

Adoption of E- Procurement in MSME Sector in India

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Abstract

Electronic acquirement is the method involved with getting items or administrations by electronic techniques, most ordinarily the web. It includes electronic requesting, offering, and delivering utilizing gateways, extranets, private stages, commercial centers, and additionally electronic information trade to purchase things and administrations over the web. The reception of e-acquisition in Indian associations is supposed to ascend sooner rather than later, inferable from the advantages it gives, the serious climate in which associations work today, and, in particular, unofficial laws commanding the utilization of e-acquirement to increment straightforwardness and kill deceptive obtainment practises.

Electronic commerce and electronic procurement are fast gaining popularity around the world. Internet-based business allows for significant cost savings, increased efficiency, and increased productivity. When it comes to embracing E-Business, India has significant historic and cultural impediments. This is primarily due to the old business mentality, which is heavily reliant on personal trust, past credit, and established company methods. Electronic data transmissions are used to assist Operational, Tactical, and Strategic Procurement. This article aims to highlight the effect of key components like insight, firm size, and buying situation on the reception of E-Procurement in Indian assembling MSMEs.

Keywords: E-Procurement, MSME Sector, Adoption of E- Procurement.

1. Introduction

Electronic obtainment (e-acquisition) is the buy and offer of provisions and administrations from organizations to organizations (B2B) or from organizations to shoppers (B2C) through the web and other data and systems administration frameworks, for example, electronic information



exchange (EDI) and venture asset arranging (ERP) (ERP). Online indents and request conglomeration, online articulations of interest, online bid accommodation, framework upheld assessment, online status distributing, online arrival of procurement request/letter of grant, request satisfaction, post-acquisition processes important and are all (http://www.eprocurement.gov.in). E-obtainment can possibly change the production network and furnish associations with various advantages that are critical for endurance in the present serious environment. Cost reserve funds, more limited lead times, smoothed out obtainment processes because of more limited acquisition process durations, continuous acquirement data, further developed checking and control, programmed work processes, disposal of non-esteem adding steps, single-stop shop, remote offering, and expanded straightforwardness are only a couple of the advantages. Regardless of the various advantages of e-acquirement, the reception rate is unobtrusive.

Reception of E-obtainment is estimated to be a component of discernment, firm size, and purchasing circumstance, according to the proposed model depicted in Figure 1. Quality, delivery, price, and technology are all factors in how people perceive e-procurement. Employee strength was employed to determine the company's size. Straight re-buy, modified re-buy, and new task are the types of purchases examined.

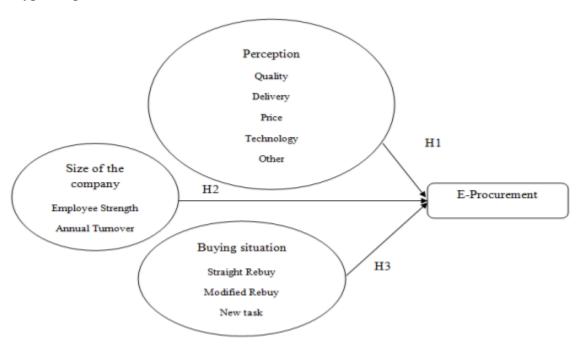


Figure: 1. Conceptual Model

Procurement is the process of obtaining, buying items, administrations, or works from an outsider, typically through an offering or bid technique. (5) Managing the requesting, getting, survey, and



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endorsement of things from providers is essential for the acquirement the board cycle. In view of the consuming reason, acquisition exercises are parted into two classes: immediate and aberrant. Direct Procurement affects fabricating organizations' creation processes. It incorporates every unrefined substance, parts, and pieces that are utilized to make finished items. Backhanded obtainment exercises, then again, are worried about the working assets that an organization buys to work with its tasks. It incorporates a wide scope of items and administrations, from minimal expense normalized things like office supplies and machine oils to more muddled and costly things and administrations.

