



Purchasing and Supply Management Collaboration Between Organisations

CIPS is expressing views on P&SM collaboration between organisations because it is an increasingly common activity in both public and private sectors and one that P&SM professionals should lead in their organisations. The use of technology has increased the ability of organisations to collaborate not only in their supply or value networks but also in the use of collaborative planning, forecasting and replenishment methodology (CPFR).

Introduction

Colin Cram defines collaborative procurement as being when two or more groups of people or organisations engaged in procurement, work together for mutual benefit. (ref 1) This definition can be extended to create a new dimension known as cCommerce or "collaborative commerce". A simple definition of cCommerce is "performing commerce collaboratively with trading partners."

Background

The concept of collaboration is not new. Professor Maria Rey (ref 2) explains in her report "Supply Chain Collaboration" that Japanese companies in structures called sogo-shoshas are "clusters of related companies with common ownership and strong single leadership that offer each other privileged access to products, services and personnel." This concept is similar to that of a virtual organisation and derives from another Japanese concept Keiretsu, an organisational collective of manufacturers, suppliers, trading and finance companies that is based around mutual shareholding and cooperation.

The virtual organisation is defined (ref 3) as: "A temporary network of independent organisations linked by information technology to share skills and costs in pursuit of a common goal." Virtual organisations are based on co-operation facilitated by technology and underpinned by trust, core competencies, equality and a shared vision.

Collaboration in The Supply Chain

Business today involves a far greater degree of collaboration and this is largely the result of technology enablers such as the Internet and the reduction of communication costs. Collaboration is also seen as a new enabler that can help business create competitive advantage. Today's technology is undoubtedly one of the principle enablers at the application level as it facilitates the integration of business processes but this must be supported by both information systems and people based decisions.

The CIPS therefore believes that there are two fundamental requirements for collaboration to work:

1. Technology must deliver the right information to the right people at the right time and in the appropriate context to make quality decisions, and,
2. Technology must enable people to use information effectively, so that this can be used at the appropriate points in the business process.

There is no doubt that today's technologies facilitate process integration that enables disparate companies to collaborate and yet still achieve their company objectives. Interdependency between supply chain partners is continually increasing and this means that information, such as forecast-

ing and planning, must be shared between organisations so that market expectations can be met. Global competition is forcing companies to form alliances and to collaborate so that they can differentiate themselves in an increasingly standardised market.

The National Procurement Strategy (NPS) for Local Government has identified that "the strategic objective of collaboration is to obtain better value by bringing councils and other public bodies together at local, regional and national levels to combine their buying power and create shared services." A number of collaborative models that are identified under the NPS are the use of shared services, joint procurement and commissioning models including purchasing consortia, open framework agreements and the use of eMarketplaces.

Shared Services

This is a form of public-public partnership and is of particular interest to smaller public bodies that have less capacity to deal with procurement and back office functions in a corporate way. An example of a shared services partnership is the South East London Shared Services Partnership (ref 4) (SELSSP). The SELSSP is an Executive Agency of Lewisham Primary Care Trust responsible for providing a wide range of non-clinical support services to a number of Primary Care Trusts. The services provided include information and communications technology, human resources and financial services, amongst others.

Joint Procurement And Commissioning

There are a variety of models for joint procurement including but not limited to purchasing consortia and centre led action networks (CLAN). Mary M Aylesworth in her paper "Purchasing Consortia in the Public Sector Models and Methods for Success" identified five structural models of purchasing collaboration operating across Canada, the United States and the United Kingdom. The "Local Network" is usually a relatively informal relationship often between a mix of public entities. They join together to obtain better pricing, share information and in some cases share resources. The "Voluntary Co-operative" is the most common form of purchasing consortia and can range from informal groupings to highly structured groups. In this model purchasing managers source products and services based on needs defined by the participating organisations.

