Concepts of e-Procurement

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Capacity Building workshop under NeGP
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Overview of Presentation

1. e-Government Concepts
2. Issues in Public Procurement
3. What is e-Procurement?
4. Components of e-Procurement
5. Challenges in e-Procurement
6. Examples of e-Procurement
7. Critical Success Factors
About e-Government
What is e-Government?

It is the *Transformation* of government to provide

- Efficient
- Convenient &
- Transparent

Services to

the *Citizens & Businesses*

through

Information & Communication Technologies
Essence of e-Government

Enhanced Value for Customer
Computerization is not e-Government

Computerization is about *Automation*

e-Government is about *Transformation*

Computerization is *Output*-based

e-Government is *Outcome*-based
e-Government is NOT about ‘e’

... but about Government!
The Four Pillars of eGov
5 Lessons in Process Transformation
Process
Lesson # 1

Don’t TRANSLATE a process

TRANSFORM a process!
Process
Lesson # 2

Service is Paramount

Process is subordinate.

Focus on Services, Service Levels
Process
Lesson # 3

Look at Best Practices

... if you don’t find any, 
**INNOVATE**
Think Big,
Start Small,
Scale Fast

Big Bang Approach has pitfalls
Parallel runs ensure failure of e-Government efforts

Manual Systems overtake Digital Systems

Kill inefficient alternatives
3 Lessons in Transforming People
People
Lesson # 1

e-Government is
..Of the People,
By the People,
For the People

.. Inform them, Involve them &
Incentivize adoption
People
Lesson # 2

BPR and Change Management are Two Sides of a Coin

Design an appropriate Change Management Strategy
People
Lesson # 3

Build Capacity at 3 Levels ...

Policy Level
Management Level
Operational Level

.. It costs only 5-10% of project outlay
2 Lessons in Managing Technology
Technology
Lesson # 1

Adopt Enterprise Architecture

Avoid piecemeal approach
Prescribe & Follow Open Standards

Ensure sustainability, competition.
2 Lessons in Managing Resources
Explore PPP

Combine Efficiency & Customer Orientation with Accountability
User Charges can be a powerful resource

Ensure Sustainability & Value for Money
e-Procurement

- efficiency & transparency
Procurement Processes...

1. Demand Aggregation
   - Indent Management
   - Specifications Workflow

2. Publication

3. Tenders Rate Contract
   - Bid Process
   - Auctions Reverse Auctions

4. Technical Evaluation
   - Evaluation
   - Commercial Evaluation

5. Award of Contract
   - Contract Management
   - Inventory Management Supplier Management


Management Information System
Issues in Public Procurement

• Lack of a common Public Procurement Policy
  • Public Procurement Law and regulations
  • Dedicated Agency
  • Transparency in Procurement Act
• Lack of model bidding documents and contract documents
• Complicated procedures for bidding, approvals and payments.
• Lack of skilled resources
• No centralized system of registration of suppliers
• Delays in making payments to suppliers
Categorization of Procurements

• By Category of Goods & Services
  • Goods
  • Services
  • Civil Contracts

• By Nature of Procurement
  • Tenders
  • Rate Contract & Catalogue Buying
  • Auctions, Reverse Auctions
  • LCB, NCB, ICB

• By Size / Volume of procurement
  • High Value, low volume
  • Low value, High Volume

• By Portfolio of services needed
  • Requisition, Bid Process
  • Evaluation, Award, PO
  • Supply, Quality check, Inventory Management
  • Payment, Accounting, Audit
  • MIS, EIS
What is e-Procurement?

