- The passport is sent to wrong address / person
So what else is important?
… The entire Passport Issuance Process as seen by the citizen

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• The passport is sent to wrong address / person

Service Quality comprises of the physical **Product**, the **Time** taken to deliver it, the **Cost** of getting the service, and **Customer Experience** or **Service Delivery**.
Key attributes of Service Quality in Government

• Time
  - taken for completion of service by the citizen/business
  - Taken for delivery of service by the Government

• Cost
  - incurred in receiving the service by the citizen/business
  - Incurred by the government in delivery of service

• Complexity (illustrative)
  - Number of forms to be filled, amount of information to be provided, number of offices to be approached…..by the citizen/business
  - Number of employees, number of approvals, number of verifications/validations to be performed by government

• Transparency
  - Knowledge on process for delivery of service, delivery timelines, status of service request to citizen and business…..
Key attributes of Service Quality in Government – contd..

• **Convenience**
  
  – Ease of access to service, quality of facilities used for delivering service to the citizens/business
  
  – Quality of facilities and tools provided for government employees for delivering the services to citizens/business

• **Experience**
  
  – Quality of interactions (courtesy, politeness, treatment) with the government during service delivery
Defining Business Process Reengineering (BPR)

**BPR is fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service and speed**

...Michael Hammer and James Champy

- ‘Changing’/’redesigning’/’replacing’/’eliminating’ the activities and/or sub-processes and/or processes related to a service to improve service quality i.e.
  - Minimize Time, Cost, Complexity
  - Improve Transparency, Convenience and Experience
- GPR may address all or some of the service quality attributes
- Government Process Re-engineering (GPR) has evolved from applying Business Process Re-engineering (BPR) concepts to Government Services
BPR/GPR success stories

Indian Railways

Issuance of passenger ticket

1. Physically going to the counter
2. Filling up application form
3. Submission at the counter
4. Confirmation of the ticket
5. Payment
6. Printing of the ticket on pre-printed government stationary
7. Delivery of ticket

Total time could be between 2 to 3 hours including travel and queue time
## BPR/GPR success stories

### Indian Railways

<table>
<thead>
<tr>
<th>Fundamental rethinking</th>
<th>Radical redesign</th>
<th>Achieve dramatic improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do we really need to be physically present at the counter?</td>
<td>Book tickets online</td>
<td>No hassle of queuing up</td>
</tr>
<tr>
<td>Do we really need to submit the application form?</td>
<td>Make payment through credit / debit card</td>
<td>No hassle of traveling to the booking counter</td>
</tr>
<tr>
<td>Do we really need to have the ticket on pre-printed railway stationary?</td>
<td>Print ticket yourself</td>
<td>Convenience of booking tickets anytime, and anywhere</td>
</tr>
<tr>
<td>Can the ticket information be made more easily available to the passenger</td>
<td>Send SMS &lt;PNR&gt; to find out the status of booking</td>
<td>Freedom from travel agents</td>
</tr>
<tr>
<td></td>
<td>Access to information on <a href="http://www.irctc.co.in">www.irctc.co.in</a></td>
<td>Government savings on manpower, and stationary</td>
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- Achieve dramatic improvements
  - No hassle of queuing up
  - No hassle of traveling to the booking counter
  - Convenience of booking tickets anytime, and anywhere
  - Freedom from travel agents
  - Government savings on manpower, and stationary
BPR/GPR success stories

Indian Railways

**Fundamental rethinking**

Do we really need to be physically present at the counter?

Do we really need to submit the application form?

Do we really need to have the ticket on pre-printed railway stationary?

Can the ticket information be made more easily available to the passenger?

**Radical redesign**

Book tickets online

Make payment through credit / debit card

Print ticket yourself

Send SMS <PNR> to find out the status of booking

Access to information on www.irctc.co.in

**Achieve dramatic improvements**

No hassle of queuing up

No hassle of traveling to the booking counter

Convenience of booking tickets anytime, and anywhere

Freedom from travel agents

Government savings on manpower, and stationary

Max 10 mins
BPR/GPR success stories

State Bank of India

Request for a Demand Draft

1. Physically going to the branch / counter
2. Filling up the application form
3. Submission of form
4. Verification of signature
5. Preparation / printing of DD
6. Signature of the official(s)
7. Delivery of DD

Total time could be between 1.5 to 2.5 hours including travel and queue time
BPR/GPR success stories

State Bank of India

**Fundamental rethinking**

Do we really need to be physically present at the branch / counter?