Key challenges the procurement managers are facing in the increasingly competitive business world are:

- (1) Lowering the cost of order processing and the time it takes to complete it.
- (2) Providing access to corporate procurement capabilities across the entire organisation.
- (3) Using employee self-service to empower desktop requisitioning.
- (4) Integrating procurement software with the company's back-end systems.
- (5) Raising the procurement department to a key position within the company.

2. Literature Review

The utilization of coordinated data innovation (IT) frameworks for acquisition capacities, for example, obtaining, exchange, requesting, receipt, and postpurchase survey is alluded to as e-acquirement (Croom and Brandon-Jones, 2007). E-obtainment, as per Moon (2005), is an extensive interaction where firms use IT frameworks to settle on arrangements for the securing of items or administrations (contracting) or to buy items or administrations in return for installment (buying). Because of the development and headways of IT and the web, e-acquisition frameworks went through a dispersion in the last part of the 1990s (Puschmann and Alt, 2005). While organizations explored different avenues regarding new advances, research articles endeavored to catch what was happening by proposing and testing connections, as well as giving prescribed procedures, structures, and models. There are an assortment of e-business advances accessible to fulfill the different requirements of e-obtainment innovations that endeavor to smooth out and further develop the buying capacity (Schoenherr and Tummala, 2007).

The utilization of Internet-based (coordinated) data and correspondence advancements (ICTs) to do individual or all means of the acquirement cycle, including search, obtaining, exchange, requesting, receipt, and post-buy survey, is alluded to as e-acquisition (Croom& Brandon-Jones, 2004). As indicated by the International Purchasing and Supply Chain Management Institute USA



(IPSCMI), about portion of all American purchasers presently use the web to carry on with work. This shows that there is an adjustment of how business is led (Caridi, 2004). A large number and researchers accept that E-Procurement is a vital instrument for expanding seriousness through productivity and adequacy in the present corporate environment (Croom, 1999; Choy et al., 2004; Gabbard, 2001; Motwani et al., 2000; Presutti, 2003; Turban et al., 2000).

3.Technology for MSMEs

E-procurement, which encompasses the acquisition and sale of products and services from businesses to businesses, businesses to customers, businesses to governments, and governments to businesses, has caused the most significant setback in traditional procurement channels. Many governance responsibilities have migrated to the internet during the previous decade, resulting in a significant shift. Many governmental organisations, like the private sector, have shifted to e-procurement as a result of the rapid growth of information and communication technology, both for increased efficiency and effectiveness.

It is critical for any organisation to cut the costs of its goods and services by sourcing from low-cost sources if it wants to thrive and remain competitive in the market. Procurement via open bidding over the internet is the most effective and accessible option. Businesses, industries, and governments have benefited from e-procurement, which includes the internet, purchasing cards, electronic ordering, and integrated automatic procurement systems.

MSMEs are the backbone of a country's economy, as well as a breeding ground for future conglomerates. E-procurement has been a major factor in MSME expansion, as well as greater production and efficiency. It has benefited MSMEs in a variety of ways, including cost savings, time savings, and financial development owing to greater productivity. With fewer paperwork, redundancy, and bureaucracy, as well as the elimination of middlemen and fraud-free transactions, ordering has become more easier.

4. E-Procurement

Croom, S., and Brandon-Jones, A. (2004) 17 characterize e-acquirement as the utilization of Internet-based (coordinated) data and correspondence advances (ICTs) to do individual or all phases of the acquisition interaction, like inquiry, obtaining, exchange, requesting, receipt, and post-buy audit. The utilization of coordinated data set frameworks and wide region organizations (WAN) to some extent or all of the buying system is alluded to as e-acquirement. E-Procurement is characterized by Chopra et al. (2001)18 as B2B buying methods that utilization electronic trade (online business) to find potential causes of supply, buy labor and products, make installments, and draw in with providers. As a general rule, electronic information move to help functional, strategic, and vital acquisition is referred to as E-Procurement.



