

## **Electronic Procurement and its Implementation in Indian Industries**

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**Abstract:** Electronic procurement, or electronic procurement, is also described as the procurement through. E-procurement is usually defined over the Internet as the purchasing of electronic goods and services over the Internet (internet, website, e-mail). It includes e-ordering, tendering and rendering via websites, extranets, private networks, and market places and/or EDI. It may also be used for purchasing cards, reverse auctions, and/or integrating electronic procurement processes to facilitate the business procurement process. The global supply chain comprises indent surveillance, electronic appointments, internet bidding, customer relations, demand forecasting and scheduling. Management of contracts. The method of planning is contract administration. This paper presents an analysis of e-commerce issues and the current status of various agencies and organizations. The paper concluded with a description of the main questions that are needed immediately to make e-acquisition more appropriate in the field of science.

**Keywords:** Supply Chain management (SCM), Electronic procurement (EP), Manages Indirect Objects (MRO), Customer Relations Management (CRM), Just-in-Time (JIT).

### **1. Introduction**

E-Procuring is the procurement and distribution of goods and resources on the Internet and other software and networking networks, such as electronic data transfer and enterprise resource planning, from business-to-business and from business-to-user [1]. Acquisition or acquisition operations as a supply chain management mechanism will be discussed. Materials or goods flow upstream and downstream in a traditional supply chain whilst information flows in both directions. The management of these supply chains is referred to as supply chain management (SCM). Kameshwaran has developed the EP as a “internet-based business method for the development and management of materials and services in the sector” [2]. E-Procurement websites usually allow eligible and registered users to search for products and services to customers or sellers. SCM includes the design and implementation of all operations involved in manufacturing and regulatory compliance, transition and all freight forwarding activities, as per the Council of Supply Chain Management Professionals.

It also co-ordinates and cooperates with channel partners, such as vendors, mediators, service providers and consumers. Essentially, supply chain management combines inventory management in and between enterprises. Buyers or sellers can define or accept deals, depending on the method. Transactions will continue and stop [3]. Continuous purchasing may allow clients to receive bulk discounts or special deals.

Technology for e-procurement may allow all buying and sale to be automated. The participating businesses hope to be able to track inventories of products more efficiently, minimize overhead buying agents and increase output cycles. Spot purchases take place where urgent requests are received and all prequalified vendors are unable to meet them [4]. Since most companies invest between 50% and 80% of revenue on goods and services procurement became a strategic source for competition between companies. E-procurement can be viewed as part of an integrated system of purchases. It is intended to help a commercial or governmental organization's internet procurement of products. Purchasers can log on to the system for viewing and placing orders in supplier catalogues. It can be specified by means of a web interface, which allows any permitted consumer to request a product or service to sends an order to a supplier [5].

IEMPs would allow companies to share and cooperate more easily and thus guarantee meaningful revenue and savings for both players and the business as a whole. The convergence of e-commerce with the computerized chain management pattern is planned. E-procurement may be described by remotely utilizing vendors / suppliers to carry out procurement operations over the Internet.

### **2. Why E-PROCUREMENT?**

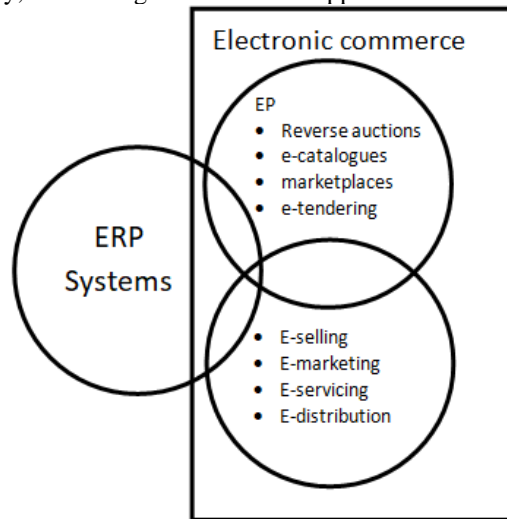
Web-based ERP – systems through which contract demands may be submitted and accepted, production orders can be issued and products or services purchased via the internet via information network [6].

- E-MRO manages indirect objects (MRO), web-based ERP handling goods.
- E-sourcing method to find potential vendors leveraging Internet technologies within a particular type of procurement needs.
- E-tendering-submitting details queries and rates to vendors and getting replies via web-based technologies.

- Online reverse auction— permits a bidder from many well recognized or unknown vendors to purchase supplies and products.

- E-informing-storing and sharing knowledge from both internally and externally through Internet technologies.

A company resources planning system (ERP) offers a fully centralized corporate information system that administers all facets of a company's business activities including project preparation, ordering, development, manufacturing, promotion, delivery, accounting and customer support.



**Fig: 1 Rough E-Procurement Conceptualization**

There have recently been introduced a number of technologies that can boost ERP 's performance, such as Online Marketing, Online Recruitment, Customer Relations Management (CRM), Supply Chain Management (SCM) [7].

