



Building a Strong Foundation for Communication and Collaboration

Commerce One Collaborative Platform™

White Paper

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Executive Summary

The advent of the World Wide Web and the subsequent increase in connectivity has dramatically impacted the way business is conducted around the world. Today, the Internet is providing a new and less costly medium for doing business, allowing companies to collaborate more effectively with their trading partners, improve operational efficiencies and accelerate time-to-market.

With the proliferation of Internet-based technologies, the scope of business has also been profoundly altered. Even as recently as the late twentieth century, businesses looked primarily inward, focusing on optimizing operations and transactions within the enterprise. In today's economy, inter-relationships are more important than ever, and companies must leverage technology to achieve efficiencies not only inside the firewall, but also with their extended enterprise-suppliers, customers, distributors, and third-party business service providers. Through tighter collaboration with business and trading partners, companies can become more responsive to customer and market demands, gain visibility and control of business processes, and reduce their operational costs.

Enterprises are looking for solutions that enable them to communicate and collaborate effectively in the context of a specific business process, such as procurement and sourcing. The buying process is a complex interaction of interdependent users, companies, systems, and business processes. It requires communication and exchange of data between multiple applications and people along the whole buying process, both inside the enterprise and outside with business partners. Enterprises are looking for a strong technological foundation to support these collaborative business processes. That foundation is the Commerce One Collaborative Platform™ — a platform that enables an enterprise to orchestrate people, systems, and processes to achieve greater levels of efficiency.

Business Challenge: An Increasing Need for Collaboration

In order to succeed in today's market, enterprises are shifting their focus outward. They require not only a comprehensive view of their organization's inward-facing activities, but also a clear understanding of outward-facing business processes and interactions with trading partners. This is because essential business activities — corporate buying in particular — rely upon a complex web of interdependent users, companies, systems, relationships, and processes.

Because of this complexity, improving the buying process requires more than just implementing a purchasing application or an Enterprise Resource Planning (ERP) system. It requires enabling communication between the disparate applications and multiple users that comprise the buying process. Any viable buying solution must focus not just on automation, but also on collaboration between users, systems and trading partners.

As the Hurwitz Group noted, the true challenge is business process management, and gaining "...visibility and control over the contributing parts of a multi-step information request or transaction ... (which) should include applications, people, and partners."¹ A successful source-to-pay solution must break down the silos that exist within the enterprise, and eliminate the barriers that inhibit collaboration with external trading partners.

So why has this been so difficult for companies? In the 1980s and the early 1990s, enterprises focused on improving business operations through the automation of internal business processes. This initiative was aided by the mass adoption of the personal computer and the growth of enterprise resource planning applications (ERP). In the later 1990s, enterprises began to shift their focus towards partnerships as a means of creating greater efficiencies and reduced costs. This trend was spurred by the introduction of the Internet as a global communication mechanism, and by the first wave of outward-facing business applications, including Customer Relationship Management (CRM) and Supply Chain Management (SCM). These applications can only partly enable enterprises to interact and transact with customers, suppliers, distributors, and other business partners. These applications were focusing on single tasks, not the entire source-to-pay process. So although they initially delivered cost savings and increased efficiencies, over time they have added layers of operational complexity — which stymies efforts to drive additional costs savings or efficiencies.

The resulting challenges that companies face include:

- **Heterogeneous computing environment** — Until today, each division within the company solved its specific procurement problems through the purchase of a front-office or back-office system. These efforts were not coordinated across the enterprise, resulting in a hodgepodge of systems that cannot communicate with one another. Data sharing is not possible, or can only be established through time-consuming point-to-point integration.
- **Disjointed communication and coordination** — Due to decisions that were made on a divisional basis, an enterprise can have many different ways to communicate with business partners. This environment is expensive to maintain, and can lead to costly errors, longer cycle times, and low customer satisfaction.
- **Sub-optimal and inflexible business processes** — At most companies, business processes—from sourcing through payment—are still manual, making it difficult to adapt to changing market conditions, and requiring significant resources to maintain. In addition, each division has different business processes, and most systems are hard-coded and cannot easily be mapped to new requirements.

