

# Concepts of e-Procurement

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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

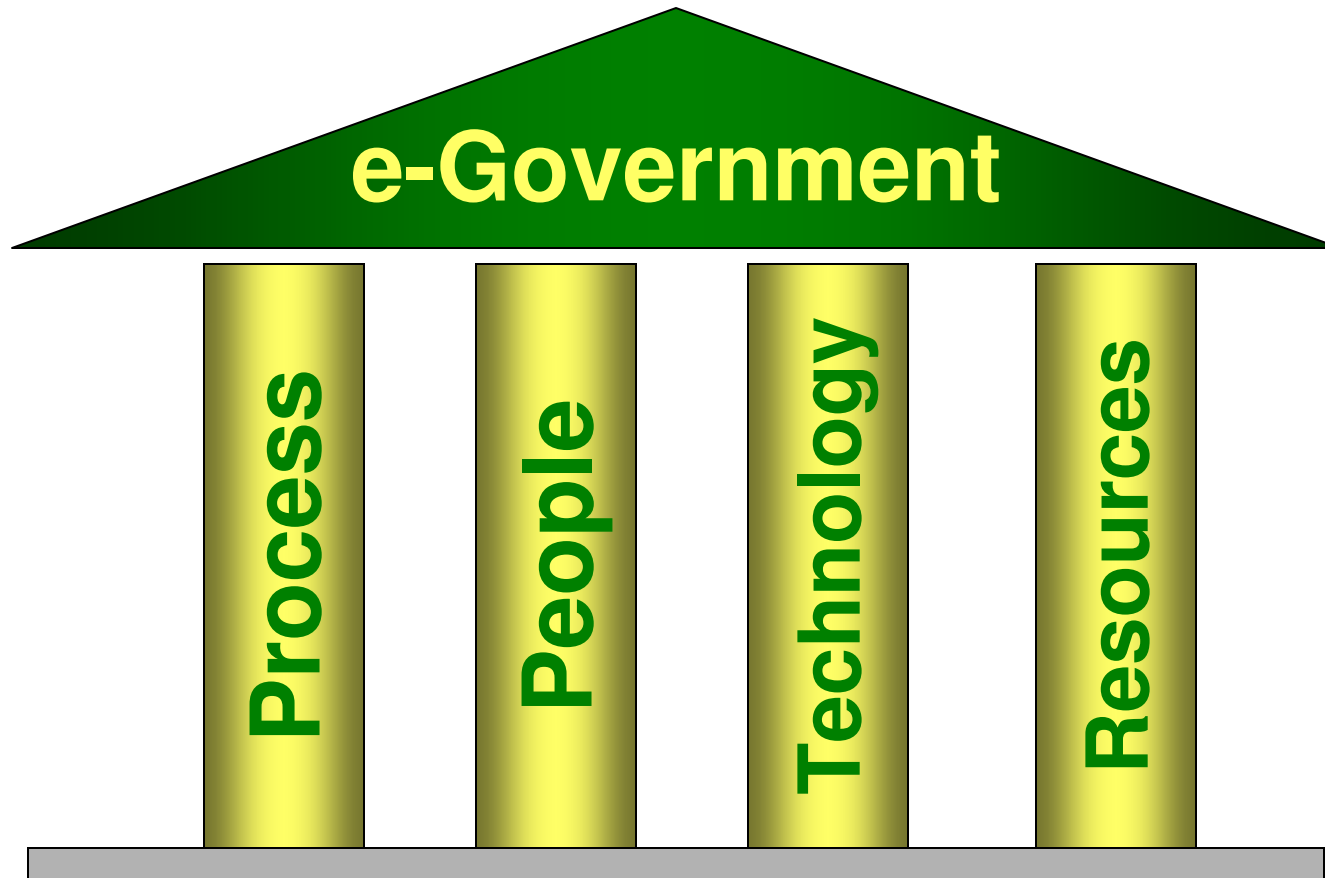
Computerization is about *Automation*  
e-Government is about *Transformation*

Computerization is *Output*-based  
e-Government is *Outcome*-based

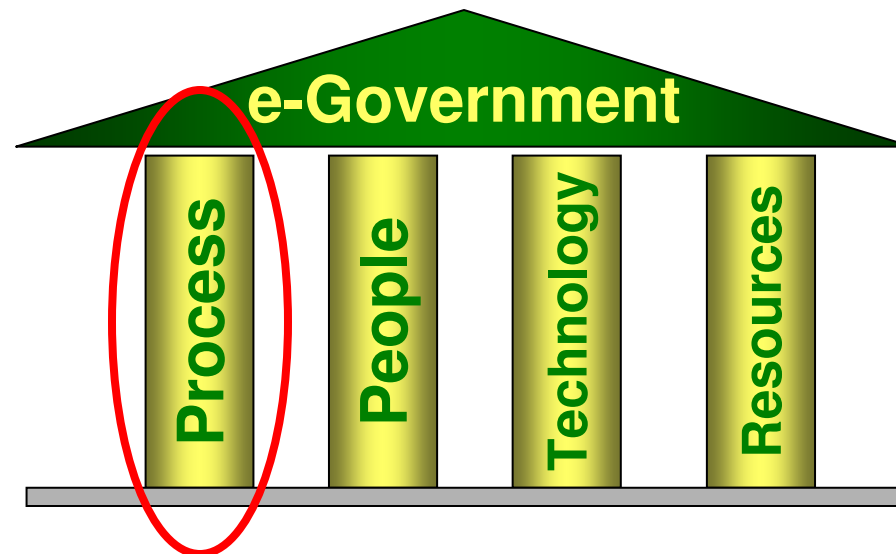
e-Government is NOT about 'e'