Do we really need to submit the application form at the counter?

Can we do away with signature verification at the counter?

**Radical redesign**

Issue DD on line

Transfer funds electronically from your own account

Verification through user id and password

Request the bank to courier the DD directly to the beneficiary

**Achieve dramatic improvements**

No hassle of queuing up

No hassle of traveling to the bank branch

Convenience of issuing DD anytime, and anywhere

Freedom from Babus of the bank

Government savings on manpower

Slide 16
**BPR/GPR success stories**

**State Bank of India**

**Fundamental rethinking**

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Government savings on manpower

**Max 10 mins**
e-Governance Project Lifecycle (eGLC)

1. E-Governance Strategy Development
2. Current State Assessment
3. Future State Definition
4. Implementation approach and sourcing
5. Develop and implement IT system
6. Operate and sustain

Project Management Office/Unit
Change Management and Communications
# e-Governance Project Lifecycle (eGLC)

<table>
<thead>
<tr>
<th>E-Governance Strategy Development</th>
<th>Current State Assessment</th>
<th>Future State Definition</th>
<th>Implementation approach and sourcing</th>
<th>Develop and implement IT system</th>
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<tr>
<td>Needs Assessment</td>
<td>Critical assessment of current business processes and pain areas</td>
<td>Process reengineering &amp; to-be process definition</td>
<td>Define implementation approach and phasing plan (functional and geographic)</td>
<td>Definition of detailed functional and technical requirements</td>
<td>System operations and maintenance</td>
</tr>
<tr>
<td>Define clear vision &amp; objectives</td>
<td>Best practices in similar environments</td>
<td>Identity IT enablement opportunities &amp; requirements</td>
<td>Assess detailed funding requirements and business model</td>
<td>System design and development</td>
<td>Software change management</td>
</tr>
<tr>
<td>Prioritization of services and projects</td>
<td>Assess legal framework and current limitations</td>
<td>Define changes to legal &amp; regulatory environment</td>
<td>Develop vendor evaluation and selection criteria</td>
<td>Rollout services and systems (functionality and geography)</td>
<td></td>
</tr>
<tr>
<td>Incorporate domestic and global learnings</td>
<td>Assess current ICT systems and their ability to support future plans</td>
<td>Develop People change and capacity building plan</td>
<td>Develop KPIs and performance levels for services and systems</td>
<td>Training and capacity building</td>
<td>Objectives and benefits evaluation and reinforcement</td>
</tr>
<tr>
<td>Identify institutional structures &amp; capacities for implementation</td>
<td>Assessment of current capacities at all levels and their preparedness for e-governance..</td>
<td>Develop project awareness and communication requirements..</td>
<td>Develop RFP</td>
<td>Change management and project communications</td>
<td></td>
</tr>
<tr>
<td>Define funding requirements</td>
<td></td>
<td></td>
<td>Bid evaluation and vendor selection</td>
<td>Sustained change, capacity building and communications..</td>
<td></td>
</tr>
<tr>
<td>Define monitoring and evaluation approach..</td>
<td></td>
<td></td>
<td>Project documentation</td>
<td></td>
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e-Governance Project Lifecycle (eGLC)

- Needs Assessment
- Define clear vision & objectives
- Prioritization of services and projects
- Incorporate domestic and global learnings
- Identify institutional structures & capacities for implementation
- Define funding requirements
- Define monitoring and evaluation approach...

Critical assessment of current business processes and pain areas
Best practices in similar environments
Assess legal framework and current limitations
Assess current ICT systems and their ability to support future plans
Assessment of current capacities at all levels and their preparedness for e-governance...

Process reengineering & to –be process definition
Identity IT enablement opportunities & requirements
Define changes to legal & regulatory environment
Develop People change and capacity building plan
Define project awareness and communication requirements...

