e-Procurement*

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ABSTRACT

e-Procurement system was introduced for all the purchases and procurements in the Government departments, Nigams and Societies under the administrative control of the State Government and which are funded by Government of Gujarat. The project caters to procurement needs like services, civil works, material procurement, rate contracts, maintenance contracts and auctions. Roll out of e-Procurement was carried out in a phased manner starting from few works/items for limited Departments to multiple items for many departments in the month of October 2004 (Circular No. ETD-2004-1288-STD dated 12th October 2004 issued by Addl. Secretary, Department of Science and Technology).

One of the prime objectives of the Government is to secure benefit of efficiency by the e-enablement of business process. Purchasing is often the area where the greatest savings can be made within any organization. e-Enabling Purchasing helps to achieve those savings sooner as well as bringing other benefits such as best practice processes and quality management information. E-Procurement project was initiated with the vision of achieving above stated goals.

e-Procurement is the process wherein the physical tendering activity is carried out online using the Internet and associated technologies. e-Procurement enables the user to introduce ease and efficiency without compromising the required procedures of the department.

e-Procurement provides transparency, results in savings of time and money, shortening of procurement cycle, ease of operation to the implementing department and to the bidders/suppliers/vendors.

The project initiated in the month of October 2004 and made compulsory for all the government department from January 2007. At present 56 departments through their 168 offices are conducting online tendering and are prime stake holders of the project.

1. Introduction

Project conceptualization

e-Procurement system introduced for all the purchases and procurements in all the Government departments, Nigams and Societies under the

administrative control of the State Government and which are funded by Government. Roll out of e-Procurement carried out in a phase manner starting from few works/items for limited Departments to multiple items for many departments.

  e-Procurement System introduced for the following transactions:-
  a) For purchases and procurement of goods, plants, equipments, machinery, medicines, medical and surgical suppliers and stores items, all type of store items, supplies and purchases, food and civil supplies stores items and purchases, printing and stationary items and purchase, all type of vehicles purchases, furniture an fixtures etc.
  b) All type of civil construction and related works
  c) Outsourcing of required services
  d) Auctioning of old plants, equipments, machinery, buildings, vehicles, furniture and fixtures, lands, properties, etc.
  e) All other purchases and work orders.

2. Project Vision, Stakeholders, Objectives and Services

One of the prime objectives of the Government is to secure efficiency benefits from the e-enablement of business process. Purchasing is often the area where the greatest savings can be made within any organization. E-enabling Purchasing helps to achieve those savings sooner as well as bringing other benefits such as best practice processes and quality management information. e-Procurement project initiated with the vision of achieving above stated goals.

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3. Project Stakeholders (internal and external)

  Internal: All the departments conducting e-Procurement
            (Buyer Community)
  External: All the bidders/suppliers/vendors
            (Business Community)

Targeted beneficiaries
Govt. Departments and Business community
4. Public Private Partnership (PPP)

Ownership of application software

(n)Code Solutions—A division of GNFC Ltd. act as an Application Service Provider (ASP) and ownership of Application software is of ASP.

Implementation model

Government—Private Partnership

Business model

Government–Private partnership concept adopted by way of Application Service Provider (ASP) concept.

1. ASP is responsible for presentation, demo, Dry run to the department, teaching and training to the department.
2. ASP is responsible for presentation, teaching and training to the bidders/suppliers/vendors
3. ASP carries out required customization of software module for conducting online tendering.
4. ASP creates online tenders on behalf of the Department (For first 5 Tenders) to establish proper hand holding.
5. ASP is responsible for all the Capital Expenditure like H/W, physical security by way of data centre, redundancy establishment as well as operating expenses like Internet bandwidth.
6. ASP is responsible for all software up gradation and maintenance.

Third party audit and compliance

Indian Institute of Management (IIM), Ahmedabad has been approached to carry out system study

Certification

Electronics and Quality Development Centre (EQDC), Gandhinagar

Sources of funds

Operative expenses funded by State Government

5. Necessity/Needs

a. To establish Transparency in procurement process.
b. To shortening of procurement cycle
c. To avail competitive price
d. To enhance confidence of suppliers
e. To establish flexible and economical bidding process for suppliers
6. Project Plan

Requirements of process re-engineering and legal framework

Technology Architecture

Change in the legal framework was not required as the project follows defined procurement guideline of the state. Minor variations in the format of News paper advertisement with the effective reduction in the size of the advertisement were required.

Process re-engineering is basic need for the project. Re-design of the bid submission is the major change as the physical submission of bid now got converted into online data submission for the bidders against set qualifying criteria. Manual bid evaluation method re-engineered so that software evaluated technical and commercial bids. As soon as the bids are opened online at the stipulated date, the system assesses the response submitted by bidders. The comparative data based on the online forms created by department and the set qualification criteria are presented in the form of system-generated bid evaluation statement of all participating bidders.