*... 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*

# Process Lesson # 4

Think Big,  
Start Small,  
Scale Fast

*Big Bang Approach has pitfalls*

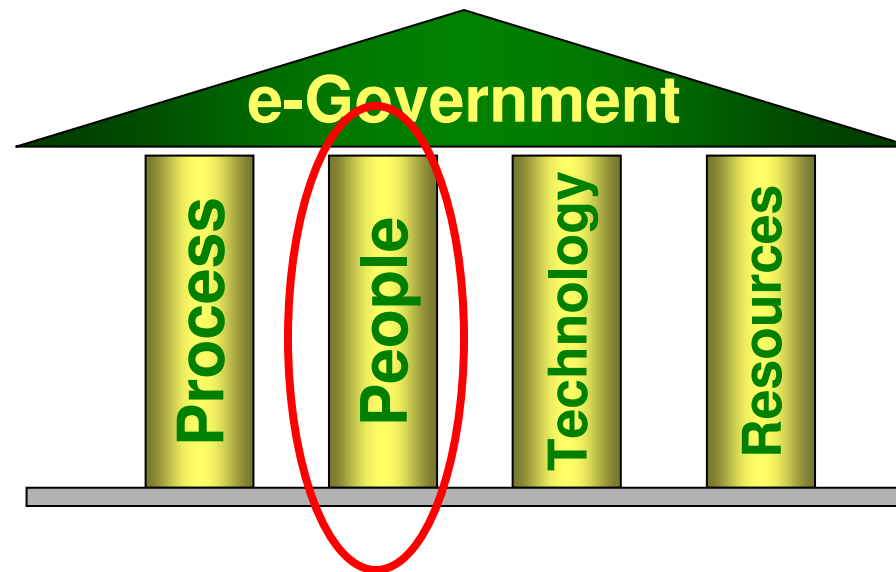
# Process

## Lesson # 5

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

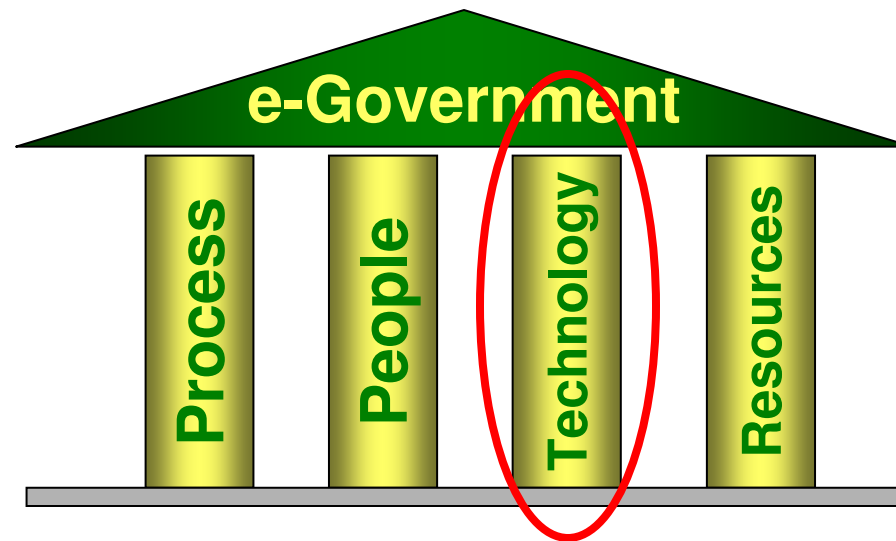
# People

## 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

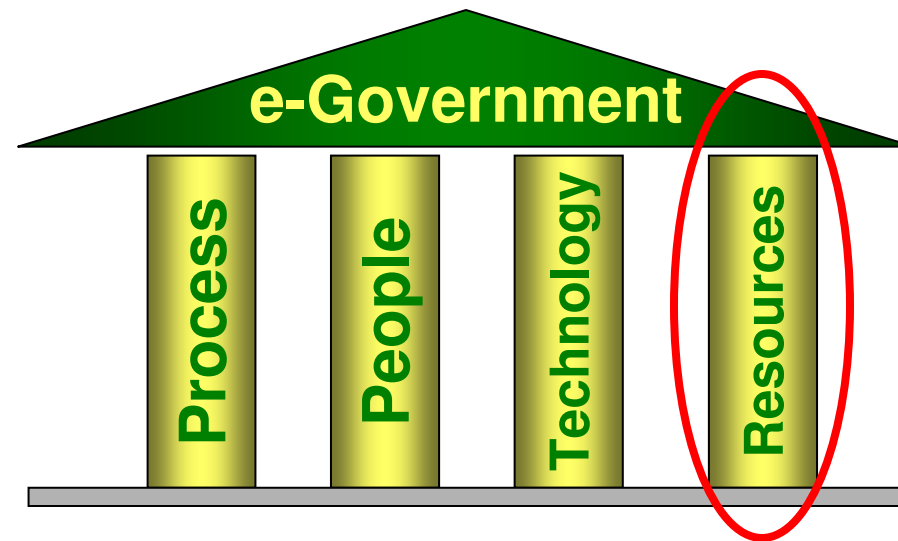
Adopt Enterprise Architecture

