

# Role of IT in Management Journey of e-Procurement System in India

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**Abstract**—IT based applications have swamped all facets of normal life. Its penetration and the ensuing outcome in industrial sectors can be adjudged second only to the industrial revolution. Graduation of the past era procurement techniques to the E-Procurement is the topic of interest. E-Procurement has catapulted all levels of business houses in the international markets. Already established as the sole mode of procurement in developed countries for more than 30 years, implementation of comprehensive end to end E-Procurement system has been recommended in India on 30 Mar 2012 vide CVC guidelines. This paper focuses on the initiatives towards implementation of paperless procurement in the Government Sector, the inherent resistance, the actual outcome vs the envisaged ones and the associated package: transparency, economisation of effort, cost and resources. Bird's eyes view of few successful cases has been included highlighting how it has orchestrated prior award of contracts, resulting in increased accountability, facilitating competition and effectively curtailed red tapism, much to the frustration of the bureaucracy. Further, in depth analysis on their E-Procurement model from online bid submission to award of contracts is discussed. The Government on their part too, has taken measures for promoting E-Procurement by instituting various recognitions and awards for excellence. However, not every firm has boomed in business by implementing E-Procurement system. This paper also discusses pedagogical aids for better analysis on E-Procurement system. However, the utilisation of this effective tool is mislaid in Indian markets in spite of the concealed augmentation to the Indian economy. This paper endows the proposal for the procurement managers in the Indian market in comparison with the E-Procurement system adopted by Defence and Public Sector Units.

## 1. INTRODUCTION

Dawn of the computer era has effectively changed the way our lives were. The events that are synonymous to this in terms of influence on our lives are very few; beginning from the invention of wheels to the coming of electricity and the barrage of accessories that came with it. In a very short span, these machines and the ensuing IT revolution have managed to substantiate the notion of a global village. Chaffey and Wood describes IT as “*Technological Resources used for Business Information Management*”. It is a combination of hardware and software resources, which combines high-speed computing with communication technology for carrying data all over the world. In the business context, Information Technology Association of America has defined IT as the “study, design,

development, application, implementation, support or management of computer based information systems”.

With the advent of IT in today's business world, the portrait of commerce has totally changed. E-Procurement is a technological solution to facilitate the corporate to purchase through internet. E-Procurement may be defined in simple words as buying and selling of goods and services electronically. The medium used to facilitate this is either EDI (Electronic Data Interchange) or ERP (Enterprise Resource Planning).

During the industrial revolution, the key strategy followed by managers to boost their business was by increasing customer value. Their emphasis was on quality rather than cost of the product. Quality of a product can be improved by a e-business system using internet to foster customer loyalty, which in turn will define the next frontier of e-business. One such means is E-Procurement which is enumerated in the succeeding paragraphs.

## 2. HISTORY

Procurement is a sensitive area, warranting accountancy and cross checks; especially in the public sector. Hence, the need for transparency, cutting costs, overcoming red tapism, streamlining the procurement cycle, increasing efficiency of the people involved and improving customer value is imperative. Due to its immense advantages, developed markets have already moved on to E-Procurement system, mandating all transactions involved ie; from raising indents to item acceptance to the final payment to be made through web based application. The nascent forms of E-Procurement systems were Ariba, Commerce One, SAP, Oracle and PeopleSoft etc; which surfaced in the 1990s. They had inherent limitations such as they designed only for catalogued items and not services, thereby being unable to receive bids from multiple vendors. The system evolved through the years and “Purpose built” or “Category built” e-Procurement systems were launched in the early 2000s. This marked the beginning of EDI or ERP platform based E-Procurement system.

### 3. THE PROCESS

It is a web application, which manages all processes involved in procurement online starting from raising of indents, indent management, e-Tendering, e-Auction, e-Payment, Vendor Management, Contract Management till final payment. It comprises of three significant components: Information/Registration, e-purchasing and e-tendering. The data of potential suppliers is captured and analysed to create a performance chart of each supplier in terms of cost comparison of goods and ability to meet deadlines. This brings to fore the potential suppliers and increases the overall efficiency of the system. A typical e-Procurement process is shown in Fig-1.