This auto bid evaluation have major impact on the reduction of evaluation cycle. The subjective evaluation efforts reduced with the faster and simpler evaluation process.

7. Milestones

High value purchases of 50 lakhs and above were made mandatory in the beginning. Lower value of Rs. 10 lakhs and above was adopted after sufficient time gap of 5 months in between.

Future roll out plan of reducing core procurement value of Rs. 5 lakhs and above in short run and Rs. 1 lakh and above in a long run is also taken as a one of the target for GPR.

Addition of new features and facility like ePayment, Catalogue management, vendor management etc. is also taken under planning of GPR.

8. Project Management Structure

Project management

35 skilled and trained people (full time)

Project policy level

Involvement of 4 senior level people from ASP end. (Part time)

Empowered committee as mentioned below from Government end.
Table 1

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<td>1.</td>
<td>Chief Secretary Chairman</td>
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<td>2.</td>
<td>Additional Chief Secretary (Finance) Member</td>
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<td>3.</td>
<td>Additional Chief Secretary (Health) Member</td>
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<td>4.</td>
<td>Principal Secretary (Small Scale Industries) Member</td>
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<td>5.</td>
<td>Principal Secretary (Expenditure) Member</td>
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<td>6.</td>
<td>Principal Secretary (Water Resources) Member</td>
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<td>7.</td>
<td>Secretary (Department of Science &amp; Technology) Member</td>
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<td>8.</td>
<td>Secretary (Roads and Buildings) Member</td>
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<td>9.</td>
<td>Addl. Commissioner, Industries and CSPO Member Secretary</td>
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Change Management—Involvement of 4 Senior level people from ASP and 4 numbers of senior level people from Government of Gujarat. (GOG) (Part time)

9. Implementation

Strategy for Pilot to roll out

For Government objective was to have a government wide e-procurement solution covering all the departments and offices across Gujarat. Newer technology, availability of infrastructure in place and criticality as well as complexities of tendering process were initial barriers for buy in of buyers and suppliers. Keeping above stated points into consideration the solution is segregated into pilot phase in the first phase and roll out in the second phase.

Pilot Phase: A pilot option is given to all the department through GR dated 12.10.2004. None of the department were compelled to instead self initiation to have better buy in of buyer was asked for. In January 2005, Sardar Sarovar Narmada Nigam Ltd. floated their works related tender through online mechanism. Gujarat Water Supply and Sewage board also followed it for works and items like pipeline network. Gujarat Informatics Ltd. dealing in hardware and software also floated tenders during pilot phase.

Pilot was meant to create awareness in the supplier community also. Standardization of pattern of procurement templates or even overcoming of limitations of IT infrastructure is also required to be handled during pilot phase. Gradually number of departments increased to 12 numbers including GNFC, GSFC, GMDC, GWIL, GUDC, Irrigation Department, medial services, Geology and Mining department and Department of road and building by the month of January 2006 with the total procurement value of Rs. 47966 lakhs.

Roll-Out: After successful handling of 225 tenders covering 19 different departments and organizations by 31 August 2006, roll out was plan in the way of mandatory e-Procurement to all the departments. Government Resolution issued on 22.11.2006 and all the procurement exceeding a value of Rs. 50 lakhs and above was made compulsory effective from 01.01.2007.
Thus 1.25 months time period given to all the departments to be able to establish required IT infrastructure and get trained for application of e-Procurement.

e-Procurement is being implemented in 60 different government departments, Board, Nigams, PSU and municipalities as on 31.08.2007. Till 31.08.2007 4073 tender aggregating to Rs. 5726 crores have been processes through the e-Procurement at Government of Gujarat.

10. Capacity Building

Governance structure, Project management teams, Exit management team, Change management and training

Capacity building

Capacity building is planned with the decentralized Zonal level support centres in the first phase which will be expanded to District level support centres.

Change management

Empowered committee is formed under the chairmanship of the Chief Secretary with the representative of different key departments for change management plan at macro level. This includes Add. Chief Secretary (Finance), Add. Chief Secretary (Health), Principal Secretary (Small Scale Industries), Principal Secretary (Expenditure), Principal Secretary (Water Resources), Secretary (Department of Science and Technology), Secretary (R&B) and Addl. Commissioner, Industries and CSPO.

e-Procurement project was allotted with special session for different ‘Chintan Shibir’ which took place during last one year. This acted as a major supportive for communication plan

• Awareness plan was established along with Central Store and Purchase Office (CSPO) and different stakeholders were trained on regular basis with the frequency of two batch/week.
• Periodic presentation were made at the secretarial level monthly meeting
• Sub committee consist of Principal Secretary SSI, U/S Industries, U/S Finance Department, Dy. Commissioner CSPO, U/S Department of Science and Technology, representative of GIL and Executive Director GNFC was formed to take care of micro level issues and technological decisions.
• Project owners were identified from within each departments/offices and core groups were formed in the user departments to chalk out the required implementation strategies within the departments.
• Training to around 1800 department employee through seminars, user manuals and visual aid media like Movie CD of complete tendering cycle provided. One to one training was given to all core team members. ‘Train-the-trainer’ method has also been adopted among stakeholders. Open training session is conducted every Saturday for all the stakeholders. This session is facilitated by proper infrastructure in place.
• In addition about 3200 vendors have been trained on the proper usage of the online facilities.

