An Introduction to Open Standards

Open standards facilitate the rapid implementation of Electronic Commerce systems by providing a common, interoperable set of business practices for Buyers, Sellers, Technology Suppliers and Payment Authorities. In order for businesses to exchange data on a worldwide basis, a process standard must exist.

Several organizations exist today that promote the development of eCommerce standards. One such organization, The Open Buying on The Internet (OBI) consortium is working with its multi-national members to implement such a standard. OBI is a vendor neutral, platform neutral, "open" technology developed to bridge various individual commerce systems and provide the ability to integrate future technology in a scalable system. Buying Organizations want the ability to select trading partners based on business values such as price, service and quality. It is in their best interest to make this decision independent of the technology used. Buyers also have a need to implement solutions at reasonable cost without significant impact on existing systems and to integrate these systems into future technological standards.

Similarly, selling organizations want the ability to respond to their customers' needs in a cost-effective way. They want to differentiate themselves based on their core competencies and services. Selling organizations, too, want to eliminate unique, custom solutions and work in a technology independent environment. They want a common set of business practices to facilitate rapid eCommerce implementation for their customers.

Overall, the business community requires an interoperable, global methodology to facilitate worldwide eCommerce. Since the OBI Consortium is focused on Business Requirements, integrating the most popular XML solutions, it simplifies global Internet procurement for the buyer, ensuring a uniform process no matter where the purchase takes place. For this reason, membership in the Consortium is open to businesses in all countries.

Simplified Business Processes: The Benefits of OBI Implementation

The OBI Architecture

The OBI architecture is based on the premise that process 'owners' should be responsible for information associated with their business processes. For example, buying organizations are responsible for requisitioner profile information, account codes, tax status and approvals. Selling organizations are responsible for electronic catalogs and the associated price, order entry, and inventory mechanisms. The OBI protocol and

formats ensure that buying organizations and selling organizations are able to interoperate. This contrasts with prevalent architectures for consumer Internet commerce in which selling organizations must acquire and maintain accurate profile information on thousands of shoppers, in addition to maintaining dynamic catalogs.

At an abstract level, the OBI architecture can be viewed as the interaction of four entities:
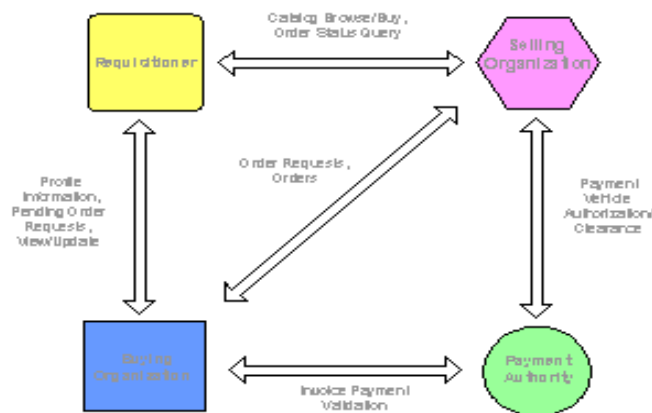

Figure 1.1
The OBI Architecture: Entities and Information Flows

• *Requisitioner:* The requisitioner represents the end-user of the system, the person who actually places the order. The requisitioner is affiliated with a buying organization. The requisitioner is assumed to have access to a desktop machine, with a World Wide Web browser and access to a corporate Intranet and the Internet. The requisitioner also has a digital certificate, issued by a trusted certificate authority.

• *Buying Organization:* The buying organization represents the purchasing management and the information systems which support purchasing. These systems include an OBI server for receiving OBI Order Requests and returning OBI Orders, and systems for handling the requisitioner profile information, trading partner information, workflow, approvals, account, and tax status information necessary to complete an order. The buying organization also negotiates and maintains contractual relationships with preferred selling organizations.

• *Selling Organization:* The selling organization maintains a dynamic electronic catalog that presents accurate product and price information --information which can be tailored based on the organizational affiliation of the requisitioner as specified in a digital certificate. Product and price information reflects the contract with a buying organization. The selling organization's catalog must be integrated effectively with inventory and order

management systems and an OBI server for sending OBI Order Requests and receiving OBI Orders. Selling organizations must be able to authorize certain transaction types with the appropriate payment authority.

• *Payment Authority:* Payment authorities provide authorization for the payment vehicle presented by the requisitioner. Payment authorities must provide payments to selling organizations and a timely invoice or debit to the buying organization. Payment authorities may include a variety of financial institutions or, if the payment vehicle is a bulk invoice, selling organizations assume the responsibilities of a payment authority. The OBI standard is intended to support a variety of payment vehicles.

<u>OBI Members</u>

3M	Dun & Bradstreet Group, Inc.	NEC Systems, Inc
Abbott Labs	Dupont	Netscape
American Express	ectone	NTT Corporation
American Management Systems	EPIC Systems, Inc.	Office Depot
Ariba Technologies	Esselte Corporation	Oracle Corporation
Avnet	Fisher Scientific	*Part*Net
barnesandnoble.com	FlintInk	Passport International
BASF Corporation	Ford Motor Company	Perot Systems
bCandid Corp.	Framfab	Rohm and Haas Company
BEA Systems, Inc.	GE Global eXchange	SAIC/Bellcore
BOC Gases	GTE Cybertrust	Sciquest
Boise Cascade	Graybar Electric	Software Spectrum, Inc.
Calico.com	Harbinger Corporation	Staples, Inc.
Catalyst Capital	Hewlett Packard	SupplySearch
Chase Manhattan Bank	Hoffmann - La Roche	SupplyWorks, Inc.
Chemdex Corporation	i2 Technologies	Total System Services (TSYS)
Comdisco, Inc.	IBM	Trilogy
Commerce One	IMedium Incorporated	UniSoft Corporation
Commonwealth of Massachusetts	Intelisys Electronic Commerce LLC	United Technologies Pratt & Whitney
CompuCom Systems, Inc.	Itec AB	United Technologies Research Center
Concur Technologies, Inc	Lexmark International, Inc.	Visa
Consolidated Commerce	Lockheed Martin	VWR Scientific Products Corporation
Corporate Express	MasterCard International	webMethods, Inc.
Dell Computer Corporation	McJunkin Corporation	W.W. Grainger, Inc.
DMR Consulting Group, Inc.	McMaster-Carr Supply Company	Xerox Corporation
	Medibuy.com	Yantra
	Microsoft Corporation	