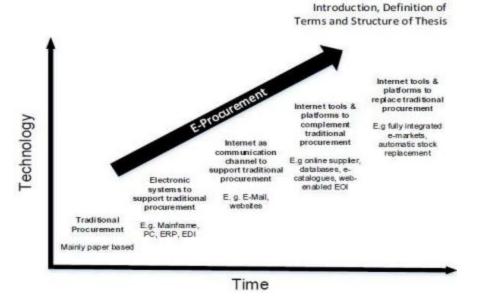


Figure: 2. The Historic Context of E-Procurement

5. E-Procurement Tool Characteristics

- Purchasing/RTP Application (Buy Side E-Procurement): A purchasing firm-facilitated application that permits clients to search for items, submit and follow requests, and get and pay for buys.
- Provider Catalogs Sites (Sell Side E-Procurement): A site claimed by a solitary organization that features its product offering in an electronic index. It permits clients to put orders web based utilizing a point-and-snap framework that is connected to a shopping bin, look at, and different elements.
- Electronic Marketplaces (Many to Many E-Procurement): This is a Web entry that gives a web-based store where purchasers and providers can execute.
- Turn around Auctions (Buyer Controlled Online Tenders): Online, ongoing offering occasions in which purchasers offer an agreement to explicit providers, who compete by lowering their offers to win the business. Although the lowest bidder is the winner in theory, the contract may be awarded based on a variety of conditions. The buying firm specifies the event's terms and circumstances.



- Electronic Sourcing: It aids in the procurement specification phase. It is possible to use it to prequalify providers. It also highlights potential suppliers for the selection phase.
- **Electronic Tendering:** It aids in the selection process and serves as a conduit for communication between the procurement company and providers.
- Electronic Auctioning: This aids in the contracting process. If suppliers agree on a price, it can make it easier to close a sale. It uses a price system that moves upward or downward. The selling organisation uses an upward pricing mechanism, while the buying organisation uses a downward price mechanism.
- **Electronic Ordering:** This is the process of drafting and authorising procurement requisitions, placing orders, and receiving products and services that have been requested electronically.
- Electronic-RFX (Buyer Examination Support): A collection of apps that aid in the examination of supply markets and providers by purchasers. Web search tools, provider rating and scoring frameworks, bid examination apparatuses, and assessment procedures are all included.

6. E-Procurement Steps

Depending on the complexity of the purchase and organisational regulations, the basic procurement cycle might have up to nine steps, according to Handfiel, R., (2003).

- **Requisition:** When a buyer detects a need, he or she submits a request for the goods or services that are necessary.
- Authorization: An approval agent verifies each need. The approvers check whether or not the labor and products are required.
- **Buy Order:** Once the approver has approved the demand, a buy request is created and shipped off the sellers naturally.
- Things Receipt: When merchandise are conveyed, the purchaser issues or recognizes a receipt to the supplier.
- **Receipt:** After the shipment is ready, a receipt is created.
- **Compromise:** After getting the merchandise, the receipt should be accommodated with the buy request and products receipt before the provider is paid.



- **Installment:** Once the items have been gotten and the receipt has been accommodated, installment is organized utilizing proper installment techniques like P-Card, EFT, Check, etc.
- Charge Reclamation: Suppliers often add charges as a charge on their solicitations so the purchaser can recover them on the off chance that they are qualified.
- **Investigation:** After the quantity of acquirement cycles has been finished, it is basic to survey the acquisition interaction's proficiency and correctness.

7. E-Procurement Tools and Applications

- Electronic System to Support Traditional Procurement (Manual Procurement) Electronic Data Interchange (EDI) Enterprise Resources Planning (ERP) System are some examples of E-Procurement technologies and applications.
- Traditional procurement can be aided via the internet (Manual Procurement)
- Use of electronic mail (email)
- Electronic Data Interchange by means of the (WEB EDI)
- Internet (WWW) Extensible Markup Language (XML) (WWW)

8. Research Methodology

8.1. Data Collection Procedure:

Managers in the Operations / Supply Chain Management function were given a standardised questionnaire. A sample of small and medium-sized manufacturing enterprises with a monetary turnover of not as much as Rs. 10 crore (100 million) and more than Rs. 1 crore (10 million) was taken.