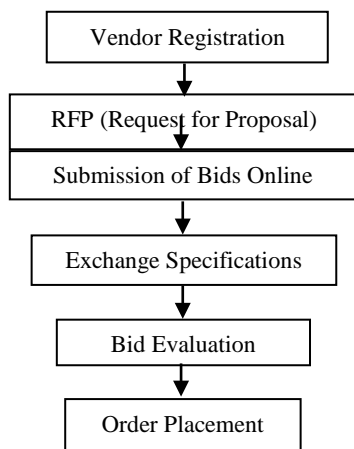


Fig. 1: e-Procurement Process

### 4. INTERNATIONAL PERSPECTIVE

Due to its innumerable benefits, numerous companies have adopted this mode of procurement worldwide. Web-based applications for business-to-business (B2B) electronic commerce is expected to enhance inter-organisational coordination and improve relationships among business partners. In Georgia, the steps towards implementation of Georgian Electronic Government Procurement System are an example of how strong political will and commitment is critical in reforming public procurement. Within a year, the State Procurement Agency of Georgia (SPA) designed, developed and tested the system and eventually mandated its use, completely wiping out paper-based tenders. The remarkable achievements of SPA were lauded by different international organisations such as OECD, United Nations (UN) and Transparency International (TI). TI adjudged Georgia as the best country in its 2014 Corruption Perception Index among the 19 countries of Eastern Europe and Central Asia.

### 5. EVOLUTION IN INDIA

e-Procurement was introduced vide Ministry of Finance(MoF) Office Memorandum (OM) No. 8(5)/EII (A)/2006 dated 10

Jan 07, where all Ministries/Departments were directed to mandatorily switch over to E-Procurement system w.e.f 01 Apr. On 24 Feb 07, at a seminar organised by Indian Institute of Materials Management (IIMM), the Director(Vigilance) of Directorate General of Supply and Disposal (DGS&D), the nodal govt agency for concluding contracts with vendors, intimated that e-Procurement has already been implemented by the agency. During the economic crisis, Finance Minister reiterated the need for revising budgetary allocation to various Ministries, Departments and State Governments. As part of the "Austerity Measures", 10% cut in non planned expenditure was prescribed. Alongwith this, resolution for implementing e-Procurement was passed. Amplifying directives were issued vide MoF, OM 10/3/2012-PPC dated 30 Mar 12, wherein, all Ministries/Departments of Central Government and their subordinate offices were to implement comprehensive end to end e-Procurement system for all procurements of 10 Lakhs or more in a phased manner. State Governments followed suit and issued guidelines based on the initiatives of GoI for implementing e-Procurement.

### 6. INITIATIVES BY GOI

The GoI approved the National e-Governance Plan (NeGP) on 18 May 06 with an objective to boost the growth of e-Governance within the country, of which e-Procurement is an integral module. In order to stabilise the e-Governance applications, a mechanism for formulation of standards and practices was established through Department of Information Technology (DIT), National Informatics Centre (NIC), Standardisation Testing and Quality Certification (STQC), Academia, Technology Experts, Domain Experts, Industry, BIS and NGOs etc. Further, DIT established "Centre for e-Governance" (CeG) for showcasing various e-Governance applications and technologies. The legal sanctity to such applications was derived from the IT Act, 2000 which authorises measures like digital signatures based on symmetric cryptosystems etc. Digital signatures on electronic documents are now accepted at par with hand signed ones on paper. Early schemes initiated by the Government are as follows:-

#### 6.1. Web based e-Procurement

This platform enables raising of indents and the tenders are floated online on approval of the requisition for purchase. Then the bids are evaluated and negotiated with the lowest bidder and the order is placed. On receipt of items post inspection either by end user or DGQA, payment is made online to the vendors through the concerned Paying Authority and book adjustments are done with concerned ministry. User departments can view items under DGS&D RC and place supply orders using digital signatures and also view status of the procurement through their website.