It’s a collaborative procurement of goods, works and services using electronic methods in every stage for bringing in efficiency & transparency.
Objectives of e-Procurement

• To act as the catalyst for procurement reform

• To enhance transparency, monitoring and control in procurement process

• To bring in economies of scale through aggregation of demand

• To reduce cost of doing business for both government and suppliers

• To establish level playing field and “fair” competitive platform for the suppliers
e-Procurement brings in Transparency & Efficiency
Transparency in public procurement

1. WHAT is being procured?
2. WHO is eligible to bid?
3. HOW to bid?
4. WHAT are the evaluation criteria?
5. WHO has got the award?
6. At WHAT cost?
7. WHAT is the quality of work/ product/service?
Efficiency in public procurement

1. Clear Specifications
2. Ease of Registration / Bidding
3. Speedy Evaluation
4. Efficient payment system
5. Strict Quality Checks
6. Cost Effectiveness of Procurement
7. Cost Savings in procurement spend
8. Accountability of public functionaries
A Bird’s Eye View of NEGP

e-Procurement is a National Priority
Components of e-GP

- E-Auctions
- Contract Management
- Indent Management
- E-Tendering
- Catalogue based Procurement
Functional View of e-GP

E-Govt. Procurement

Purchasing
Low value, High volume

Contract Management

e-GP Tendering
High value, Low volume

Information & Communication

Business

Portal

Government

Citizens
Features of Supplier Registration Module

• Enables online registration of suppliers/ contractors
  • of different categories
  • of different classes
• Maintains a database of the list of suppliers
  • with their qualifications & infrastructural capabilities
• Stores Information about
  • Projects undertaken
  • Supplier performance data
• Registration module is used to
  • enable suppliers to tender online
• Blacklisting of suppliers is done in a centralized manner
Features of Indent Management

• Preparation of Estimates & Design Documents

• Administrative Approval & Technical sanction
  – including the workflow involved

• Collation of Demand of different field units
  – in rate-contract procurement

• Preparation of NIT
Features of e-Tendering

- Publication of NIT
- Uploading of Tender/ RFP
- Downloading of Tender documents by contractors/ suppliers
- Online submission of tenders by bidders
- Opening of bids
- Auto-bid evaluation
- Publication of award
- Technical bid evaluation is sometimes handled manually
  - automating this requires a well-functioning contract mgmt. and supplier mgmt. modules
Features of e-Auction

- There are two types of auctions
  - forward auctions e.g. auction of assets
  - reverse auctions – online bidding
- In forward auctions, the price line goes upwards
- In reverse auctions, the price line goes downwards
- e-Auction may be used to select the L1 / H1 bidder
  - after technically qualified bidders have been identified.
Features of Contract Management

• Useful in managing the contract from award to completion of supply/ completion of work
  • mainly used in the Works departments
• Handles activities such as
  • Measurement of Works
  • Quality Inspections
  • Payments
  • Monitoring progress of works
• Measurement book is maintained online
• Workflow involved in making the payment to suppliers is also done online.
Features of Catalogue Procurement

• Relevant for the procurement of goods of large volume but small value, as per demand
  • Medicines, Stationery, Educational aids

• Rate contract information is posted in an e-marketplace.
  • End-users log into the e-market and place an order using the rate contract module

• The goods sought by End-users are delivered directly to their location

• Workflow involved in authorizing a purchase and making the payment is handled online

• Demand aggregation is an important feature
Challenges in e-Procurement
## The Buy-side Issues

<table>
<thead>
<tr>
<th>Issue</th>
<th>Approach</th>
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<tbody>
<tr>
<td>Complexity of Procurement Procedures</td>
<td>Procurement Reforms</td>
</tr>
<tr>
<td>Wide Range of items to be procured</td>
<td>• Conduct an ABC Analysis&lt;br&gt;• Select ‘A’ items initially</td>
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<tr>
<td>- Goods&lt;br&gt;- Works&lt;br&gt;- Services</td>
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<tr>
<td>Organizational Resistance</td>
<td>Change Management</td>
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<tr>
<td>Lack of IT Skills among employees</td>
<td>Training</td>
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<td>Lack of resources with Government</td>
<td>Public-Private-Partnership</td>
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# The Sell-side Issues

<table>
<thead>
<tr>
<th>Issue</th>
<th>Approach</th>
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<tbody>
<tr>
<td>Difficulties in changing over to new systems of tendering</td>
<td>Supplier adoption</td>
</tr>
<tr>
<td>Low levels of technological skills</td>
<td>• Training</td>
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<td></td>
<td>• Help Desk</td>
</tr>
<tr>
<td>Difficulties in access to site</td>
<td>E-Procurement help centres</td>
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<tr>
<td>Resistance to change</td>
<td>Change Management</td>
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## The ‘e-Procurement system’ side