*Avoid piecemeal approach*

# Technology Lesson # 2

Prescribe & Follow  
Open Standards

*Ensure sustainability, competition.*



*2 Lessons  
in  
Managing Resources*

# Resources

## Lesson # 1

Explore PPP

*Combine Efficiency &  
Customer Orientation  
with  
Accountability*

# Resources

## Lesson # 2

User Charges can be a  
powerful resource

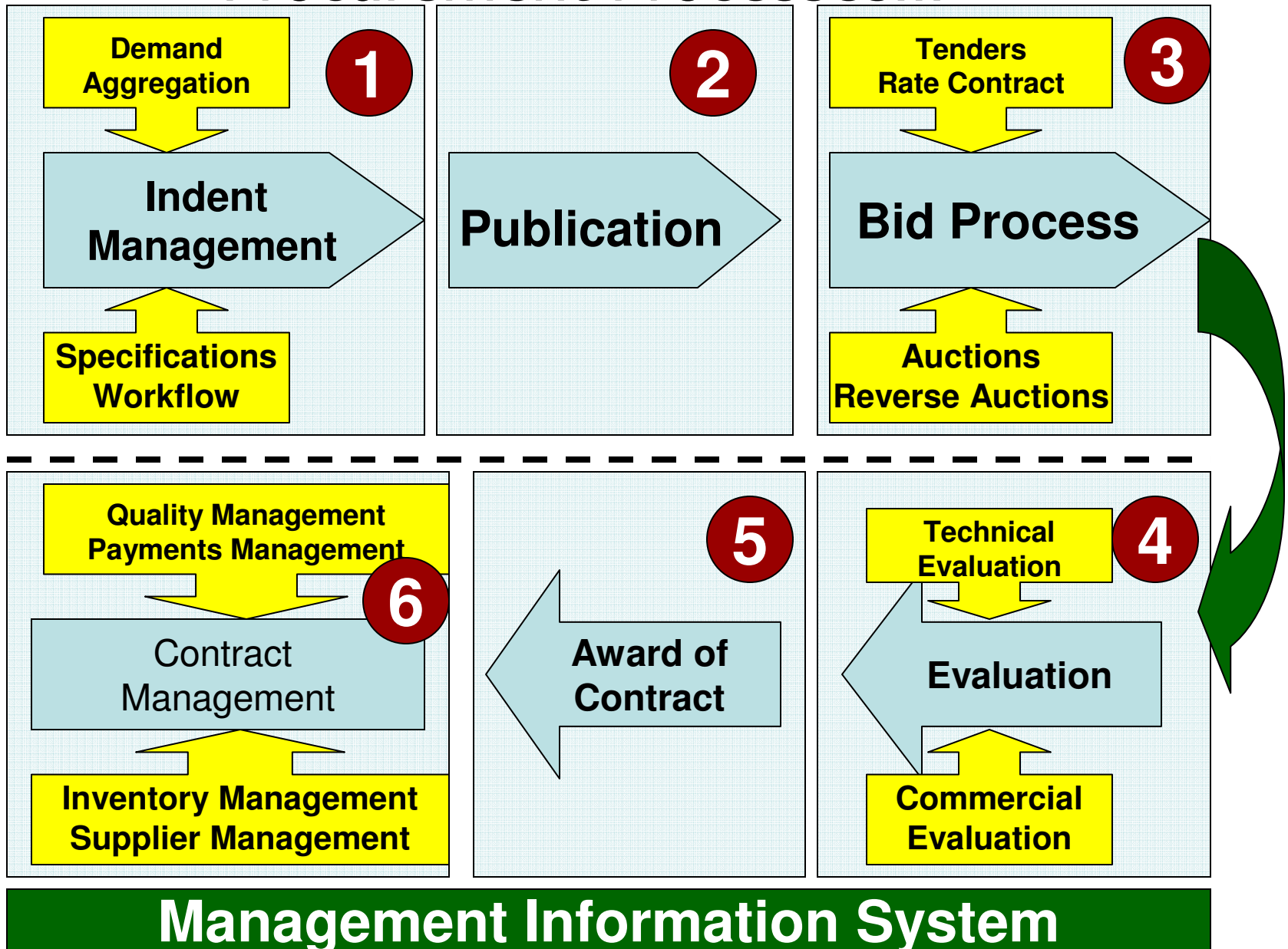
*Ensure Sustainability &  
Value for Money*