#### 6.2. e-Tendering

This process involves floating tenders, requesting information and prices from vendors and evaluating their bids online. GoI

has stipulated hosting of all open tenders on the official web site <http://www.tenders.gov.in/>

### 6.3. e-Auctioning

This process involves advertising the items under sale/auction/disposal on website, collating information and prices from potential buyers, evaluating the highest bidder and according approval for sale of the items online. The objective of e-Auctioning was to generate revenue by economising on the cost involved in actual auctioning process. Disposal of unserviceable and obsolete items are undertaken through M/s MSTC, a GoI enterprise.

### 6.4. e-Informing

e-Informing relates to collecting and distributing information about purchases, both from and to internal and external parties online. In terms of Right to Information Act 2005, all government departments should provide information pertaining to their functioning like procurement etc on their website. This act has further made it easier for a potential supplier to obtain vital information through the process stipulated in the Act.

### 6.5. E-Procurement Module by NIC

The e-Procurement module was designed with following features by NIC:-

- All activities related to tendering stage including submission of bids is online
- The user departments can define two additional role apart from tender creator bid opener and bid evaluator.
- All users have valid digital signature certificates for enhanced security
- Creation of individual roles to key operators
- Creation of reports and returns for assessment of performance

## 7. BENEFITS OF E-PROCUREMENT

e-Procurement provides for reduced labour cost, time saving, paperless transactions, reduction in lead time of procurement, transparency, increased productivity, obviates movement of files from desk to desk in public offices, streamlined procurement process, global operability, building of trading community, increased opportunity to leverage preferred customer relationship, ease of application configurability and scalability in terms of reports and returns.

## 8. ROADBLOCKS AND ACTUAL OUTCOME

Despite the earnest efforts emanating from the Govt. itself, there are bound to be few roadblocks to implementation of e-Procurement system. One of the main impediments is the institution of a tailored framework for operation. Most of the

users at public and private sectors are facing issues due to lack of infrastructure, lack of connectivity and security. Every project during its inception would have teething issues, which needs to be handled tactically. Often projects are launched without looking into the availability of basic amenities to sustain the project. Public sector institutions implement Govt. policies to the bare minimum. The fact that this is done more to brag in their annual reports rather than to reap the long term benefits involved leads to eventual demise of the noble cause. When rules are framed for implementing a project there need to be pioneers too. So the Government must conduct meticulous appraisal of current situation, the ground realities, evaluate the costs, impacts, benefits and create a customer oriented and user friendly system.

## 9. AWARDS AND RECOGNITIONS

Government has introduced various awards and recognition for motivating the public and private sector companies to implement e-Procurement system. Some of the awards and recognitions are discussed below:-

### 9.1. Skoch Smart Governance Award

It is an initiative recognising top performing government organisations and organisations working with the government, operating at local, state and national level in the area of Health, Education, Rural Development, Panchayati Raj, Urban Development, Finance and Security. It is a step towards recognising best practices and models of governance for excellent and efficient implementation of programmes and service delivery. This award, coveted for independent and exceptional research, is distinctive for its approach in selection of awardees. Only top notch projects make it to the order-of-merit.

### 9.2. Elets Knowledge Exchange Awards

The award was instituted by the Government of Goa for promoting India's progress as a knowledge economy. This event was intended to be a catalyst for revolution in the use of ICT in India.

### 9.3. Gold Icon award

The Information Technology and Communications (IT&C) Department of the Government of Andhra Pradesh has won "The Gold Icon award" in 2003 under the exemplary implementation of e-governance category.

## 10. BIRD'S EYE VIEW ON SUCCESS STORIES

Few success stories by implementing e-Procurement in India are enumerated in succeeding paragraphs.