¹ <http://www.line56.com/articles/default.asp?NewsID=3222>

- **Limited information visibility** — Due to the many disparate systems within the typical enterprise, it is hard to gain an understanding of how the company is functioning as a whole, and how it interacts with its business partners. Instead of being centralized, information is limited to departments or divisions. This results in miscommunications and many missed opportunities. For example, many companies cannot easily access the supplier performance data they need in order to choose the right sourcing strategy.

These challenges represent significant roadblocks to achieving a truly efficient collaborative environment between an enterprise and its business partners. These problems will become exacerbated over time and further disable a company from working effectively with business partners. As Commerce One worked to develop a comprehensive solution to solve the communication and collaboration problems which companies face, we analyzed how companies have attempted collaboration with their business partners in the past — and why those solutions have not been sufficient to create a comprehensive collaborative environment.

What is Collaboration and How Have Companies Tried to Improve It?

Collaboration is critical to the overall source-to-pay process, because the supply chain is only as strong as its weakest link. Teams inside and outside the enterprise must work together closely and effectively to design, build, source, and procure a product. Collaboration at this level is about more than simple information sharing. It is about having access to crucial, real-time data from trading partners such as suppliers and customers, and simultaneously sharing that knowledge with all the members of the extended enterprise. This enables an organization to be nimble, making intelligent, informed business decisions.

According to Forrester, 72 percent of companies consider supplier collaboration critical to their product development success in 2003 — and the costs of not enhancing supplier collaboration are staggering. According to IDC, the Fortune 500 will lose over \$57 billion (US) in the next two years because of communication and collaboration failures. This translates into a need for solutions with the ability to interact with suppliers.

How have companies tried to collaborate with their trading partners up until now? Typically, businesses selected enterprise applications based on their own internal automation needs, rather than considering what would best optimize relationships with suppliers and other external business partners. As enterprises merged and new divisions were formed, the number of internal systems multiplied, resulting in heterogeneous ERP, SCM, and CRM systems, which have very few capabilities for communicating and collaborating with external partners. As a result, for many companies, collaboration and communication with external business partners is still manual, and most interaction with trading partners is conducted by phone, fax, e-mail, and via overnight carriers such FedEx.

In an attempt to move beyond manual processes, many companies implemented custom point-to-point integrations with their trading partners, using proprietary methods or EDI networks. Unfortunately, these solutions are difficult to maintain, and are not adaptable to changing market requirements. However, EDI did solve some initial collaboration issues satisfactorily, so moving forward, it is important that any new solution is capable of leveraging that existing infrastructure — and adding value to it by automating additional processes and establishing a flexible framework that can keep up with ever-changing cross-enterprise business processes.

With the advent of Internet technologies such as HTML, HTTP, XML, and Java, significant promise has been shown in providing a truly collaborative solution. Unfortunately, these standards by themselves are not sufficient. They only provide a low-level framework for what is really needed — a collaborative platform that can link multiple heterogeneous systems and manage disparate processes across business units and trading partners.

The first solutions based on these Internet standards solved specific point problems such as application integration, trading partner integration, and user interface integration. Many companies have implemented one or more of the following:

- **EAI** — Enterprise application integration technology to integrate the data of internal applications
- **B2Bi** — Business-to-business integration technology to integrate data from enterprise applications with those of trading partners
- **Portal technology** — for unifying the user interface of multiple applications through a portal framework
- **BPM** — Business process management technology for coordinating the flow of data based on a business process and its participants

However, these solutions have only solved very specific issues involved in collaboration, such as data or user interface integration. These systems lack the ability to automate and integrate an enterprise's business processes with those of its trading partners. True collaboration requires a solution that enables the participation of systems and people both inside and outside the enterprise within the context of a business process, such as sourcing or procurement. In addition, today's business climate requires that an enterprise and its partners be able to react quickly to constantly evolving business strategies and market conditions.

Enterprises need a solution that has the flexibility, scope, and technology to address the myriad issues involved in collaboration, and to manage the entire source-to-pay process.

