Cost Components of DPR, Risk Assessment & Mitigation

Detailed Project Report
Agenda

By the end of the session, you will be able to:

- Explain the classification of costs involved in an e-Governance Project
- Identify the various cost components in an e-Governance Project
- Identify the different sources of funding in an e-Governance Project
- Explain the forecasting of expenditure in an e-Governance Project
- Define risk and explain the various types of risks involved in an e-Governance Project
- Describe the Risk Management Process in an e-Governance Project
Why Costing?

- DPR is primarily used to obtain financial approval for projects.
- Costing allows project team to decide on business model and the type of PPP format (if applicable)
- It allows for budget forecasting
- Budgeting enables monitoring for cost over-runs
Classification of Costs

PROJECT COST

CAPEX
- IT Infrastructure

OPEX
- Non-IT Infrastructure
CAPEX – Capital Expenditure

Also known as investment cost OR one-time cost

- Hardware
  - PCs, laptops, scanners, printers,
- Software
  - System Software (OS, Office suite, anti-virus, EMS, RDBMS license, etc.
  - Application Software
- Data Centre / Disaster Recovery Centre
- Networking Infrastructure
- Other IT infrastructure
  - RFID tags, barcode, etc
- Installation and deployment

IT Infrastructure
CAPEX – Capital Expenditure
Also known as investment cost OR one-time cost

Non-IT Infrastructure

- Site Preparation Cost (DPR/DRC)
- Data Digitization & Migration
- Third Party Audit
OPEX – Operating Expenditure

Also known as recurring cost

IT Infrastructure

- AMC for system software
- Application Enhancement
- Application Maintenance
- Application Helpdesk
- Connectivity
- Consumables
OPEX – Operating Expenditure
Also known as recurring cost

Non-IT Infrastructure

- Programme Management Unit (PMU)
- Change Management
- Training & Capacity Building
- Monitoring & Evaluation
Sources of Funding

- At the state level, there would be 3 primary sources of funding:
  - Departmental Budget
  - Funding by Central Line Ministry
  - Funding by external agencies like World Bank, UNDP, ADB and other agencies
Expenditure Forecasting

Expenditure Forecasting is important for the following reasons:

- Useful in working out the business plan and PPP model
- Enables departments to factor project expenditure in their annual budgets
- Enables project team to control cost over-runs
- Enables corrective action to be taken in time
## Expenditure Forecast
Expenditure forecasting is for a given time period.

<table>
<thead>
<tr>
<th>Line Item</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
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<td>Application Development</td>
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<td>Customizing existing applications</td>
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<td>Data Digitization</td>
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<td>PMU</td>
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<td>Consumables</td>
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What is a Risk?
Definitions

Common definitions:

- The possibility of suffering harm or loss
- Risk is the potential that a chosen action or activity (including the choice of inaction) will lead to a loss (an undesirable outcome)
- (Exposure to) the possibility of loss, injury, or other adverse or unwelcome circumstance; a chance or situation involving such a possibility

Project Definition:

- Project risk is an uncertain event or condition which, if it occurs, has a negative effect on at least one project objective i.e. time, cost, scope or quality
Issues to Keep in Mind

- Project risks are unique to each project
- One risk may have one or more causes and one or more impacts.
- Two or more different risks may have one and the same cause.
- Apart from the overall project risk, each phase of the project may have its own risks
- Risk management is a continuous process and needs continuous review and monitoring.
Risk Management Methodology

- Planning
- Identification
- Quantitative Analysis
- Qualitative Analysis
- Response Planning
- Monitoring & Control

Risk Management
Risk Management Methodology

- **Risk Management Planning**: Deciding how to approach, plan and execute the risk management activities
- **Risk Identification**: Determining the risks and documenting their characteristics
- **Qualitative Risk Analysis**: Estimating the probability and impact of the risks
- **Quantitative Risk Analysis**: Numerically analyzing the effect of the perceived risks
- **Risk Response Planning**: Developing options and actions to reduce threat from risks
- **Risk Monitoring & Control**: Tracking and monitoring identified risks and identifying new risks
Risk Management Planning

- Risk Management Plan (RMP) is a sub-set of the Project Management Plan
- RMP consists of
  - Methodology
  - Roles and Responsibilities
  - Budgeting
  - Timing
  - Risk Categories
  - Definition of Risk Probability and Impact
  - Reporting Formats
  - Tracking Mechanism
Risk Identification

- Identifying which risks might affect the project and documenting their characteristics
- Risk identification is an iterative process
- Tools for risk identification
  - Brainstorming (or project team meeting)
  - Root cause identification
  - Interviewing
  - Checklist analysis
Risk Identification Contd…

- Outputs of the risk identification process
  - List of identified risks
  - List of potential responses
  - Root causes of risk
Qualitative Risk Analysis

- This stage involves:
  - Categorizing the risks
  - Determining the probabilities
  - Determining the impact
Qualitative Risk Analysis

- **Output of this stage:**

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<th>Impact</th>
<th>Probability</th>
<th>Low</th>
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Risk Response Planning

- Process of developing options and determining actions to reduce threats

- It involves
  - Identifying the mitigating measure (or response)
  - Identifying the person responsible for execution
## Risk Response Planning

- **Output of this stage**

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<th>Description of Risk</th>
<th>Risk Mitigation Measure</th>
<th>Stakeholders involved</th>
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Risk Monitoring and Control

- Risk Monitoring and Control involves:
  - Identifying new risks
  - Tracking identified risks (upgrading or downgrading)
  - Reviewing the execution of risk response and evaluating their effectiveness