### 10.1. Hindustan Petroleum Corporation Limited (HPCL)

HPCL is a GoI enterprise with a Navratna Status. Furthermore, it is a Forbes 2000 and Global Fortune 500 company. It had originally been incorporated as a company

under the Indian Companies Act, 1913. HPCL started e-Procurement April 07. The comprehensive e-Tendering solution includes options for supplier enrolment and approval, department creation and control, buyer user creation & control, indent/tender creation, tender approval, online bid/quote submission (both technical as well as non-technical), online tender opening (with minimum 2 buyers and option for an alternate opener to non-delay opening), online technical evaluation (including queries and attachments) and loading factor, revised bid, online bid selection / rejection, online recap generation to decide L1 bidder and quantity allocation and approval. It also provides features such as email alerts to all buyers and vendors at all critical stages, online pre-bid meeting, online viewing of bids for all participants for user as well as participants bids and tender archival. Tenders of value ranging from Rs. 0.1 m to as much as Rs. 500 m were floated using this portal. From 2007 to 2010, a total of 1778 tenders were successfully executed, which included 1429 tenders of the Marketing department of HPCL, 274 tenders of Mumbai Refinery and 75 tenders of Vizag Refinery.

### 10.2. Metaljunction.com Pvt. Ltd

Metal junction is m-junction's steel e-sales division, which enables big as well as small consumers to buy steel directly from large corporate such as SAIL and TATA steel. Metal junction started its operation in 2002. From transactions worth Rs. 94.35 Crores in the first year, transactional value stood at Rs. 14,393 Crores in 2009. Year wise online transactional values of few sectors are brought out in Table 1.

Table 1.

Year	Transaction Value (in crores)	Types of Services
2005-06	4054	Events and conferences, BPO selling
2005-06	5533	Coal sales, Logistics
2006-07	8053	Auto sales ,Publications, Buyer finance, Procurement KPO
2007-08	10314	Auto e-sales, Enterprise procurement system
2008-09	14393	High-end Industry Reports
2009-10	19650	KPO, retail, coal sales
2010-11	24854	Coal sales, metal e-sales
2011-12	33145	Auto e-sales, Enterprise procurement system
2012-13	41134	Metal e-sales
2013-14	151108	High end Industry Reports

Source: mjunction.in

According to Business Standards 4 April 2015 edition M-junction has transacted over Rs 2 lakh crore, excluding the spectrum auction for which the government earned about 1 lakh crore. While other companies are gung ho about e-procurement, m-junction is building profitable enterprises in business-to-business commerce. The company launched its consumer ventures, straight line and auto junction, five years

ago as inventory-led e-retailing. But with the onslaught of deep-pocketed rivals, it tweaked its business model. Today straight line offers loyalty programmes for customers and auto junction offers dealers a platform to sell spare parts. The company is competing by focusing on its customer value rather than providing discounts.

### 10.3. Government of Andhra Pradesh

The cabinet sub-committee of AP government, which was set up for wide-ranging reforms in the public procurement process recommended a web-based government-to-business IT project. The Govt of AP launched pilot e-Procurement project on Jan 03 and the operations were rolled out to all departments in Jul 04. Ever since, the portal has processed nearly 30000 transactions worth Rs 46500 crores and yielded cost savings to a tune of Rs 2800 crores to the Exchequer. The biggest challenge faced was not in launching the project but in making the stakeholders adopt the project. To enable this, numerous steering committees, training workshops, help desks were held to build confidence in using the new technology. This reduced cartel formations amongst suppliers, since all the bidding is done online through the portal. It also increased vendor participation, since anybody can bid for a tender remotely through the internet. The user departments are benefited by cost savings to a tune of 8–12% on account of competition among the suppliers bidding for the government contracts and time-saving of more than 70% compared to conventional tender process. AP leads the way and has clocked a e-Procurement business of Rs 35,000 crore in the last two years, has netted a saving of Rs 5630 crore. The E-Procurement trend is as shown in Table-2

Table 2: E-Procurement Trend

E-Procurement Trends		
Financial Year	No of Tenders	Value in Crore (INR)
2003-04	1549	3623
2004-05	4901	30822
2005-06	9930	11892
2006-07	21985	31487
2007-08	33904	75119
2008-09	44883	130061
2009-10	26062	28208
2010-11	47182	19675
2011-12	49354	24436
2012-13	67593	25191
2013-14	93566	36845