# e-Procurement

*- efficiency & transparency*

# Procurement Processes...



# 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

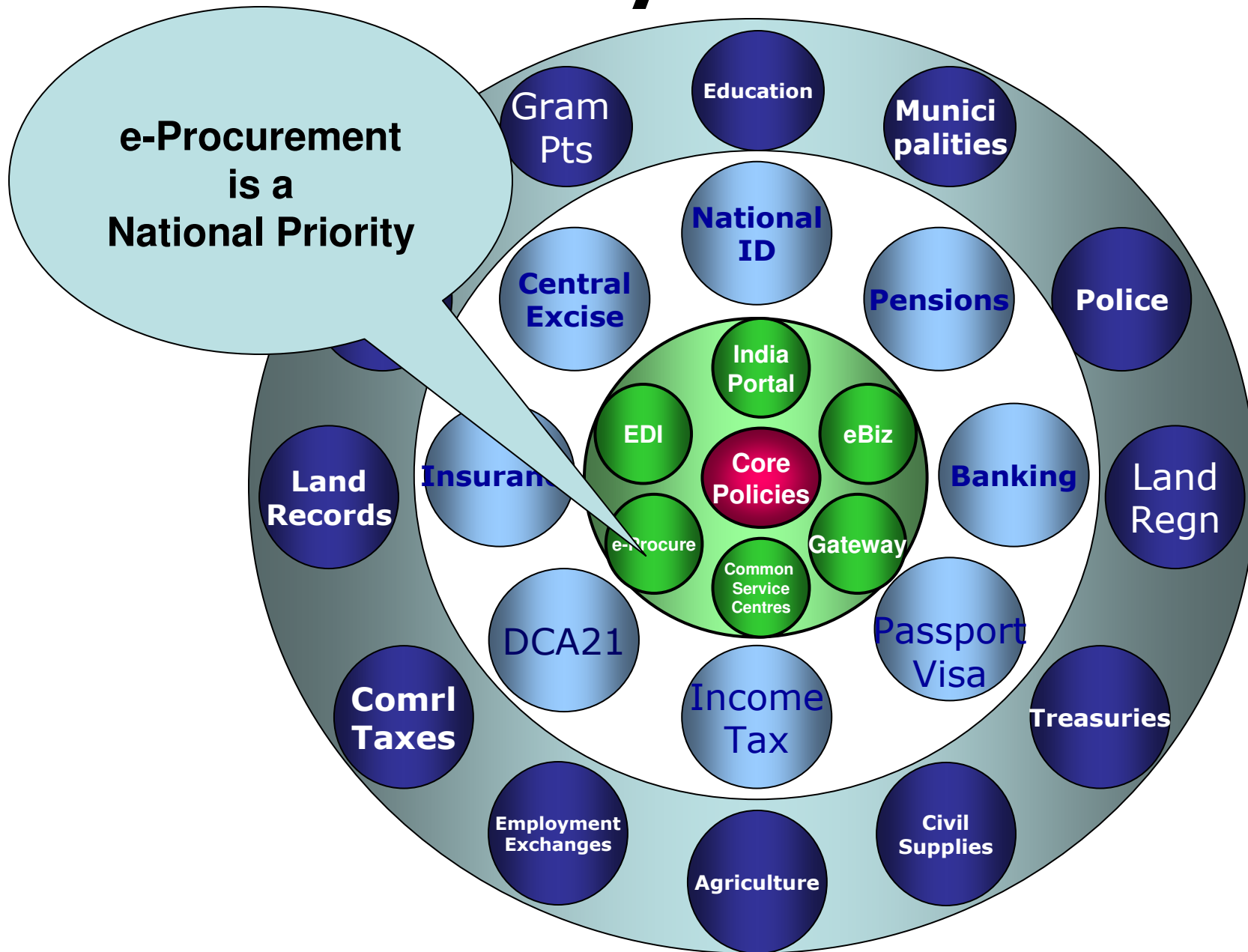
1. WHAT is being procured ?
2. WHO is eligible to bid?
3. HOW to bid ?
4. WHAT are the evaluation criteria ?
5. WHO has got the award ?
6. At WHAT cost ?
7. WHAT is the quality of work/ product/ service ?



