B2B Global Trade: Electronic Catalog Content and Supplier Enablement Challenges

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ABSTRACT

Global trade poses unique challenges for B2B e-commerce. The contribution of this paper is in identifying these additional complexities and requirements specifically in the realm of electronic catalog content and supplier enablement related to sourcing and purchasing direct goods. Content is being recognized today as a fundamental requirement for any successful B2B e-commerce initiative. In hindsight, the lack of supplier participation and suppliers digitized catalogs was a major factor in the slow adoption and failure of many e-procurement initiatives and B2B marketplaces.

INTRODUCTION

B2B e-commerce is becoming an increasingly important method of conducting buying and selling processes. Although much discussion and analysis revolves around the experience and lessons from B2B marketplaces and exchanges, the work has much broader application, and in particular to the e-procurement initiatives of large companies which include supplier extranets and private exchanges. One of the prominent lessons that has emerged from company experiences is the recognition of the significant role that content plays in the e-procurement process, the catalog management process, supply chain management process, and supplier enablement.

This paper addresses catalog content issues in general for B2B e-commerce and in addition identifies unique complexities for B2B global trade. Although some academic research addresses B2B e-commerce issues in general (e.g., Kaplan and Sawhney, 2000; Han and Noh, 2000; Hope, Hermanek, Schlemmer, Huff, 2001; Wise and Morrison, 2000), only a few studies were found that address content issues specifically (Essig and Arnold, 2001; Laseter, Long and Capers, 2001). No research was found that addresses content issues for B2B global trade. This is primarily due to the fact that any research addressing these issues has not had time to make it to published journals. There is considerable work in the trade literature that addresses the problems and possible solutions for content in B2B e-commerce, e-marketplaces and exchanges (e.g., Mitchell, 2000; Murphy and Barling, 2001; Nicolett and Doyon, 2001; Yankelovich and Harris Interactive, 2001; Handley, 2001; Knickle, 2001).

The contribution of this paper is in focusing on content issues for B2B global trade. Global merchandise trade is particularly well suited to benefit from e-commerce, online marketplaces and electronic procurement. The large scale and fragmented nature of international trade makes it difficult for buyers and suppliers to identify each other. Although the catalog and content issues identified and problems encountered for B2B commerce generally apply to global trade, there are addi-

tional complexities and unique obstacles that companies should expect to encounter. Proactively recognizing these problems will shorten the learning curve and increase the likelihood of success.

This research is based on a synthesis of current thought from both the academic and trade literature as well as the first-hand experiences of one company with extensive knowledge of international business practice and a recognized pioneer in electronic marketplace development.

THE GLOBAL TRADE ENVIRONMENT

Global trade is a large and very unique subset of B2B e-commerce. Large distances between trading partners, multiple transportation factors and associated documentation and costs are a significant source of supply chain inefficiency. Participants can span multiple time zones, speak different languages, and observe diverse cultural norms. The documents and processes required are complex, labor intensive and error-prone. Fluctuations in currency exchange rates increase the financial risks, and governmental actions, including tariffs and export quotas, increase the costs of international trade. Most communication between buyer, seller and various middlemen still usually takes the form of mail, faxes and phone calls. These challenges mean that companies frequently experience prolonged delivery cycles, lost sales and increased costs.

According to the World Trade Organization, global exports of merchandise exceeded $6.1 trillion in 2000. They also reported that the ratio of world trade in goods and services to world GDP reached 29%, an increase of 10 percentage points since 1990 (WTO International Trade Statistics, 2001).

Despite the after effects of 9/11, trade is expected to continue growing rapidly. The growth in global trade is driven by many factors, including increased recognition of the benefits of free trade, the proliferation of free trade agreements, the emergence of a much larger global capital market, more efficient global communications and logistics, and more widespread use of electronic commerce technology which is dramatically reducing communication costs. Given the intensity of retail competition in the developed economies, sourcing more products from less developed countries is increasingly becoming a requirement for profitability and survival.