Source: eprocurement.gov.in

## 11. E-PROCUREMENT IN DEFENCE MINISTRY

The Defence Ministry undertakes the largest government procurement. The budget for FY-2015 as per the interim budget documents is Rs 2,24,000 crore. In pursuance to Govt. Guidelines, the Defence Ministry implemented an end to end procurement in order to blitzkrieg the allegations of corruption. e- Procurement will help the domestic

manufacturing sector to take advantage of this huge stream of business. In Indian Navy, e-Procurement module is integrated with the Integrated Logistics Management System. The tenders are uploaded online and the vendors submit their bids online. On receipt the Bids are evaluated for the lowest quoted price in case of procurement of items. A comparative statement is generated, which shows the lowest offered price of firm that has participated. Thus providing a competitive environment and curtailing the cartel formations. The lowest bidder is called for negotiation and the contract is awarded to the qualifying firm. The purchase orders are placed online. The firms on the other end are able to view the entire proceedings from tendering stage to contract award stage. Due to the implementation of this system there is increased transparency in every tender transactions and accountability has increased.

## 12. PROPOSAL FOR INDIAN MANAGERS

A well conceptualised and executed support system is a pre-requisite for success of e-Procurement projects. Sufficient time and resources need to be provided in implementation of the project. There should be availability of end to end computerisation. The projects sustain only if the benefits are reaped on either side the vendor and the buyer. Further a strong back-up mechanism should be provided. On analysis of implementation of e-Procurement in Defence and Government sectors following are recommended for the Indian Managers:

- Continuity in the Project Management team.
- Sufficient time and resources for implementation and maintenance of system.
- A strong back up mechanism foreseeing crisis.
- Overcome barriers of change management
- Strategy for assessment of on ground situation, project inventory, the actual cost involved, control management and continuous monitoring with feedbacks.
- Borrowing successful working models of e-Procurement.
- User Organisation needs to properly map their structure with the e-Procurement portal
- Appointment of nodal managers for data and information management.
- Security concerns to be addressed appropriately.

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The government must have a clear strategy to overcome the barriers to change. Part of the strategy is to engage in a rigorous assessment of the current situation, the reality on the ground and the inventory of projects, articulate costs, impacts and benefits of programme as well as continuously monitor and evaluate the project upgrading. Borrowing a lesson from the private sector, e-Procurement must be customer-driven and service oriented. This means that a vision of e-Procurement implies providing greater access to information as well as better, more equal services and procedures for public and businesses.

Lessons i. A well conceptualized and executed BPR is a pre-requisite for success of e-Governance projects. ii. There should be end-to-end computerization. iii. Large e-Governance projects, having large scale impact require total support at the political level. iv. Continuity in the Project Management team helps in proper implementation of e-Governance projects. v. If benefits to citizens are real and substantial, projects become sustainable. vi. A holistic approach is necessary for e-Governance. Adequate time and resources need to be devoted in conceptualization, implementation and maintenance of projects. vii. Systems should have a strong back-up mechanism.

The Government of Andhra Pradesh introduced the e-Procurement project in 2003 with the following objectives: i. To reduce the time and cost of doing business for both vendors and government; ii. To realize better value for money spent through increased competition and the prevention of cartel formation; iii. To standardize procurement processes across government departments/ agencies; iv. To increase buying power through demand aggregation; v. To provide a single-stop shop for all procurements; and vi. To allow equal opportunity to all vendors. 4.3.1.3 In order to achieve these