Define implementation approach and phasing plan (functional and geographic)
Assess detailed funding requirements and business model
Develop performance levels for services and systems
Develop RFP
Bid evaluation and vendor selection

Definition of detailed functional and technical requirements
System design and development
Rollout services and systems (functionality and geographic)
Objectives and benefits evaluation and reinforcement
Sustained change, capacity building and communications...

The highlighted activities in eGLC are carried out as part of the GPR exercise
Approach to GPR

- Process Study and Documentation
- Process Analysis
- Process Reengineering
- To-be process definition
- Process implementation / IT enablement & validation
Approach to GPR

Understanding the ‘As-Is’ Process

Process Analysis

Process Reengineering

To-be process definition

Process implementation / IT enablement & validation
Understanding the As-Is Process

• Understanding the current ways of working

• Understanding and documenting the various tasks and activities that make up the process

• Identification of important characteristics of the process by understanding the
  - inputs,
  - outputs,
  - people,
  - systems,
  - regulatory controls related to process.
Understanding the As-Is Process

INPUTS
- What is the input?
- Who supplies the input?
- How are the inputs provided?
- What are the interdependencies with other departments?
- What forms are filled? Why?

OUTPUTS
- What is the output?
- When is the output generated?
- What triggers the output?
- Who uses the output?
- What metrics do we use to measure the outcomes? What is their measure?

REGULATORY CONTROLS
- What are the governing guidance/regulation, laws, budgets and why?

PEOPLE
- Who are the people involved?
- What is the activity performed by each person involved in the delivery of service?

SYSTEMS
- What systems / technologies are used in the process?
Understanding the As-Is Process – Railways Ticket booking

INPUTS

• What is the input?  
  Customer and his travel information

• Who supplies the input?  
  Customer or someone on his behalf

• How are the inputs provided?  
  Through an application form

• What are the interdependencies with other departments?  
  None

• What forms are filled?  
  A form that contains information related to customer and his travel

Why – to book the details

OUTPUTS

• What is the output?  
  A railway ticket printed on govt. stationary

• When is the output generated? Or What triggers the output?
  - Travel details have been validated by clerk
  - Ticket is available
  - Customer has made payment

• Who uses the output?  
  The customer

• What metrics do we use to measure the outcomes? What is their measure?  
  Average time taken to book a ticket
Understanding the As-Is Process – Railways Ticket booking

REGULATORY CONTROLS

- Governing guidance/regulation, laws, budgets and why?
  Ticket can be booked almost 60 days in advance

PEOPLE

- Who are the people involved?
  Clerk at the booking counter
  Customer/ anyone booking the ticket

- What is the activity performed by each person involved in the delivery of service?
  Clerk: Validate travel details, accept payment, book and print ticket
  Customer: Submit form, make payment

SYSTEMS

- What systems / technologies are used in the process?
  Client server based reservation systems
Process Mapping – Understand how things happen actually

Objectives of Process Mapping

- To understand:
  - Players
  - Process flow
  - Policies, Standards and Responsibilities
  - Phases with clear start & end-points and process time-lines

- To identify the CTPs

- To identify “Quick Wins” in the process

- To understand response time & cycle time

- To determine process efficiency
  - Value-added activities
  - Non value-added activities

- To estimate the cost of the process
  - Waste
"Draw a flowchart for whatever you do. Until you do, you do not know what you are doing, you just have a job."

-- Dr. W. Edwards Deming.
Sample process map

Over the Counter Railway Ticket Reservation

1. Visit Railway Ticket booking counter
2. Collection and filling of application form for reservation
3. Stand in queue and submit form
4. Submit application form
5. Verify completeness of form
6. Capture the Reservation Request details in system
7. Check tickets availability on planned date and with berths
8. Plans alternate day/Class or drop travel plan
9. Make Payment
10. Receive payment and record payment in system
11. Provide ticket to Citizen
12. Print Ticket
13. Confirm ticket details and leave the counter
Flowcharting: Mapping the process at an activity level

Based on the walkthrough, you must document the processes in detail.