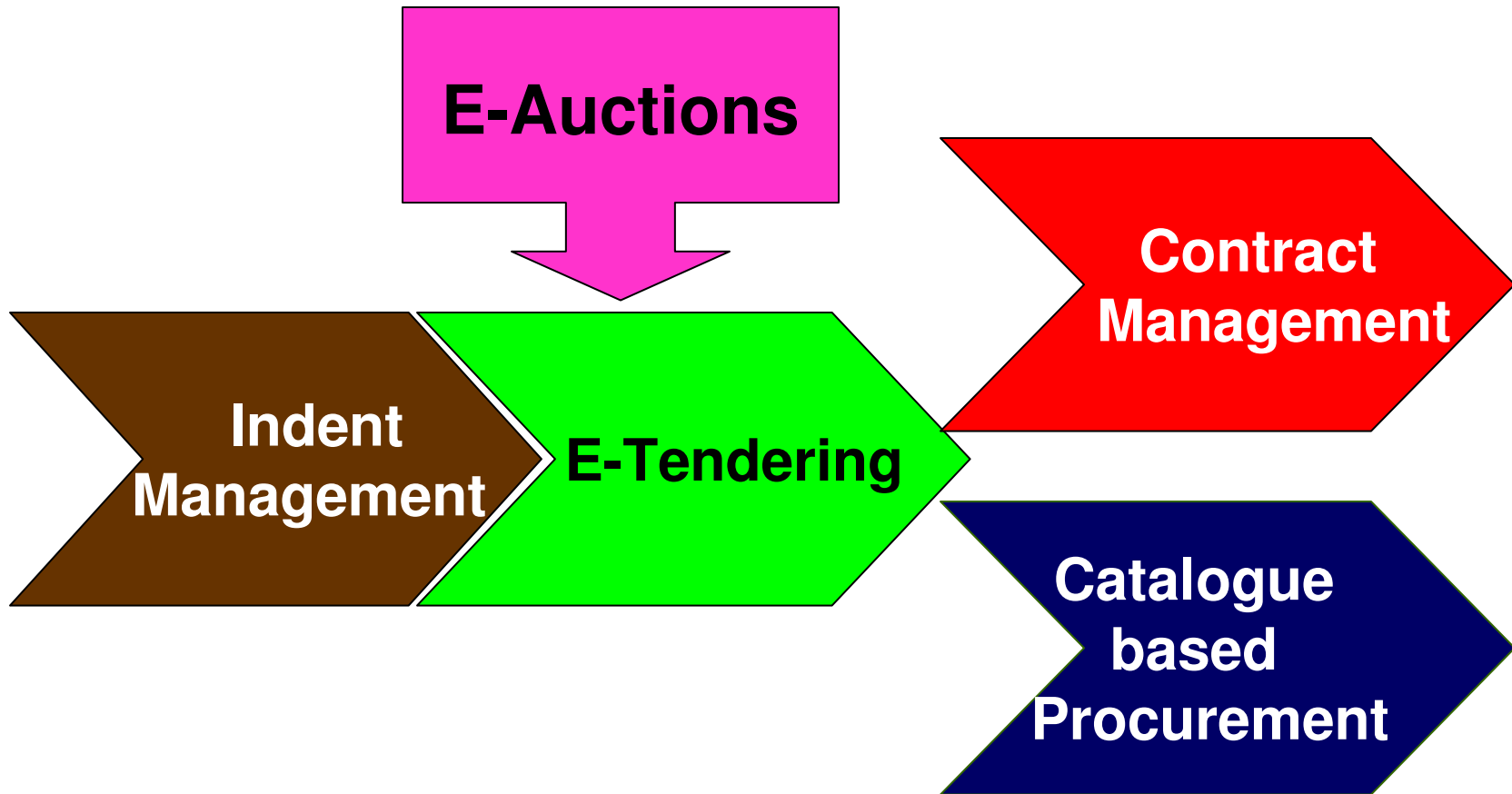
# **Efficiency** in public procurement

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

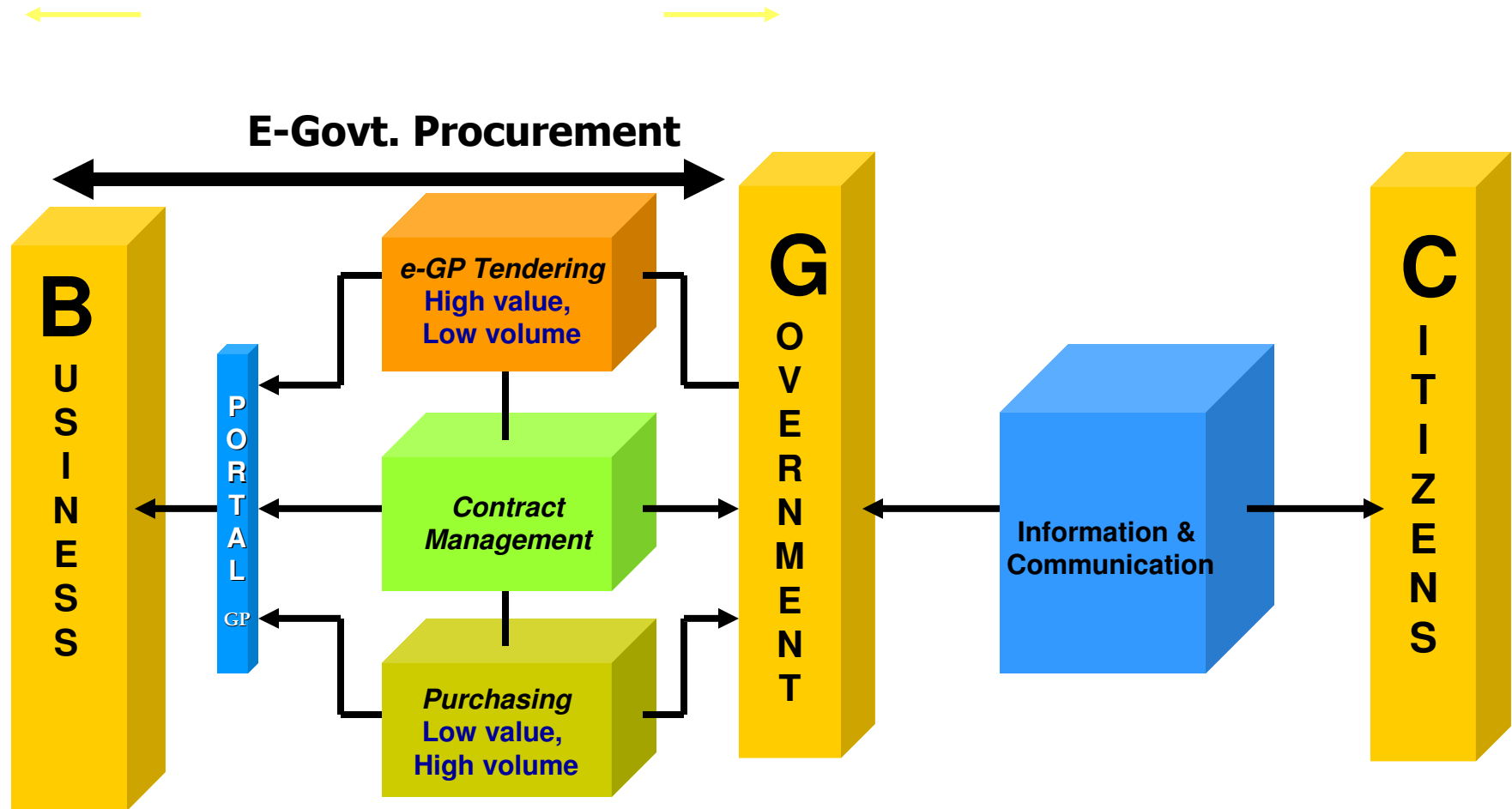
# A Bird's Eye View of NEGP



# Components of e-GP



# Functional View of e-GP



# **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**

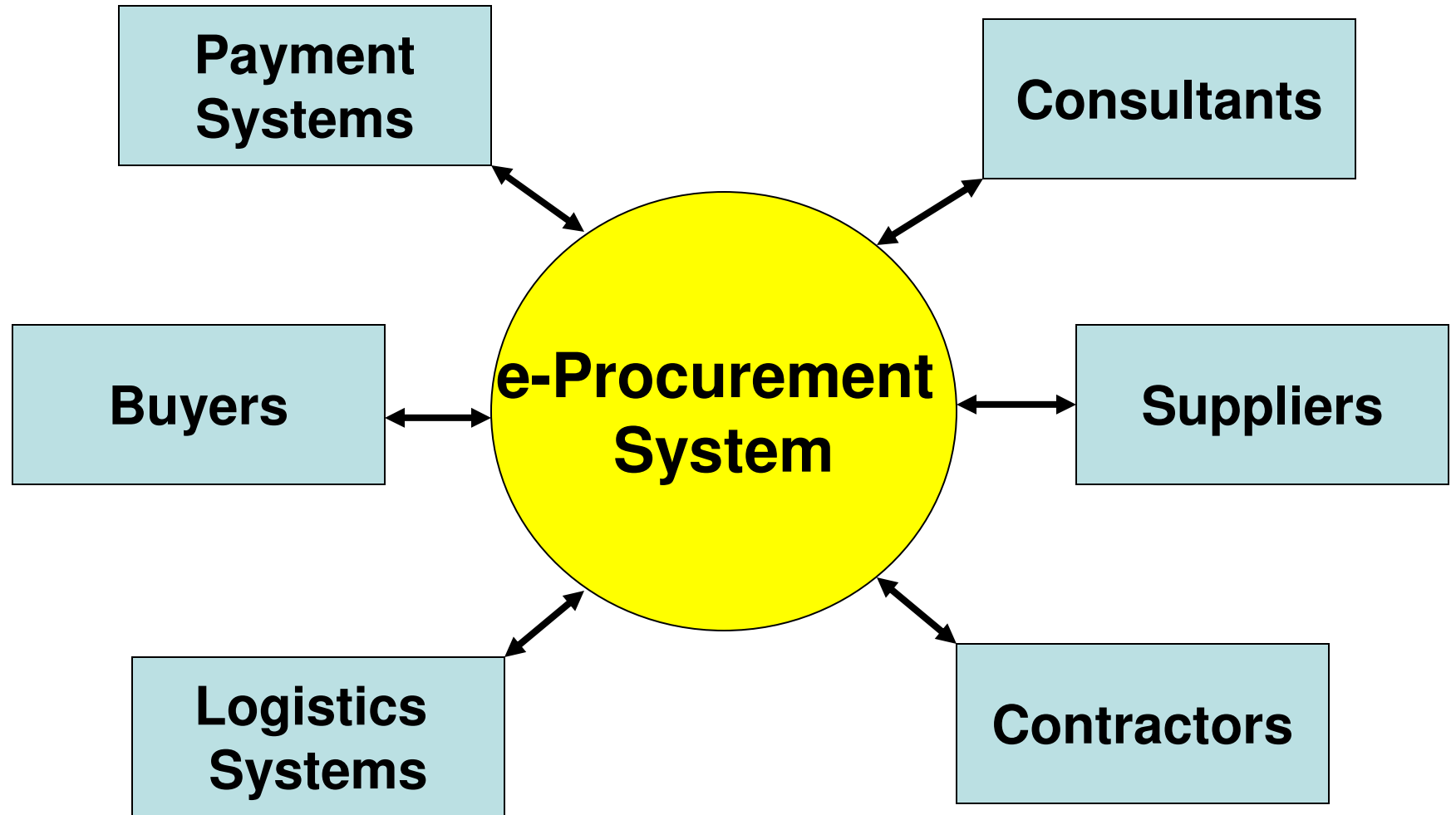
- Useful in managing the contract from award to completion of supply/ completion of work
  - mainly used in the Works departments
- Handles activities such as
  - Measurement of Works
  - Quality Inspections
  - Payments
  - Monitoring progress of works
- Measurement book is maintained online
- Workflow 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

# e-Procurement Scenario



# The Buy-side Issues

Issue	Approach
<b>Complexity of Procurement Procedures</b>	<b>Procurement Reforms</b>