objectives, the entire e-Procurement process was designed to avoid human interface i.e., supplier and buyer interaction during the pre-bidding and post-bidding stages. The system now ensures total anonymity of the participating suppliers, even to the buyers, until the bids are opened on the platform. The e-Procurement application provides automatic bid evaluation based on the evaluation parameters given to the system. These improved processes have eliminated subjectivity in receipt and evaluation of bids and has reduced corruption to a significant extent. 4.3.1.4 Further, to bring transparency in e-Procurement, tender documents containing all details are hosted on the website. The documents can be downloaded by the interested suppliers free of cost, from the day of publication of a tender. At any time in the procurement cycle, any person associated with the transaction can check and know the status of the transaction. This saves time and effort involved in finding out the status of a purchase order, besides enabling better planning of inventory. 4.3.1.5 At the outset, an effort was made to standardize the procurement processes and forms followed by various departments especially for public works tenders. Today, all the departments are following a common tendering process and forms for works tenders. These processes have been re-engineered to further improve the efficiency and curtail subjectivity in tender evaluation by the department users. 4.3.1.6

The benefits of the new system are as follows:

- Reduction in tender cycle time: In the pre e-Procurement era, the departments would take 90-135 days for finalization of high value tenders. The tender cycle time gradually came down to an average of 42 days over a period of one year and further reduced to 35 days at the end of the second year.
- Reduction in opportunities for corrupt practices: The e-Procurement system allows 'any where' and 'any time' access for bidders and suppliers from the Internet. The entire e-Procurement process has been designed to eliminate the human interface i.e., supplier and department interaction during pre-bid and post-bid processes. The automatic tender evaluation mechanism inherent in the system has reduced subjectivity in tender evaluation and helped to curb opportunities for corrupt practices to a significant extent and increased the accountability of procurement officials. In terms of transparency, any supplier or citizen can get information about tenders through a search engine on the home page. A supplier participating in a tender knows the list of other participating suppliers, the documents furnished by his competitors, price quotations and the evaluation result, as soon as a stage is completed by the departments in the system.
- Cost Savings: The cost savings could be visualised in the following manner: Ø Supplier participation has increased from an average of 3 per tender in the conventional mode to 4.5 in the e-Procurement mode. Cartels have been

eliminated and even small and medium suppliers are now able to bid, as the platform facilitates 'anywhere anytime' bidding. The departments have made significant cost savings by an average reduction of 20% in costs for procurement transactions done through the exchange during 2003-04 and 12% in 2004-05 due to a competitive environment. Ø There is also substantial reduction in the advertisement costs in the press media, as e-Procurement tender notices were shortened to contain only basic information on the name of work, estimated costs and the URL of the e-Procurement site. There has been a 25% saving in the column space used, resulting in savings of approximately \$0.56 million in a year. Promoting e-Governance – The SMART Way Forward e-Governance : Initiatives in India 42 43 The process consisted of a long chain of internal authorizations and scrutiny which necessitated several visits by the suppliers to government departments. The manual tender system suffered from various deficiencies, including discrimination, cartel formation, delays, lack of transparency etc. 4.3.1.2 The Government of Andhra Pradesh introduced the e-Procurement project in 2003 with the following objectives: i. To reduce the time and cost of doing business for both vendors and government; ii. To realize better value for money spent through increased competition and the prevention of cartel formation; iii. To standardize procurement processes across government departments/ agencies; iv. To increase buying power through demand aggregation; v. To provide a single-stop shop for all procurements; and vi. To allow equal opportunity to all vendors. 4.3.1.3 In order to achieve these objectives, the entire e-Procurement process was designed to avoid human interface i.e., supplier and buyer interaction during the pre-bidding and post-bidding stages. The system now ensures total anonymity of the participating suppliers, even to the buyers, until the bids are opened on the platform. The e-Procurement application provides automatic bid evaluation based on the evaluation parameters given to the system. These improved processes have eliminated subjectivity in receipt and evaluation of bids and has reduced corruption to a significant extent. 4.3.1.4 Further, to bring transparency in e-Procurement, tender documents containing all details are hosted on the website. The documents can be downloaded by the interested suppliers free of cost, from the day of publication of a tender. At any time in the procurement cycle, any person associated with the transaction can check and know the status of the transaction. This saves time and effort involved in finding out the status of a purchase order, besides enabling better planning of inventory. 4.3.1.5 At the outset, an effort was made to standardize the procurement processes and forms followed by various departments especially for public works tenders. Today, all the departments are following a common tendering process and forms for works tenders. These processes have been re-engineered to further

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conducted in a transparent manner, saving taxpayers' money. 4.3.1.7 The current trends from the portal (<http://www.eprocurement.gov.in>) are shown below in Fig.4.1 and provide an indication of the stability, growth and success of the project.