For graphical process flow mapping, common symbols used are as follows:

- **Terminator**: Indicates the start or end of a process.
- **Process**: Used to specify any activity carried out.
- **Off page Connector**: Used to link from one page to another.
- **Decision box**: Indicates a decision (Yes/No) is being taken.
- **On page**: Used to link within the page.
- **Documents**: Used to specify standards & policies.
# The Four Field mapping template

<table>
<thead>
<tr>
<th>Description of Process</th>
<th>Which process group this process belongs to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standards &amp; Policies</td>
<td></td>
</tr>
<tr>
<td>System</td>
<td></td>
</tr>
<tr>
<td>Player 1</td>
<td></td>
</tr>
<tr>
<td>Player 2</td>
<td></td>
</tr>
<tr>
<td>Player 3</td>
<td></td>
</tr>
</tbody>
</table>
The Four Field mapping template

1. Phase
2. Standards / Policies / Templates
3. The players involved in the process
4. The actual process activity wise

Description of Process
Which process group this process belongs to
Building a process map

• Get a cross-functional team of all front-line process players to participate

• Discuss & define the start and end-points accurately

• Start mapping the process activities one after the other clearly marking the flow of the activities with arrows in field 2
  - What happens next?
  - Why?
  - Decisions (yes/no, if possible)
  - Identify/ emphasize wait times

• Note down the relevant policies (rules governing the process activity), the standards (formats, templates used for the process activity) and any responsibility for the particular process activity in field 3

• Keep building the time-line in field 4 and finish with end-point; mark completion of any phase with distinct end-points

• Allocate time for each process activity on the map
  - All team members must agree on time
Building a process map (contd..)

• Total the time of each activity
• Do a reality check – does it make sense?
• Review the process map with peers, management and other players involved
  – Is the map a true reflection of the As Is process?
  – Are there additional issues?
Sample process map

Over the Counter Railway Ticket Reservation

Ticket booking guidelines/SOPs/Fare details

Visit Railway Ticket booking counter → Collection and filing of application form for reservation → Stand in queue by to submit form → Submit application form → Tickets available on planned date & OK with berths → Yes

Verify completeness of form → Capture the Reservation Request details in system → Provide tickets availability status and berth numbers

Yes → Plans alternate day/Class or drop travel plan

Make Payment → Receive payment and record payment in system → Print Ticket

Confirm ticket details and leave the counter → Provide ticket to Citizen

Railway Official

Citizen

System

Policies/Guidelines
‘As-Is’ Study validation

Making sure that your understanding of the ‘As-Is’ processes is complete and correct.

As-Is Study Validation

- Share documented ‘As-Is’ Process with stakeholders
- Stakeholders evaluate the understanding
- Identify gaps in your understanding
- Discuss with Stakeholders. Plug the gaps
Process Analysis

- Process Study and Documentation
- Process Analysis
- Process Reengineering
- To-be process definition
- Process implementation and validation
Identify the Problems, Issues and Expectations with the process

Problems

- Non-conformance to defined processes and procedures due to skill gaps, lack of common understanding, resource constraints, etc.
  - e.g. documentation not completed as per guidelines/checklist

Issues

- Systemic gaps where processes and procedures are not defined or are ill-defined
  - e.g.

Expectations

- Expectations that process owners, users and other stakeholders have from world-class best practices
  - e.g. Service delivery within minutes/self services/online services
Understanding Problems in the current Government processes

What is a Problem Statement?
- A Problem Statement is a specific description of the current situation of the problem that will be addressed by the team in measurable terms.

Why develop a problem statement?
- To develop a shared understanding of the problem that the team is trying to address.

Example of good problem statement
- Process for Passport Issuance on TAT metric is operating at only 38% within SLA.
- Cost per transaction for the passport issuance process has increased by 20% over last year and is 35% over budget.
So what makes a good Problem Statement?