The word supply chain management is used to explain how wholesale and retaliatory actions and the producers' attempts to successfully incorporate the procurement and delivery of logistics and physical production operations into the business have been implemented. The modern networked technology, e-procurement, e-logistics, distributed trading, real-time demand prediction, stock control, genuine just-in-time (JIT) development, consumer experience, and cloud shipment Monitoring have been actually reinvented in supply chain management [8]. The supply chain for online procurement involves indent control, e-appointment, e-auctioning, product management, inventory management and contract management. The process for the planning of deals is indent administration. This aspect of the value chain is discretionary and is determined by the specific procurement departments. The online system for the acquisition of services requires regulatory consent and technological authorization. Indent generation operations are conducted electronically in the acquisition of materials [9]. A program framework that involves product control tools and dynamic auctions is developed for procurement. Electrical acquisition involves Knowledge Request, Proposition Request, Quote Request, RFx (the former two jointly), and eRFx (RFx Project Management Software).

Situation before e-procurement can be summarized as:

Discrimination in issue of tender schedules to suppliers

Cartel formation suppresses competition

Keeping financial bids close to the maximum permissible

Physical threats to bidders

Tender boxes at multiple locations

Delays in finalization of tenders

Possibility of tampering or loss of records

Human interface at every stage

Lack of Transparency

Manual movement of tender files from districts to the offices of the Heads of Department

## 2.1. Advantages and Disadvantages

The advantages involve having the best commodity at the right moment at the appropriate quality and quantity from the best manufacturer. In reality, e-procurement has the benefit of moving supply chain management to the next stage and supplying the manufacturer with real-time knowledge about a customer's requirements. For e.g., if the consumer hits a low stock amount a retailer will negotiate with a consumer to send the inventory automatically [10], thereby eliminating the customer's need to order. E-procurement benefits should be restored as follows:

- Improved accountability, smart governance and real-time selection knowledge and enhanced oversight and tracking.

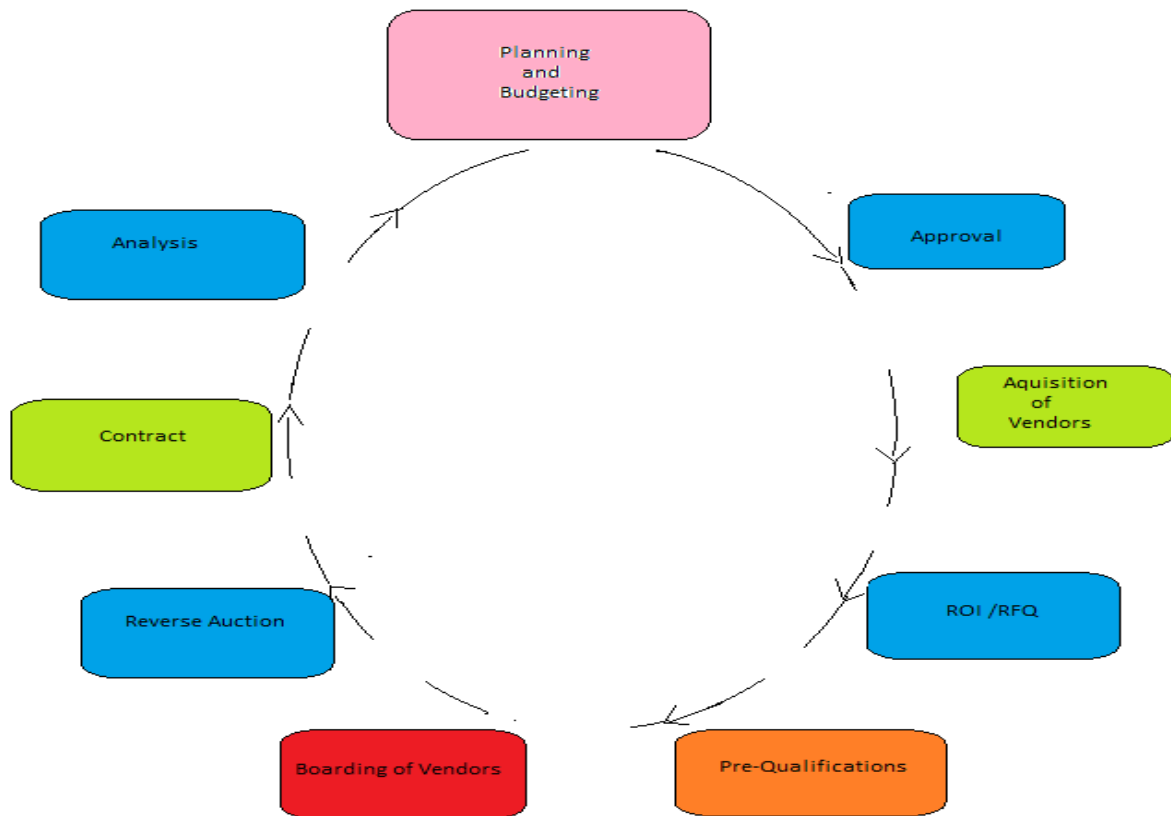
- Free of print

- Workflows automated
- Avoidance in expenses
- Collection of demands
- Lack of lead period
- Reduction in expenses.
- Shop for one line
- Centralized tendering
- A robust and efficient network of development
- Application of current and validated technologies for development
- Make use of key expertise and knowledge of stakeholders and big suppliers.