The Central Buying Consortium (CBC) is an example of this model and is a loose confederation of seventeen local authority members. The work of the CBC is carried out by a Management Committee and Technical Panels. More information can be found on the CBC web site (ref 5). The third model is the "Regional Purchasing Agency". This is a pseudo-cooperative type of consortium where central government bodies receive services from the Agency but their control and

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input is limited. OGC Buying Solutions is a refined version of this model as it is an Executive Agency of the Office of Government Commerce (OGC) (ref 6). Its remit is to offer a dedicated, professional procurement service to central government and the wider public sector. The fourth model of collaboration is the "Member-owned Service Bureau". Participating organisations set up a separate entity to provide common services to the participants. A board of representatives from the member organisations set the policy; the operations are carried out by paid staff. The fifth model is the "For-Profit Enterprise", and this model generally takes one of two forms. Both forms are based on the aggregate demand of clients. In the first, the enterprise purchases the goods on the basis of client demand and resells them at cost plus a profit margin. In the second the enterprise acts as an agent of the client and negotiates the contractual terms based on the aggregate demand. The enterprise then charges a commission for its services. Regardless of the form of the model they are generally based on market specialisations such as energy or on common operations.

Centre led action networks (CLAN) is a procurement model that exists in a variety of forms but one of the most common is employed within federal structures that have highly devolved decision making procedures. A core team of procurement professionals identify collaborative opportunities and may negotiate framework agreements for organisation-wide requirements. They may also provide core expertise to the devolved parts of the organisation that may have little or no procurement expertise. Whilst this model is not, strictly speaking, a collaborative model it is worth mentioning in this practice statement as it is an enabler of collaboration.

There has also recently been a growth in commissioning models. The word "commissioning" denotes a strategic as well as operational involvement in service planning and an example of this is Northern Ireland where since 1972 community health and social services have been provided by integrated trusts. This is an example of commissioning based on an area or locality. Health and social service commissioning can also be based at practice or patient level and examples of these can be found at: <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=28605>

Public, private partnerships and the public finance initiative are models of partnering where the objective is the "delivery of better services to citizens through the creation of sustainable partnerships between councils and suppliers in the public, private, social enterprise and voluntary sectors for the delivery of services and the carrying out of major projects, including construction".(ref 7) Other examples of partnering models include local authority companies, joint venture companies and concessions or franchises. There are many different service delivery models and equally there are many different reasons why organisations might want to enter into partnership with one another. Some of these reasons include access to new technology, wider markets, new skills and investment. In the public sector, strategic partnerships, (whether public-public, public-private or public-voluntary sector), can forge strong links that can help to improve service delivery and to deliver the community plan. More information can be found on the Department for Communities and Local

Government (DCLG).(ref 8)

E-Markeplaces

E-marketplaces are web-based marketplaces whose early evolution was led by dot-com start-ups. The concept started as a new way to procure products, especially indirects.

The scope of this concept has now widened dramatically and the true value is now as a mechanism that enables greater collaboration and synchronisation between organisations. The use of eMarketplaces, eCatalogues and eAuction systems is fuelling the development of open sourcing environments, and it is these environments that will facilitate collaborative commerce solutions. This however, is not the whole picture and the CIPS believes that in order for collaborative commerce to continue to evolve more attention must be paid to the development of business intelligence tools so that critical business data can be extracted from all parts of the value chain. William M. Adams, et al identifies four categories of commerce that are transacted over the Internet.

The four categories are:

1. Consumer-to-Consumer (C2C)
2. Consumer-to-Business (C2B)
3. Business-to-Consumer (B2C)
4. Business-to-Business (B2B)

For the purposes of this document we will look more closely at the development of the last category as this model is based on simultaneous buyer and seller eMarketplaces and has experienced phenomenal growth and development in the last few years. The development started with passive websites with minimal product information and limited interaction with customers and suppliers. This has now progressed to the eCommerce stage where Internet based transactions and integration are common but there is a heavy dependency on technology. The next stage of development identified by Adams et al, is the eMarket stage where Internet based transactions and integration are common but the technology has advanced to allow vertical and horizontal collaboration. The final stage is cCommerce (collaborative commerce), where Adams et al (ref 9) identify a further stage of development, "where enterprises are formed that are hyper-competitive participants in both mature and emerging markets".