A good Problem Statement

- States the effect and not the cause (What is wrong & not Why it is wrong)

- Focuses on the gap (between “What Is” & “What should be”)

- Is measurable (How often, How much, When)

- Is specific (avoids broad & ambiguous categories)

- Is a statement, not a question

- Focuses on the “Pain Area” (How Customers / Citizens, Employees and the Government are affected)
Measure of Excellence / Performance metrics must be derived from VoC / VoS

Customer’s Point of view
• Hassle free service delivery
• Adhering to promises made on Turnaround Time
• Error free deliverables – Deliver the right service at right place at right time
• Value for money
• Customer delight

Government’s Point of view
• Simplified business processes to reduce administrative burden
• Minimize resources and cost in service delivery
• Achievement of KPIs/SLAs
• Increase in revenue
• Improve regulatory compliance

Measures of Excellence (MoOE)
• Customer centric
• Measure effectiveness of a process
  – Critical To Quality (CTQ) &
  – Critical To Time (CTT)

Measures of Performance (MoP)
• Stakeholder centric
• Measure efficiency of a process
  – Critical To Cost (CTC) &
  – Critical To Revenues (CTR)
Why do we need to do Process Analysis?

Process analysis helps us identify opportunities and areas for improvement.

What constitutes process analysis?

- Measuring process efficiency – VA/ NVA activities
- Identifying process complexity – DEPs / HoPs etc.
- Hands On Time (HOT) vs. Turn Around Time (TAT) analysis
Classifying process activities in VA/ NVA

An activity is classified as Customer value added activity (CVA) if:
- The activity adds a form or feature to the end-product or service, and
- The customer is willing to pay for it
- The task enables a competitive advantage (reduce price, faster delivery, fewer defects)

An activity is classified as business value added (BVA) if:
- The customer does not want to pay for it but are required for some reason
- The task required by law or regulation
- The task reduces financial risk?
- The process breaks-down if the task were removed

An activity is classified as non-value added if:
- It includes any of the following activities – rework, multiple signatures, counting, handling, checking, inspecting, transporting, down-time, delaying, storing
Non-Value Added activities

An activity that provides the business process with **no competitive advantage** and which **can be discarded without influencing the final outcome**.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Transport / Handling</td>
<td>Moving people, information and/or things from one location to another</td>
</tr>
<tr>
<td>Redundancy / Duplication</td>
<td>Rework; unnecessary or duplicate performance of a task</td>
</tr>
<tr>
<td>Inspection / Verification</td>
<td>Ensuring a task was performed correctly / Checking / Reviewing</td>
</tr>
<tr>
<td>Preparation</td>
<td>Getting ready to perform a task / Prepare to do work</td>
</tr>
</tbody>
</table>
Identifying Non-Value Add activities

Railways – Ticket booking

1. Customer goes to Railway Ticket booking counter
2. Collection and filling of application form by customer
3. Waiting in queue by customer to submit form
4. Submission of filled application form to clerk at booking counter
5. Clerk receiving payment from customer
6. Checking availability of ticket by clerk
7. Confirmation of ticket details from customer by clerk
8. Customer plans alternate ticket

Existing

Average time taken to book a ticket: 2 to 3 hours
Railways Ticket booking – Non-Value Added activities

Value-added activities

<table>
<thead>
<tr>
<th>Time (mins)</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Cust fills application form</td>
</tr>
<tr>
<td>2</td>
<td>Cust submits application form</td>
</tr>
<tr>
<td>2</td>
<td>Clerk confirms details in form</td>
</tr>
<tr>
<td>5</td>
<td>Customer checks availability of ticket</td>
</tr>
<tr>
<td>2</td>
<td>Customer plans alternate ticket</td>
</tr>
<tr>
<td>2</td>
<td>Customer makes payment</td>
</tr>
<tr>
<td>2</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>60</td>
<td>Customer goes to booking counter</td>
</tr>
<tr>
<td>5</td>
<td>Cust collects application form</td>
</tr>
<tr>
<td>30</td>
<td>Cust waits in queue to submit form</td>
</tr>
<tr>
<td>5</td>
<td>Clerk receives &amp; verifies payment made</td>
</tr>
</tbody>
</table>

Average time taken to book a ticket: 120 minutes
Railways Ticket booking – Value Added Analysis

- Value-added: 15%
- Transport: 44%
- Preparation: 39%
- Inspection: 2%
- Redundant: 0%
Process Reengineering

Process Study and Documentation -> Process Analysis -> Process Reengineering -> To-be process definition -> Process implementation and validation
Process Reengineering Principles

- Redesigning existing processes
  - Elimination of non-value added activities,
  - organize the process around the outcomes
  - Building quality in the source…
- Reworking the way a process is executed;
  - process tasks and steps may remain largely the same but how and where the process is executed may be changed
  - E.g. where several different personnel who undertake different tasks in a process are located in different areas of a building, co-locating these individuals into work cells or work groups to facilitate closer cooperation, reduce errors and speed up throughput
Process Reengineering Principles (contd..)