A key issue that will affect how fast global trade grows and how much administrative costs can be reduced is content. This paper will focus primarily on electronic content issues affecting the global merchandise trade sector and in particular, consumer products and their parts and components which are purchased for resale or for inclusion in products being manufactured.

THE ROLE OF CONTENT IN B2B E-COMMERCE

If one looks back at all the expert views on what it was going to take for B2B commerce and marketplaces to flourish, what stands out is that many underestimated the value of content and/or the difficulty of creating and maintaining it.

Most e-procurement and marketplace initiatives have failed to deliver the benefits expected primarily because of the difficulty of acquiring and managing all the product and supplier information needed. In fact, the lack of suppliers with digital catalogs may be the biggest factor limiting the growth and widespread adoption of B2B e-commerce.

Use of an aggregated electronic catalog can greatly facilitate the rapid identification of potential supply sources, which is the first step and most time consuming process in the sourcing cycle. It is necessary that the catalog be frequently updated and have fully searchable capabilities. Although most buyers are well acquainted with their existing supply base, the need for third party content becomes necessary when moving into new geographic locations and /or product categories (Mitchell, 2000).

Many marketplaces and exchanges have not been successful, due in large part to supplier catalog issues. Most marketplaces have not provided content management services and tools to acquire catalog content; they have not provided help to suppliers to create e-catalogs; and they have not provided buyers with customized catalogs.

The reasons are many. First, the assumption that suppliers would be forced by buyers to digitize their catalogs was a wrong assumption. Second, assuming that digitizing catalogs was an obvious step for suppliers was far from correct. Suppliers require education, handholding, software, service and support. Thirdly, content acquisition and maintenance is complex, hard work and there was a shortage of firms who were even able to do it. Creating and maintaining a high quality, unified catalog of multiple suppliers is not a core competency for most buyers, exchanges and marketplaces. Finally, there was a lack of clarity about who would pay for content acquisition and maintenance. E-procurement software vendors and marketplaces lacked business models that addressed the high cost of content.

Content, especially product catalog information, is the fuel for B2B e-commerce and for exchanges. According to an AMR research study (Knickle, 2001), "content is the heart of all marketplaces-private, consortium, and public".

Since inefficiencies in purchasing are largely information driven, the availability of greatly enhanced information and content rich marketplaces gives buyers the ability to be much more efficient and effective. Marketplaces are most useful for gathering information in the pre-decision, sourcing phase but also play an important role in post-selection activities (Essig and Arnold, 2001).

According to a 2001 study by A.T. Kearney and CAPS, sourcing represents 73% of the total procurement savings opportunity. Aberdeen Research (2000) had a similar finding, stating that "the purchasing practices of companies in multiple industries indicate that the initial sourcing process, from supplier search and identification through contract negotiation and final purchase, has the greatest impact on the cost, quality, and delivery of a product or service."

It is important to point out however, that applications that can improve these sourcing processes, are only as good as the quality and relevance of the content they carry.

GLOBAL TRADE HAS UNIQUE CONTENT REQUIREMENTS

Global trade faces all the content requirements and supplier enablement issues described in the previous section but also has some very unique challenges. There are a number of unique aspects to catalog content and to the search process. There are also unique supplier enablement challenges.

Industry Characteristics

Historically, export suppliers have marketed their products and capabilities through trade magazines, printed catalogs and, more re-cently, through web sites and electronic marketplaces. Even in many marketplaces, however, finding and comparing products and suppliers is very difficult and cumbersome because suppliers describe the same product categories in very different ways and formats. In addition, buyers from different countries use different words to describe the same product. Added to this complexity is the fact that many supplier catalogs contain out of date and inaccurate information.

The success of many import procurement systems, private exchanges, and e-marketplaces depends in part on aggregating, and keeping up to date and accurate information about multiple suppliers in a manner that facilitates effective search and comparisons by buyers and merchandisers.

More Complex than Domestic B2B

The table below highlights some of the differences in complexity and information requirements in an environment purchasing direct goods from offshore as compared to purchasing MRO products domestically. They are both B2B but the differences are dramatic.