## Case Studies.

### About the e-Tendering solution for HPCL

C1 India has rendered its e-Tendering services to one of the leading energy sector organizations, HPCL. Hindustan Petroleum Corporation Limited (HPCL) is a Government of India enterprise with a Navratna Status. Furthermore, it is a Forbes 2000 and Global Fortune 500 company. It had originally been incorporated as a company under the Indian Companies act 1913.

HPCL started e-Procurement services with C1 India in April 2007 from Mumbai. The three major departments of HPCL which use C1 India's e-Tendering application across India are its Marketing department, Mumbai Refinery and Vizag Refinery.

### The Result

C1 India has provided a comprehensive e-Tendering solution to suit the requirements of HPCL. The e-Tendering solution provided by us includes options for supplier enrollment and approval, department creation and control, buyer user creation & control, indent/tender creation, tender approval, online bid/quote submission (both technical as well as non-technical), online tender opening (with minimum 2 buyers and option for an alternate opener to non-delay opening), online technical evaluation (including queries and attachments) and loading factor, revised bid, online bid selection / rejection, online recap generation to decide L1 bidder and quantity allocation and approval.

It also provides features such as email alerts to all buyers and vendors at all critical stages, online pre-bid meeting, 128 Bit Data Encryption, online viewing of bids for all participants (once opening is through) for self as well as participants bids and tender archival (after 6 – 12 months of completion)

Our e-Tendering solution ensured faster turnaround, complete transparency, confidentiality of sensitive procurement information and huge savings in terms of cost and time for HPCL. Data Encryption and 24X7 uptime with robust Help Desk Support made the operations of the portal seamless. The portal also met all government norms and guidelines regarding e-Tendering.

Tenders of value ranging from Rs. 0.1 m to as much as Rs. 500 m are floated using this portal. From 2007 to 2010, a total of 1778 tenders were successfully executed, which included 1429 tenders of the Marketing department of HPCL, 274 tenders of Mumbai Refinery and 75 tenders of Vizag Refinery.

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**Case study 2**

The e-Procurement system, which is broadly consistent with good public procurement practices, has increased competition among suppliers. In addition, by bringing processes online, it has made the procurement system more transparent, less bureaucratic, and less discriminative. As a result, the system has significantly minimized corruption risks and brought substantial savings to the government and Georgia's citizens.

The reform of e-Procurement is clearly one of the most effective and efficient reforms undertaken in the last decade in Georgia. It has also been well received by procuring entities and the private sector alike.

The remarkable achievements of SPA have been explicitly acknowledged by different international organizations including the OECD, the United Nations and Transparency International, the latter ranking Georgia as the best country among the 19 countries of Eastern Europe and Central Asia in its 2014 Corruption Perceptions Index.

This success comes as a result of a longstanding partnership between the World Bank and the government of Georgia. In 2012, the World Bank started an assessment of the Georgian e-Procurement system in order to explore the possibility of using the same system for World Bank-financed projects. The assessment identified improvements and modifications required to make the e-Procurement system meet the World Bank's requirements for the procurement of civil works and goods.

SPA undertook these modifications and, after almost two years of extensive internal work and close cooperation with the government and the private sector, the World Bank started using Georgia's e-Procurement system for the procurement of civil works with an estimated contract price below US\$ 10 million, as well as for the procurement of goods below an estimated contract price of US\$ 1 million. As of today, two major project implementation units have published 14 tenders with a total estimated value of more than US\$ 22 million for the rehabilitation of roads, buildings, sewage systems, and similar.