8.2. Sampling Method:

It was decided to do a convenient sampling. This is due to constraints such as the study's lack of availability of Operations Managers. One hundred and 47 organizations were by and by requested, and 100 and twelve companies responded. One hundred responses were deemed to be complete in every way.

8.3. Selection of Respondents:



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Each organization's response was based on a single respondent. Multiple respondents are expensive as far as both monetary assets and reaction rate, subsequently numerous scientists settle for a solitary source all things considered (Miller and Roth 1994, Youndt et al. 1996).

8.4 Hypothesis:

H1: A favourable view of the prospective benefits of e-procurement has a direct and positive impact on e-procurement adoption.

H2: The size of the organization usefully affects Eprocurement reception.

H3: The intricacy of the purchasing situation usefully affects E-acquisition reception.

9. Result

H1: The normal of perceptual scores on the four aspects (quality, conveyance, cost, and innovation) was utilized as a free factor in a Linear Regression study with the Value of online buy as the reliant variable. Table 1 shows a synopsis of the discoveries

| Model | | | | | Change Statistics | | | | | |
|--------------|-------|--------|------------|---------------|-------------------|--------|-----|-----|--------|---|
| | | R | Adjusted R | Std. Error of | R Square | F | | | Sig. | F |
| | R | Square | Square | the Estimate | Change | Change | df1 | df2 | Change | |
| dimension0 1 | .167ª | .028 | .018 | 4980.077 | .028 | 2.781 | 1 | 97 | .099 | |

Table: 1. Model Summary

H2: Table 2 shows that the association between the size of the company and the amount of online procurement is statistically insignificant.

| Model | | | | | Change Statistics | | | | | |
|--------------|-------|--------|------------|---------------|-------------------|--------|-----|-----|--------|---|
| | | R | Adjusted R | Std. Error of | R Square | F | | | Sig. | F |
| | R | Square | Square | the Estimate | Change | Change | dfl | df2 | Change | |
| dimension0 1 | .077ª | .006 | 016 | 5255.376 | .006 | .266 | 2 | 89 | .767 | |

Table: 2. Model Summary

H3: As indicated in table 3, the association between buying complexity and online procurement was likewise shown to be insignificant.



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|---------------|-------|--------|------------|---------------|-------------------|--------|-----|-----|--------|---|--|
| Model | | | | | Change Statistics | | | | | | |
| | | R | Adjusted R | Std. Error of | R Square | F | | | Sig. | F | |
| | R | Square | Square | the Estimate | Change | Change | dfl | df2 | Change | | |
| dimension0 1 | .069a | .005 | 027 | 5118.357 | .005 | .151 | 3 | 94 | .929 | | |

Table: 3. Model Summary

10. Conclusion

Due to India's rapid economic growth and attractive business environment, several multinational corporations seek to launch and extend their operations there. As a result, there are a lot of small and medium-sized businesses in this industry. Although some multinational firms adopt a few green practises that are bored down from their central command, Indian assembling little and medium measured endeavors don't have all the earmarks of being mindful of green acquisition. The discoveries uncover that the general size of the association (regarding yearly turnover and staff strength), unmistakable Buying Situations (Straight rebuy, Modified rebuy, and New errand), and by and large insight of online buying (Price, Quality, Technology, and Delivery) have little bearing on E-Procurement.

These days, e-procurement is the newest buzzword. More and more businesses are adopting eprocurement as a result of the competitive market, government requirements, and benefits it provides. However, various obstacles, for example, security worries in monetary exchanges, should be addressed for e-obtainment to immediately spread. Representatives ought to be made mindful of the benefits that e-obtainment can give if accurately carried out.