<table>
<thead>
<tr>
<th>Issue</th>
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<tr>
<td>Difficulties in establishing &amp; maintaining the system</td>
<td>By sharing responsibility through PPP</td>
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<td>Lack of Financial resources for maintenance &amp; transaction handling</td>
<td>• Designing appropriate business model</td>
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<td></td>
<td>• Levy of service charges</td>
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<tr>
<td>Concerns of</td>
<td>Digital Signature Certificates</td>
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<tr>
<td>• Confidentiality of bids</td>
<td></td>
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<tr>
<td>• Authenticity of bids</td>
<td></td>
</tr>
<tr>
<td>Varying requirements of Multiple Departments</td>
<td>• Process Reforms</td>
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<tr>
<td></td>
<td>• Standards-based system</td>
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eProcurement – Some Examples
International Experiences

Public Procurement Service, Korea

GeBiZ, Singapore

Gatetrade, Denmark

State of North Carolina, USA
National Experiences

State of Andhra Pradesh

State of Chhattisgarh   State of Karnataka

Indian Railways

National Informatics Center
Example: Govt of Andhra Pradesh

- Hosted by C1 India Pvt. Ltd.

**eTendering**
- Displays Tender Notices
- Contract Award Notices
- Submitting queries of Tenders
- Submitting Tender Offers
- Open Tendering
- Selective Tendering
- Single or Restricted Tendering

**eAuctions**
- Forward auction
- Reverse auction

**Departments covered**
- Irrigation
- Panchayat Raj (Engineering)
- Andhra Pradesh Tech Services
- Roads & Buildings
- State Road Transport
- AP Health

**General Features**
- Online Registration for Vendors
- Web based secure access (PKI) enabled for vendors and buyers
- Training kits and FAQs online
Example: Hong Kong Government

- Hosted by government supplies dept. (GSD)

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**Products & Services**
- Chemicals & related products
- Electrical Equipments
- Leather and Rubber products
- Machinery including pumping equipments
- Medical items
- Road Vehicles
- Textiles, garments etc.

**General Features**
- General T&C for govt. supplies dept.
- Online Registration

[www.ets.com.hk]
Example: US Federal Government

- Managed & Administered by GSA Federal Technology Services
- Uses the best technology available in the commercial space

- Private Auctions (Reverse auction)
  - Real time dynamic price negotiations
  - Creates dynamic competition
  - Used for any procurement where price/performance tradeoffs can be easily evaluated

- eFast
  - Used for procuring commodities
  - Has aggregation capabilities, individual small quantities can be grouped with substantive quantities
  - Bulk purchases

- Quick Quote
  - Issuing of RFQ and receive quotes
  - Shopping cart used for bulk transfer to private auction for procurement
  - Used to procure complex & hard to find services & direct procurement goods
  - Examples: construction projects, production materials, temporary staffing

www.buyers.gov
Critical Success Factors of e-Procurement

- Effective Procurement Policy & Reform
  - Process re-engineering to transform government procurement
  - Sound legislative and regulatory framework
- Well-designed Business Model
- Adequate participation and commitment from participants
  - Effective Communication Strategy to disseminate benefits
  - Strategies for adoption of buyers & suppliers
  - Flexible systems for meeting requirements of all agencies
- Effective Training and Change Management plan
  - Developing effective skill-base in new procurement methodologies
- Open standards based, interoperable technology infrastructure
Conclusion

• Procurement is a sensitive function of the state

• e-Procurement enhances transparency & efficiency in public procurement

• Electronic Interface with suppliers/ contractors can save time, effort and cost.

• There are several challenges in implementation

• A planned approach can lead to successful implementation

• PPP models are ideal for e-Procurement projects
Value of Zero!!

Leadership & Vision

Management, HRD, Infrastructure, Resources

Technology, GPR, Partnership

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Thank You

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