<b>Wide Range of items to be procured</b> <ul style="list-style-type: none"><li>-Goods</li><li>-Works</li><li>-Services</li></ul>	<ul style="list-style-type: none"><li>•Conduct an ABC Analysis</li><li>•Select 'A' items initially</li></ul>
<b>Organizational Resistance</b>	<b>Change Management</b>
<b>Lack of IT Skills among employees</b>	<b>Training</b>
<b>Lack of resources with Government</b>	<b>Public-Private-Partnership</b>

# The Sell-side Issues

Issue	Approach
Difficulties in changing over to new systems of tendering	Supplier adoption
Low levels of technological skills	<ul style="list-style-type: none"><li>•Training</li><li>•Help Desk</li></ul>
Difficulties in access to site	E-Procurement help centres
Resistance to change	Change Management

# The 'e-Procurement system' side

<b>Issue</b>	<b>Approach</b>
<b>Difficulties in establishing &amp; maintaining the system</b>	<b>By sharing responsibility through PPP</b>
<b>Lack of Financial resources for maintenance &amp; transaction handling</b>	<ul style="list-style-type: none"><li>• <b>Designing appropriate business model</b></li><li>• <b>Levy of service charges</b></li></ul>
<b>Concerns of</b> <ul style="list-style-type: none"><li>• <b>Confidentiality of bids</b></li><li>• <b>Authenticity of bids</b></li></ul>	<b>Digital Signature Certificates</b>
<b>Varying requirements of Multiple Departments</b>	<ul style="list-style-type: none"><li>• <b>Process Reforms</b></li><li>• <b>Standards-based system</b></li></ul>

# **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**

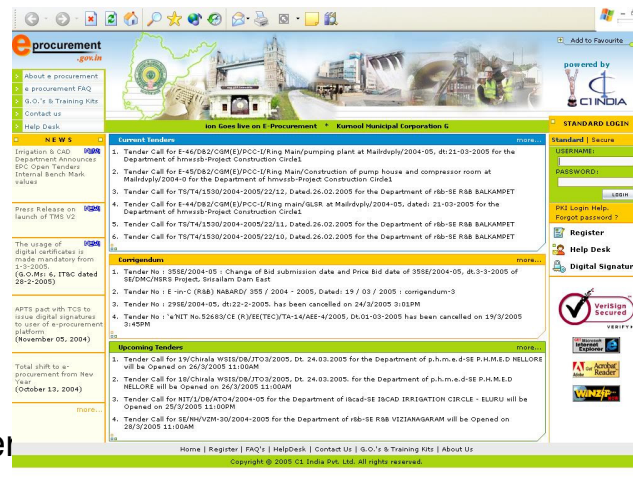
**State of Karnataka**

**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 Tender
- 👉 Submitting Tender Offers
- 👉 Open Tendering
- 👉 Selective Tendering
- 👉 Single or Restricted Tendering