This they describe as being the Agile Virtual Enterprise (AVE). The AVE has been defined as, "A temporary yet structured alignment of independent companies linked by information technology to share skills, capacity and innovation for mutual market success. Each company contributes only what it regards as its core competencies. The network has little hierarchy and focuses on functionality along the value chain. (ref 10) An AVE is a collaborative infrastructure that is leveraged with technology and is a dynamic alliance between companies that bring in "complementary competencies, resources and capacity scaling that are collectively available to each other, with the objective of delivering a product or service to the market as a community with mutual shared interests." (ref 11) Jeffrey H Dyer (ref 12) recognises that over the last ten years there has been a shift away from vertical integration as original equipment manufacturers (OEM's) have increasingly outsourced their in-house parts divisions. Dyer also believes that "competitive advantage will [increasingly] be created by teams of companies." This will mean a fundamental change of mindset from today's executive norm. Dyer explains that the traditional executive perspective focuses on the individ-

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ual firm's economics whereas the focus of competitive advantage is channelled through the economics of the entire value chain, thus benefiting all the parties within that value chain. Dyer concludes that creating extended enterprises requires firms to recognise their interdependence on each other and illustrates this by citing examples of collaboration in the automotive industry. Chrysler and Toyota, he suggests, have been the first in their industry to recognise and exploit this interdependence, therefore gaining competitive advantage over rivals Ford and GM through the creation of integrated teams of companies. These integrated teams deliver huge performance advantages, even though Ford has more modern plants. Another example of collaboration is Wal-Mart, the biggest retail chain in the U.S. Wal-Mart allows its suppliers to access its internal information management system in order to get an overview of its stock situation. Suppliers therefore know when it is time to make a replenishment delivery.

The apportionment of intellectual property (IP) rights is also vital to a successful collaboration, and can have a significant impact on the structure of the deal. A number of schemes have been worked out for apportioning IP rights between collaborating partners, the simplest of which is to designate all IP as jointly owned. In most collaborations, however, IP rights either remain with the inventor or are allocated based on technology, and the choice is dependent largely on the structure and goals of the collaboration.

Extended enterprises require a high level of resources to generate value through partnerships, and therefore the organisation wishing to establish an extended enterprise may need to focus on partnering those suppliers that bring high value, customised inputs that interact with other components and systems. However as J. Dyer suggests, "collaborative advantage does not materialize overnight"; it takes time to develop strong relationships and make investments in dedicated assets and not all partnering relationships will survive and therefore the CIPS believes that it is necessary to integrate an exit strategy at the developmental stage of the extended enterprise so that all parties involved have a clear understanding of the business risks and benefits.

As new ideas and technologies continue to blur functional and organisational boundaries the CIPS believes that supply management is moving away from the collection of operational disciplines that it was once associated with. Organisations of the future must be flexible and adaptable and able to respond to change using new innovations and collaborative techniques to achieve their strategic objectives.

- 1 Cram C. Two Heads: Always Better Than One, Government Opportunities, September 2003
- 2 Rey M. Supply Chain Collaboration, Business Briefing: Global Purchasing and Supply Chain Strategies, 2002
- 3 Lysons K, Gillingham M, Purchasing and Supply Chain Management, Chapter 5, Part One, Page 144, Pearson Education Ltd, Sixth Edition, 2003
- 4 <http://www.selssp.nhs.uk/index.php>
- 5 <http://www.cbconline.org.uk/public/home.htm>
- 6 The OGC merged the procurement services previously provided by The Buying Agency (IBA), the Central Computer and Telecommunications Agency (CCTA), Property Advisers to the Civil Estate (PACE) and procurement units from the Treasury to create OGCBuying.solutions on 1 April 2001. <http://www.ogcbuyingsolutions.gov.uk/default.asp>
- 7 National Procurement Strategy for Local Government, Partnering and collaboration, Chapter 4, page 27

- 8 <http://www.communities.gov.uk/>
- 9 William M Adams, Raymond M Wallace, Arpan Sengupta, Pushing the Digital Frontier: Collaborative Commerce: The Agile Virtual Enterprise Model, Ch. 12, 2001
- 10 O. Arnold and M. Hartling, Virtuelle Unternehmen; Begriffsbildung und discussion. Arbeitspapier der Reihe "Informations und Kommunikationssysteme als Gestaltungselement Virtueller Unternehmen" (Nr.3/1995)
- 11 William M Adams, Raymond M Wallace, Arpan Sengupta, Pushing the Digital Frontier: Collaborative Commerce: The Agile Virtual Enterprise Model, Ch. 12, 2001
- 12 J H Dyer, Collaborative Advantage: Winning Through Extended Enterprise Supplier Networks, Oxford University Press 2000