


P&SM: eProcurement



'The combined use of electronic information and communications technology (ICT) in order to enhance the links between customer and supplier, and with other value chain partners.'



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Introduction

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This document is about eProcurement.

Definition

The CIPS definition of e-procurement is:

'The combined use of electronic information and communications technology (ICT) in order to enhance the links between customer and supplier, and with other value chain partners, and thereby to improve external and internal P&SM processes. eProcurement is a key component of e-business and e-commerce'.

Background

The beginnings of eProcurement were in the early 1980s with the development of electronic data interchange (EDI). This allowed customers and suppliers, most often in the fast moving consumer goods business (FMCG), to send and receive orders and invoices via secure store and call forward networks. These EDI systems allowed businesses to exchange and synchronise master data files on products, prices, specifications and information about each other's locations and trading practices.

In the 1990's internet software started to become available, and software companies began to develop buyer managed electronic catalogues for use by vendors. Sometimes these proved to be too unwieldy due to failures in communication between customers and suppliers (salesman and buyers), and software companies started to customise, maintain and host some catalogues, effectively becoming "the intermediaries between the buyer hub and the vendor spokes"¹ and vice-versa. As the catalogues became outsourced, software companies started to offer the same catalogues to a number of buyers.

Another development in eProcurement that arose at a similar time was the proliferation of e-marketplaces which covered some of the electronic trading needs of certain industries, such as automotive and aircraft. These act as a virtual market place for suppliers, distributors, agents and customers.

Explanation

ePurchasing enables:

¹ Neef, Dale: E-procurement: from strategy to implementation, Financial Times Prentice Hall, Upper Saddle River, 2001.

- The automatic processing and auctioning of orders and of related trading documents and data, thereby enhancing the speed and certainty of doing business at a lower total cost
- Improved workflow of the internal procurement process - this enables end-user self-service and decentralisation with centralised control through company-specific catalogues
- New functionality - such as eRequests For Quotations (RFQs) and on-line bidding in e-auctions (both conventional and Dutch)
- Use of potentially more efficient and cheaper connectivity methods - such as the Internet and XML (a computer language for coding content and delivery) however, these may result in a lack of security
- Connectivity to external sources of information - eg. databases, catalogues and portals such as eHubs and e-marketplaces
- Connectivity to external supply chains - for example, extranets and allowing shared real time information (such as suppliers accessing real time sales)
- Sourcing - for example, using intelligent search engines and data mining
- Connectivity to internal systems and sources of information – these include inventory management, maintenance management and Materials Resource Planning (MRP), Enterprise Resource Planning (MRP & MRPII) systems amongst others
- Payment systems - eg. links to banks, credit card companies and purchasing cards
- Improvements in supply chain mechanisms and consortia etc. leading to mutual benefit

Before embarking on eProcurement or any aspect of eBusiness it is essential to undertake the following steps in this sequence:

1. Agree clear objectives with senior management
2. Define the value chain and then the key business and procurement processes, including those which will benefit from e-purchasing
3. Agree clear objectives and processes with customers and suppliers
4. Define the messages and data to be used
5. Define the computer systems, applications and data bases involved
6. Define the computer networks, computers and software to support the above - this infrastructure will be internal and external and will include intranets/extranets
7. Where a company or its trading partners includes an ERP system (Enterprise Resource Planning and Management) such as SAP or Oracle it will be essential to be aware of the particular structures and facilities (including strengths and weaknesses)
8. Examine carefully issues of security – eg. potential data corruption, hacking, cyber-security, etc.
9. Examine carefully issues relating to inter-operability especially where legacy databases are involved.

Strategy

CIPS believes that organisations should seriously consider incorporating eProcurement within their corporate strategies, as correctly chosen eProcurement options can be a relatively low risk practice which offers significant benefits. The emphasis must be on 'correctly chosen', however, and P&SM professionals should still ensure they have thoroughly assessed the risks

when looking to adopt new eProcurement strategies or amend existing ones (CIPS positions on practice on risk management are also available on this site).

P&SM professionals should also ensure they are aware of the objectives any new eProcurement system will need to fulfil to be successful. To aid the accomplishment of these objectives CIPS strongly recommends that organisations have a well-defined P&SM strategy and use appropriate eSourcing/eProcurement methods as a facilitator to achieve this, rather than expecting eProcurement to solve all P&SM issues. A progressive P&SM strategy will deliver significant business benefits and maximise value for money. An eProcurement solution should never be implemented in the absence of such a strategy.

Having this strategy does not mean that the organisation should simply automate existing procurement processes and systems when engaging in eProcurement. However, CIPS believes that P&SM Professionals should always consider improving ways of working and re-engineering business processes prior to the implementation of eProcurement. P&SM professionals should challenge established procurement practices to test whether these have evolved around a paper-based system and as such can be replaced.

The P&SM strategy does not exist in isolation either, and eProcurement may well be used to encourage improvements in procurement strategy. For example, it will generate accurate and detailed management information which should enable strategic insight into organisations' buying patterns and facilitate improved sourcing, supplier management, improved scheduling, reduced stock holding, demand management and supplier performances. However, P&SM professionals should be aware that no computer system automatically provides or improves data, irrespective of what its supplier may state. It may well be that a large amount of prior work needs to be done on the product and supplier data.

P&SM professionals should ensure that the eProcurement strategy also supports their organisation's eBusiness/eCommerce strategy and objectives. This enables P&SM professionals to show the value of the P&SM function within the organisation by providing a demonstrable contribution to their organisation's strategy.