## eAuctions

- ❖ Forward auction
- ❖ Reverse auction

## General Features

- 👉 Online Registration for Vendors
- 👉 Web based secure access (PKI) enabled for vendors and buyers
- 👉 Training kits and FAQs online

## Departments covered

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

# Example: Hong Kong Government

👉 Hosted by government supplies dept.(GSD)

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## General Features

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

## Products & Services

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

# 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

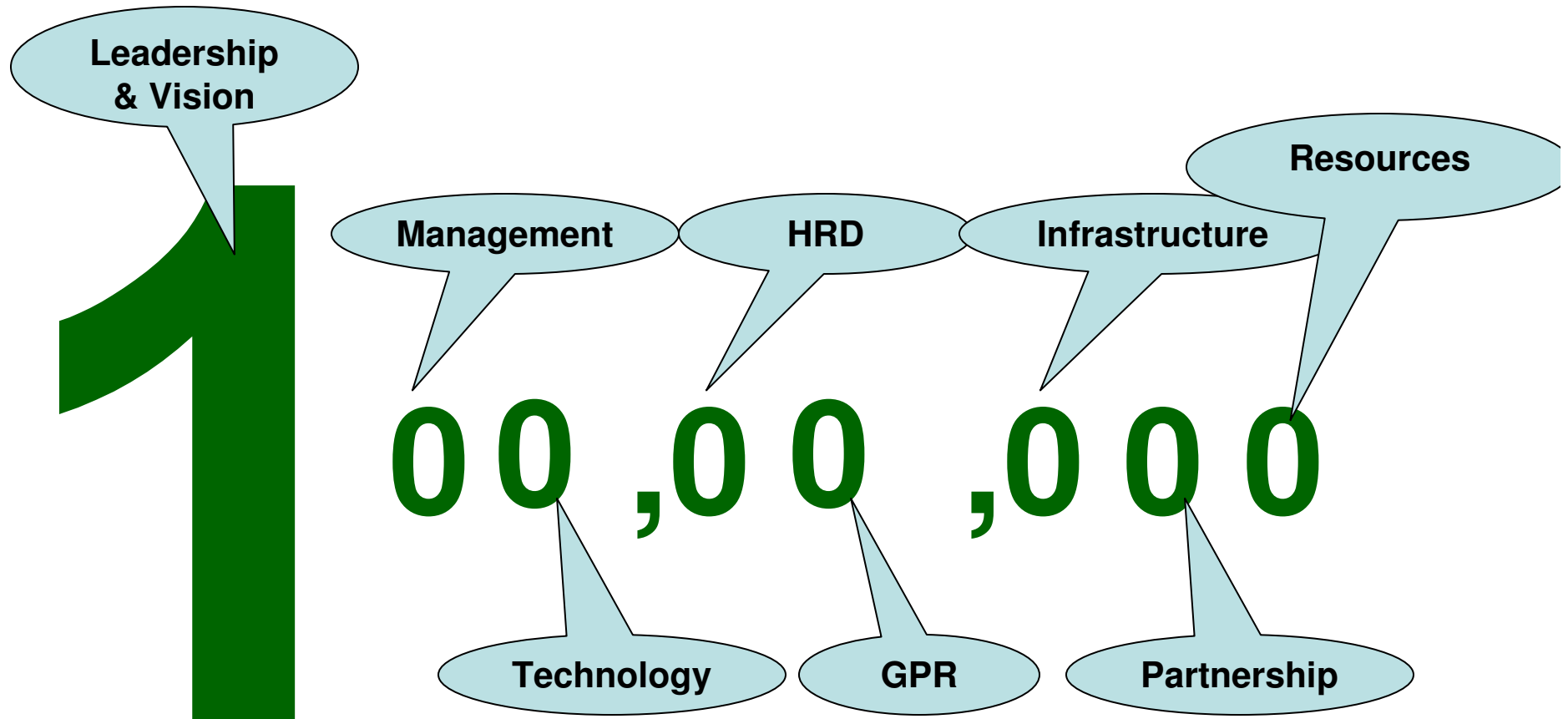
# Critical Success Factors of e-Procurement

- 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 !!





A photograph of a long, straight bridge with a metal railing, stretching across a calm body of water towards a range of mountains in the distance. The sky is a clear, bright blue with some light clouds. The text "Thank You" is overlaid in a green, italicized font in the upper center of the image.

*Thank You*

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