MRO products are indirect goods. MRO stands for maintenance repair and operations and includes such products as cleaning supplies and lubricants used in the manufacturing plant — and paper, pens and PCs used in the office.

Buyers at large companies typically select MRO products from an internal catalog where prices have already been negotiated for the company by the purchasing department. However, when importing direct goods, online marketplaces, supplier catalogs, and websites do not contain prices. The price depends on many variables including volume, buyers brand, custom specs, country specific safety approval and much more.

In the MRO environment suppliers are all well known and approved, while in the global arena many are unknown. These OEM producers are all over the world and many are in countries where there is a significant lack of verified background or credit information on the firm and its owners.

The difference in supplier selection risk is tremendous. Making a mistake in selecting a supplier of mops for the factory floor will not significantly impact the company. However, selecting the wrong company to deliver container loads of merchandise for resale can threaten the survival of the firm.

There is an acute need for an aggregated catalog of the thousands of suppliers. Buyers want a one-stop solution. Given the high search and evaluation costs, they want product comparisons, customized catalogs and other features that enable rapid identification of goods and suppliers. To remain competitive, buyers have to be constantly on the lookout for more competitive products, suppliers and supply markets.

The problems they face when looking for product and supplier information include: knowing what information is available; knowing where to find information; determining the quality, comprehensiveness,

Table: MRO versus Direct Goods Imports

MRO Domestic	Direct Goods Imports
Few parties to transaction	Many parties to transaction
List or contract prices	Negotiated prices
Known suppliers	Unknown suppliers
Non-strategic, low value	Strategic, high-value
Simple, standard work flow	Complex workflows vary by company
Horizontal sameness	Vertical uniqueness
Inventory availability	No inventory
RFI/Q not integrated	RFI/Q essential in process
Selection on few parameters	Selection on multiple product and company parameters

credibility, and accuracy of information; and being able to compare products and suppliers across information sources.

The product catalog information and supplier profile information needs for buyers and sellers in global merchandise trade are unique and complex:

- Buyers have to be aware of a very large, geographically dispersed supplier base of relatively unknown companies that stretch from Beijing to Bombay to Buenos Aires.
- Traditional supplier verification and credit check reports are often not available.
- Suppliers produce primarily on an OEM or private-label basis; they do not produce for inventory; and do not have catalogs with price lists.
- Primary search criteria are company capability attributes in addition to the more obvious product attributes.

Supplier profile information important to buyers during the search and evaluation process includes such items as number of engineers, total factory space, production capacity, production machinery and equipment, OEM services, safety/quality approvals and which payment terms are accepted.

The following case study addresses some of these unique issues for B2B global trade.

CASE STUDY: GLOBAL SOURCES

Business Overview

Global Sources (NASDAQ: GSOL) creates and facilitates global trade between buyers and suppliers by providing the right information, at the right time, in the right format. The company enables more effective buying and selling by providing valuable, industry-specific information and integrated marketing solutions through a leading online marketplace, trade magazines, CD-ROMs, and conferences and exhibitions. In addition, they help companies create, manage and distribute their own product information by providing an end-to-end content management solution for global trade.

Global Sources serves an independently certified community of more than 335,000 active buyers in over 230 countries and territories. These buyers purchase direct goods in volume for resale. As of December 31, 2001, over 135,000 suppliers were listed in their marketplace. During the 12 month period ended December 31, 2001, buyers sent more than 2.9 million Requests For Information (RFIs) to suppliers through their online marketplace Global Sources Online (www.globalsources.com). It is comprised of 27 vertical and 14 geographic portals and it is believed to host more marketing and sourcing activity than any other global merchandise trade marketplace.

Value Proposition

Global Sources' products and services allow international buyers to identify suppliers and products, and enable suppliers to market their products to a large number of buyers. Since everyone is not online, and since buyers value different media for different reasons, Global Sources gives buyers the choice of media in whatever combination is best suited to their unique needs. Similarly, suppliers are able to develop integrated media marketing campaigns weighted as they wish by type of media.