- Replacing processes completely;
- Removing the process; or
- Outsourcing the process
- Automate the process
## Reengineering objectives

<table>
<thead>
<tr>
<th>Integrate</th>
<th>I</th>
<th>Divisions, Customers (internal and external) &amp; Suppliers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automate</td>
<td>A</td>
<td>Repetitive tasks, data capture or entry &amp; error check</td>
</tr>
<tr>
<td>Simplify</td>
<td>S</td>
<td>Forms, Procedures, Communication &amp; Work Flow</td>
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Railways Ticket booking – Reengineering the process

Integrate

• Eliminate the intermediary (clerk); hence empower the customer and integrate him more closely with the Railways department

Automate

• Capture of information about the customer and his travel
• Search of available tickets and planning of itinerary

Simplify

FORM

• A user-friendly easy-to-fill online form

PROCEDURE

• Eliminate the need to go to the counter physically
• Print the ticket on ordinary paper, rather than pre-printed government stationary

COMMUNICATION

• Let the customer communicate with the Railways database directly, without an intermediary clerk
Railways Ticket booking – Reengineering the Process

Value-added Activities

<table>
<thead>
<tr>
<th>Time (mins)</th>
<th>Customer logs on to website</th>
<th>Clerk checks availability of ticket</th>
<th>Customer plans alternate ticket</th>
<th>Cust fills application details online</th>
<th>Cust submits details</th>
<th>Customer makes payment online</th>
<th>Customer prints ticket</th>
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</table>

Non Value-added Activities

Zero Non-Value added activities

Average time taken to book a ticket: 10 to 15 minutes
To-be process definition

- Process Study and Documentation
- Process Analysis
- Process Reengineering
- To-be process definition
- Process implementation and validation
Definition of To-Be Business Process

Online Railway Ticket Reservation

Citizen
- Fill online application form for enquiring availability of tickets
- Tickets available on planned date & ask with berths
- Verify availability of tickets and provide status and available berths
- Fill application form for reservation and and make online payment
- Process and provide ticket confirmation receipt
- Save or print ticket

System
Performance Measure

- Develop Performance measures to examine the outcomes of the new process
- Track results and provide feedback

PERFORMANCE INDICATORS

- Staffing Costs
- Cost
- Resource
- Time
- Demand
- Productivity
- No. of employees needed to provide a service
- Average time taken to respond to a query
- No. of customers requesting a service
- No. of queries answered in a day
Railways Ticket booking – Performance Indicators

- **Cost indicator**: Total cost incurred per ticket issued
- **Time indicator**: Average time taken to book a ticket
- **Demand indicator**: % bookings that happen physically and online
- **Productivity indicator**: No. of customer queries responded to in a day

A comparison of these measures for the old and redesigned process will show the improvement achieved in performance.
Process implementation and validation

1. Process Study and Documentation
2. Process Analysis
3. Process Reengineering
4. To-be process definition
5. Process implementation and validation
Implementing and managing change

As is

Change Management

To be

• Technology / Physical
• Infrastructure + Business Process
• Re-engineering + Management Structure

• Employees Preparedness &
• Acceptance to Change
Ensuring the success of GPR

- Commitment from top management and acceptance of responsibility
- Setting expectations that are realistic and not over-ambitious
- Requirements of target group are considered
- Business case analysis is completed
- Legal issues are identified and addressed
- Focus on developing long-term solutions
- Remember BPR is not solely technology driven!
- Prior experience in reengineering efforts
- Continuous Process Improvement mind set contrary to the belief that BPR is a quick-fix
- Continuous Performance measurement
- Change Management
End of Session