E-procurement program

CIPS believes that P&SM professionals should lead and drive the procurement part of any eCommerce project and work cross-functionally with colleagues. This is because P&SM professionals are best placed to:

- Identify all the procurement requirements for direct and indirect materials and services that will need to be incorporated into the development of the eProcurement solution that best suits the needs of the organisation.
- Identify the business benefits, compare these with costs and develop a cost/benefit analysis
- Persuade suppliers to join the market and carry out due diligence of any potential new suppliers

Where it is not practicable for a P&SM professional to lead an eProcurement project, they must ensure that they are consulted by the eCommerce project team involved in decision

making and kept abreast of developments. New technology is not a substitute for good professional knowledge and abilities.

To take account of this, and in order to reap the benefits of eProcurement, CIPS believes that P&SM professionals should ensure that they undertake appropriate training and ensure their skills, knowledge and competencies are continuously developed. Skills relating to eProcurement include wider management skills such as those involved with change management.

P&SM professionals should also note that eProcurement is not a discrete systems application, but rather an on-going program which should be continually developed as technology and P&SM expertise evolves within an organisation.

Implementation issues

There are also issues to overcome when implementing eProcurement including:

- Ensuring that, by deploying eProcurement, organisations are not simply passing costs or process inefficiencies on to another part of the organisation or on to suppliers
- Competition issues (eg. in exchanges using collaborative purchasing)
- Possible negative perception from suppliers, for example, due to their margins being reduced by e-auctions
- Website and information control lost to exchange administrators
- Negotiated procurement benefits may be shared with other exchange users who may be competitors
- Creation of catalogues can be a long process and costly to suppliers
- Data and catalogue management has to be done well and can be costly, as can product coding and classification
- The cost of changing suppliers once they have invested in catalogue production may inhibit competition and lead to inertia
- Culture profile within organisations (eg. resistance to change)
- Security of data in eProcurement systems is critical. The system must contain robust mechanisms for identifying and authenticating the user so that the supplier knows that he can fulfil any orders placed. Both parties must have complete confidence in the security infrastructure of any system.

Benefits to suppliers

Engaging in the eBusiness process also brings potential benefits to suppliers. These include:

- Time and cost savings in re-inputting orders
- Reduction in errors, eg. from re-inputting orders, deliveries, returns, invoices and payments
- Reduced transaction costs and cycle times
- Holding less stock as a result of more efficient communications with customers ie. real time sales data

- Information for use in planning and forecasting
- Improved supplier performance by sharing supplier measurement information
- Faster payment
- Improved management information

The resulting benefits to buyers will be:

- Reduced transaction costs and cycle times
- Possibility of developing Vendor Managed Inventory
- Improvements in Just in Time deliveries
- More accurate deliveries due to reduced input order errors by suppliers
- Shared performance measurement data which encourages improved supplier performance
- Potential for less expediting by the buyer as the supplier acknowledges orders by exception which automatically updates the buyer's system
- Reduced stock due to shared sales/forecast information
- Possibility of using self-billing

Changes and benefits

EProcurement has changed the dynamics of the P&SM profession by, for example, placing a greater emphasis on knowledge management. It is suggested that eProcurement will change the culture of P&SM in an organisation and may lead to a greater emphasis on cost and prices.

EProcurement can release time to be spent on more value-adding aspects of purchasing, such as the development of end users' purchasing competencies and the development of suppliers. CIPS believes it is an opportunity to deploy competencies to the greatest effect.

CIPS also advises P&SM professionals to consider how eProcurement can enhance their transactional purchasing by providing end users with quick and easy to use electronic systems, such as electronic catalogues for selecting and purchasing their requirement from preferred suppliers. This should reduce transactional costs by improving speed and efficiency and provide greater commitment to contracts by the reduction of 'maverick purchasing', ie. purchases made outside of an organisation's contractual arrangements.

CIPS believes that eProcurement has the potential to facilitate communication between purchasers, their customers, suppliers and employees. It can particularly be used as a communication tool to encourage suppliers to become more efficient and more focused on meeting the organisation's needs.

Future

Technology continues to advance and with it we are experiencing a step-change in IT-generated productivity. Mobile technology has enabled improved access, delivery and sharing at both personal and enterprise levels. This is transforming procurement by enabling better

connections and collaborations between buyers, suppliers, customers and other trading partners. Business networks can provide:

- Cloud based applications that allow not just the sharing of business processes but also the supporting technology infrastructure.
- Community derived intelligence that makes use of good practice and other features or services useful to that particular community.
- Networks of business partners that can share and execute processes, so increasing flexibility and agility in responding to customer needs.

Conclusion

CIPS encourages organisations to fully understand how eProcurement can be of benefit to their business and suggests that P&SM professionals ensure their organisations have a comprehensive eProcurement strategy within their eBusiness plans. P&SM professionals should also evaluate eProcurement options in order to ascertain the most appropriate solutions for their own organisation.

CIPS Group Easton House, Easton on the Hill, Stamford, Lincolnshire, PE9 3NZ, United Kingdom
T +44 (0)1780 756777 F +44 (0)1780 751610 E info@cips.org

CIPS Africa Ground Floor, Building B, 48 Sovereign Drive, Route 21 Corporate Park, Irene X30, Centurion, Pretoria, South Africa
T +27 (0)12 345 6177 F +27 (0)12 345 3309 E infosasa@cips.org.za

CIPS Australasia Level 8, 520 Collins Street, Melbourne, Victoria 3000, Australia
T 1300 765 142/+61 (0)3 9629 6000 F 1300 765 143/+61 (0)3 9620 5488 E info@cipsa.com.au

CIPS Middle East & North Africa Office 1703, The Fairmont Hotel, Sheikh Zayed Road, PO Box 49042, Dubai, United Arab Emirates
T +971 (0)4 327 7348 F +971 (0)4 332 5541 E mena.enquiries@cips.org



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