11. Evaluation and Measurement

a. Time savings in terms of shortening of purchase cycle achieved by the service users. Average time for decision making like from the day when first tender stage opened (i.e., document fee stage) till price bid stage opening was approximately 30 days. This cycle time reduced to 6.6 days with implementation of project.
b. Project financial benefits and sustainability are of qualitative as well as quantitative nature. Indicative savings of quantitative nature for this project are 23.5 days savings on man days. Savings of Rs. 48.6 crore against ECV for 300 random sample data. Substantial savings on advertisement cost because of drastic reduction in the size of newspaper advertisement.
   Qualitative benefits like increased transparency, enhancement of trust of suppliers, wider reach, equal opportunity to all etc are also available with this project.
c. Transparency increased as physical interaction of purchaser and supplier is reduced. The information related to all the tenders is available online and it is not selectively produced in some newspapers.
d. Growth in no. of users taking the services through the new system can be seen as In the month of January 2007 tender per month were 131 while that was 432 per month for March 2007 and 739 for August 2007. Participation of department increased from 19 departments in January 2007 to 34 departments by March 2007. As on August 2007 number of the departments reached to 61.
   Offices those are active in e-Procurement and falling under all of these departments also increased from 49 by end of January 2007 to 93 in March 2007 and 199 by August 2007. Thus, total 250 offices are actively involved in one or other stage of the e-Procurement roll out.
   Department officers directly involved into e-Procurement were 190 by end of January 2007 reached to 345 in March 2007 and 646 by end of August 2007. Supplier participation also increased from 737 at the end of January 2007 to 1394 in March 2007 and 3084 by end of August 2007.
12. Issues and their Solutions

Lessons learnt

• For paradigm change into the system, it is very much essential to have buyers and supplier buy in early stage.
• Stakeholder participation during the initial phase of project is very critical.
• Change management is sensitive and important issue to be managed for such projects.
• Pilot phase plays critical part to understand teething problem and solutions for the same.
• Pilot phase also helps to have slow diffusion of change and easy penetration of the new concept.
• Training is an essential part of the project roll out. Different mode of training and creation of facilitation point play vital role for smoother pick up of project.

Critical success factors

• Training to Department Users
• Training to Bidders/Suppliers/Vendors
• Support to Bidders/Suppliers/Vendors
• Uptime of the Service
• User friendliness of an application
• Dynamism of an application for varied procurement requirements

Failure factors

• Lack of computer awareness – Department
• Lack of computer awareness – Bidders/Suppliers/Vendors.
• Infrastructure like Computers and Internet connection
• Department’s willingness for technology adoption
• Initial Resistance of Bidders/Suppliers/Vendors
• Freezing out function requirement of the department for customization purpose.

The future roadmap includes covering of all purchases above Rs. 1 lakh through this system.

Other milestones to be covered in the next 12 months include:
1. Payment Gateway (currently under implementation)
2. Digitally signed e-Auctions,
3. Reverse auctions
4. Catalogue management,
5. Vendor management
6. e-Payments
7. Demand aggregation
13. Status and Results

- **Present status**—Roll Out

14. Specific Achievements during the year 2006–07

During the year e-Procurement was identified as a significant administrative reforms project and accordingly its progress was orchestrated throughout the year by significant training and education programs, infrastructure improvements, awareness and creating business process reengineering.

During the year no of monthly tender increased from 20 tender per month in the first quarter of year 2006–2007 to 432 tender per month in March 2007.

170 numbers of training programs arranged.
4385 people (buyers and suppliers) participated in the program
Total 1273 Tenders worth of Rs. 1985 crore floated during the year.
Total numbers of man days saving in tendering activity was 23.5 days
multiple by 1273 tenders = 29,915.5 days.

*Future plans for readers seeking more information on project*

1. Increase in the reach and coverage so more and more department offices can float online tenders and more and more suppliers takes part for the online bidding process.
2. Future roll out plan of reducing core procurement value of Rs. 5 lakhs and above in short run and Rs. 1 lakh and above in a long run.
3. Addition of new features and facility like e-Payment, Catalogue management, vendor empanelment etc.