A big drawback to E-Procurement may be that if a manufacturer has a standard supply chain management system, they would be able to profit from the client by learning more about the consumer than they should otherwise. Increased regional collaboration, vatic fragmentation and key practices have culminated in companies being integrated through a networked supply chain. The complexities of organized supply chain from upstream to downstream have been brought in from this strategic perspective.

### 3. Present Status of E.P in India

In India the estimated business for EP is about Rs. 450,000 crore per year [11]. This makes it necessary to have greater transparency, accuracy & faster information flow among the partners. Extensive, integrated business processes and a supporting technological framework that helps knowledge to synchronies across expanded organizations are needed for optimum supply chain collaboration. Today's companies focus on greater, more nuanced engagement with their mutual associates as they compete for competitive edge.



**Fig: 2 E-Procurement Process Overview**

While EP may generate substantial 'buy-side' costs reductions for firms, many creative organizations and market places are also looking at more relevant business areas to improve company efficiency through the supply and demand chain. They are discussed as below:

The government of Andhra Pradesh has pioneered the implementation of a statewide e-GP system.

NIC & DGS&D have launched e-GP initiatives.

The Governments of Karnataka, Rajasthan, Uttar Pradesh and Chhattisgarh have embarked on implementing State-wide e-GP systems.

Only the e-Tendering aspects of eProcurement mainly implemented, though there is increased interest in the other components of e-GP.

There is wide-spread awareness on E-GP.

Many other Public Sectors, Private Sectors and Private Companies like BHEL, IT & Commerce Department, NISG, Ordnance Factory, Oracle, Sify, Railways, Price-Water Coopers etc. have either implemented or in the process of implementing E-Procurement in India

#### **4. Initiatives for Promoting E- Procurement**

Indian government along with the DG(S&D) and the World Bank have formed the following Mission Objective:

Assessment of e-GP readiness is going on.

Mandatory publication of tenders on website is already in force.

Mandatory e-procurement w.e.f. January 1, 2007, based on Ministry-specific thresholds.

A likely scenario is that e-procurement becomes mandatory for all items covered by Rate Contracts. The DDOs should be able to place supply order on DGS&D's website.

The procurement of products through electronic interface with bidder and IT has allowed a structured implementation of the various clauses and monitoring of claims (notice inviting offers, suppliers of tendering papers, reception of proposals [12], appraisal of the offer, awarding of contracts and execution of contracts). A pilot project is being undertaken by the Regional IT Center to establish a safe IT solution answering issues such as contract verification, digital signatures, protected payment gateways, date / time stamps for operations and access control [13]. All their deals were already released on their websites by ministries and departments as their first phase in achieving e-contracting. The application sector of the Mission Objectives was also discussed in the presentation:

Defense (a) Food & Beverages (b) Common engineering stores (c) Common user vehicles (d) Special equipment and high value systems

Railway stores (a) Common user items (b) Special stores

Special equipment - Hospitals, scientific departments

Hospital supplies of medicines and consumables, hospital equipment

Stationery and other consumables; Preprinted and security printing

Vehicles

#### **4.1. Issues for Future Consideration**

As evident from this article, E-Procurement covers several areas of the company including the collection of the correct vendors, purchasing, payments, precise & prompt data sharing and so on.

- Create an opportunity program for suppliers to take part in e-commerce.
- Why will standard manufacturers be drawn to demand decreases?
- Need to connect to the servers of the provider.
- Computer seller's documentation 'veracity'.
- Minimize professional appraisal subjectivity.
- Create a rich seller information database.
- Create an e-payment program for services.
- Creating a delicate balance in the compilation of knowledge from all perspectives between cooperation and protection
- Centralized regulatory threats but localized commercial contracts in the structure of regulatory process.
- Workers can follow the transfer phase effectively.
- Managers have a huge task to establish appropriate output benchmarks and measures to determine correctly which will further boost corporate effectiveness.

#### **5. Conclusion**

E-procurement is currently being applied in India, although some of the big companies have begun using e-procurement. However, E-Procurement sees a promising future for India with the help and inspiration of the India Government and the potential for more work in this area is huge. The issues that have been debated in general include: lack of qualified staff; multi-departmental implementation; insufficient IT and networking facilities; obstacles to state-wide management system; the need to control the e-procurement market; and the reproduction of quality standards in the state setup. An essential part has been played by the service provider in providing solutions that meet requirements of the customers and give a large added value to the offered service. Though this paper explicitly covers e-commerce in India, some aspects of it may be widespread in the world in e-commerce implementations. That means that e-procurement ensures better accessibility for both the consumer and companies to resources and greater fair services and protocols.

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