11. References

- 1. Attaran, M. (2001) 'The coming age of E-procurement', Industrial Management and Data Systems, Vol. 101, No. 4, pp.177–181.
- 2. Batenburg, R. (2007) 'E-procurement adoption by European firms: a quantitative analysis', Journal of Purchasing and Supply Management, Vol. 13, No. 3, pp.182–192.
- 3. Croom, S.R. and Brandon-Jones, A. (2007) 'Impact of e-procurement: experiences from implementation in the UK public sector', Journal of Purchasing and Supply Management, Vol. 13, No. 4, pp.294–303.
- 4. Davila, A., Gupta, M. and Palmer, R. (2003) 'Moving procurement systems to the internet: the adoption and use of e-procurement technology models', European Management Journal, Vol. 21, No. 1, pp.11–23.



ISSN:2320-3714 Volume 2 Issue 1 April 2023 Impact Factor: 11.7 Subject Commerce

- 5. Eadie, R., Perera, S. and Heaney, G. (2010) 'Identification of e-procurement drivers and barriers for UK construction organizations and ranking of these from the perspective of quantity surveyors', Journal of Information Technology in Construction, Vol. 15, pp.23–43.
- 6. Fleming, E.D., Kuo, C. and White, R.E. (2010) 'Funding e-procurement initiatives in US Government agencies: challenges, models, and trends', Int. J. Procurement Management, Vol. 3, No. 3, pp.231–246.
- 7. Gunasekaran, A. and Ngai, E.W.T. (2004) 'Information systems in supply chain integration and management', European Journal of Operation Research, Vol. 159, pp.269–295.
- 8. Hart, P.J. and Saunders, C.S. (1998) 'Emerging electronic partnerships: antecedents and dimensions of EDI use from the supplier's perspective', Journal of Management Information Systems, Vol. 14, No. 4, pp.87–111.
- 9. James, D. and Wolf, M.L. (2000) 'A second wind for ERP', McKinsey Quart, Spring 2000, No. 2, pp.100–107.
- 10. Kshetri, N. (2007) 'Barriers to e-commerce and competitive business models in developing countries: a case study', Electronic Commerce Research and Applications, Vol. 6, No. 4, pp.443–452.
- 11. Lee, J., Oh, K. and Kwon, H.Y. (2008) 'Striving for transparency and efficiency in e-government: procurement reform through e-procurement', Proceedings of the 2nd International Conference on theory and Practice of Electronic Governance, Egypt, 1–4 December.
- 12. Motwani J, Madan M, Gunasekaran A., (2000), Information technology in managing global supply chains. Logistics Information Management 13(5).
- 13. Nevshehir, N. (2006) 'Making waves: integrating radio frequency identification (RFID) technology into your supply chain', Society of Manufacturing Engineers (SME), pp. 1–11.
- 14. Osmonbekov, T., Bello, D.C. and Gilliland, D.I. (2002) 'Adoption of electronic commerce tools in business procurement: enhanced buying center structure and processes', Journal of Business and Industrial Marketing, Vol. 17, Nos. 2/3, pp.151–166.
- 15. Patterson, K.A., Grimm, C. and Corsi, T. (2003), "Adopting new technologies for supply chain management", Transportation Research, Vol. 39 No. 2, pp. 95-121.
- 16. Rigby, D. and Zook, C., (2002), 'Open marketing Innovation', Harvard Business Review, October, pp. 80-89.



ISSN:2320-3714 Volume 2 Issue 1 April 2023 Impact Factor: 11.7

Subject Commerce

17. Sarkis, J., (1999), How Green is the Supply Chain? Practice and Research, Graduate School of Management, Clark University, Worcester, MA.

18. Turban, E., Lee, J., King, D., and Chung, H. M., (2000), Electronic commerce: A Managerial Perspective. Prentice-Hall International Inc., Englewood Cliffs, NJ.

19. Xavier, M.J., Raghavendran, Sabari, Ganesh, Gopala, (2010) "A Survey to assess online B2B Procurement in India". International Conference on Technology and Business Management, March 2010, Dubai.

20. Youndt, M.A., Snell, S.A., Dean, J. and Lepak, D.P., (1996), Human resource management, manufacturing strategy, and firm performance. Acad. Manage. J., Vol 39, 836–866.

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