Information is provided to help buyers evaluate numerous sourcing options so they can place orders with suppliers that offer them the best terms, conditions and capabilities. The company helps suppliers market their products and their capabilities to the community of buyers worldwide. By receiving inquiries from a wide selection of buyers, suppliers have more opportunity to achieve the best possible terms, and to learn which markets have the highest demand.

Catalog Tools Support Buying and Selling

The company offers *My Catalog* to enable buyers to maintain personalized product and supplier information from current and/or potential suppliers, and to receive private offers from suppliers. Approximately 100 large buying organizations currently use the service, including The Home Depot, PREL- (buying agent for Wal-Mart, Dell,

Compaq), and Gemex- (buying agent for Metro, Europe's largest general merchandise retailer). In addition, the company has a strategic alliance with the WorldWide Retail Exchange (WWRE), to offer a supplier sourcing program for WWRE members.

Private Supplier Catalogs enable suppliers to enter, manage, update and distribute their product and company data for a variety of online marketing and cataloging applications. Each Private Supplier Catalog is a private, password-protected online environment where the supplier has the sole right of access and data entry. Tools are provided within the catalog to assist with the creation, updating and posting of content into the public environment of *Global Sources Online*, or to post product information into the private buyer catalogs of selected existing or potential clients.

Customer Training, Service and Support

A key challenge is educating suppliers about why to become electronically enabled and how to digitize their data. The 30 years of relationships, and the trust fostered over this time between Global Sources and its supplier community has helped overcome the fears and uncertainties of adopting new technology and business practices. Global Sources' on-the-ground team of 700 account executives helped suppliers move online, beginning with some of the most basic requirements such as buying computers, installing the necessary software, and teaching them how to use e-mail.

Today, Global Sources offers suppliers two options to become electronically enabled. One is for companies to digitize all product and company information themselves using the step-by-step, do-it-yourself tools in the Private Supplier Catalog. Global Sources supports this with local-language, hands-on classroom instruction and with online e-learning. For suppliers who do not wish to deal with data input, the company offers content digitization and catalog creation services. The scope of this service ranges from digital photography to full translation service and quality control.

Content Acquisition and Development

The company leverages its extensive on the ground sales force to capture raw content from suppliers. Global Sources Sales representatives are provided with laptops and digital cameras and are trained to provide a one-on-one service to suppliers including basic online production, help suppliers gather appropriate company data, assist in taking photographs and input and update data. Representatives collectively make an average of 40,000 supplier visits per month.

The Global Sources network of content development teams and production units then enhance, standardize and quality check all data prior to upload. In Asia, where Global Sources has a particularly strong sales and production presence, this model has proven exceptionally advantageous given most supplier's needs for extensive manual assistance in quality data creation and capturing.

Content creation services are offered through content management facilities in 15 locations including Korea, Philippines, Indonesia, Mexico and multiple sites in China, Taiwan and Hong Kong.

As a result of working with a large number of non-native English speaking suppliers, a significant amount of the original content provided by the suppliers is in local languages which requires translation and/or creation of original copy in English. All supplier data loaded in the Global Sources community is subjected to rigorous quality controls and cleansing. This process includes every field of data and all graphic images.

CONCLUSIONS AND FUTURE RESEARCH

This research provides a current assessment of the value and role of electronic content and supplier enablement for global B2B trade. The challenges and solutions for one company, Global Sources, have been identified and discussed in the context of international business practice. The contribution of this work to the current literature is in the identification of unique challenges and issues for catalog content strategy for global B2B trade. In addition, this work contributes to a better understanding of international business practice in this new realm of

electronic marketplaces. The paper also provides practical significance for companies involved with e-marketplaces, exchanges, or e-procurement for international operations.

This research lays the foundation for further inquiry and development of knowledge in the realm of electronic business and e-marketplaces. The primary issues and challenges for content strategy and supplier enablement have been identified and possible solutions provided. The case study provides real world application and contributes to a better understanding of what works and what doesn't. This work, therefore, provides a foundation from which to study a broader range of companies, industries, and countries in order to define best practices for e-marketplace catalog content strategy and supplier enablement.

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