Commerce One 5.0™: A Comprehensive Source-to-Pay Solution Suite

Commerce One 5.0 is a comprehensive suite of solutions that makes the collaborative processes within sourcing and procurement more efficient. It consists of the Commerce One Buy and Commerce One Source solutions, built on the foundation of the Commerce One Collaborative Platform.



The Commerce One 5.0 suite delivers collaborative solutions for visibility and control over the source-to-pay process. It links people and systems within the enterprise and connects organizations with trading partners. Built on an open, collaborative platform, Commerce One 5.0 is the only solution that meets the unique, complex requirements of specific enterprises, industries, and regions.

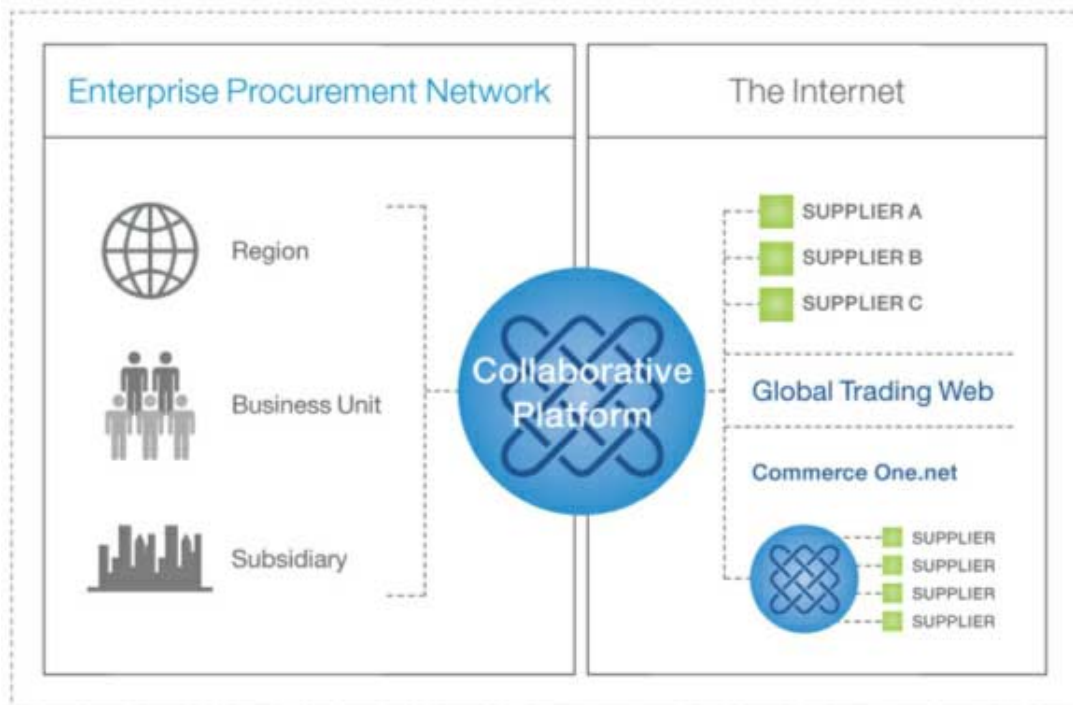
Commerce One Collaborative Platform: The Backbone of Collaboration

The Commerce One Collaborative Platform is an open-standards based foundation for collaborative business processes such as procurement and sourcing. It is a secure infrastructure for collaboration and has been proven on a global basis in more than one hundred Fortune 500 implementations. Using this platform, an enterprise can create a collaborative business environment for processes such as buying and sourcing with key trading partners, public e-marketplaces, and third-party service providers.

The Commerce One Collaborative Platform can help companies accomplish the following:

- **Outward focus** — The Commerce One Collaborative Platform enables the enterprise to look outward and think in terms of relationships and processes with key partners. The platform's technological flexibility allows for the integration of systems, processes and people, so trading partners can be tied into the procurement and sourcing processes of the enterprise. This is critical in creating a unified business process that spans multiple enterprises.
- **A unified enterprise** — The platform is highly customizable, and can be tailored to present a unique face to different audiences, while retaining centralized control of data. Existing enterprise applications can be integrated so that information can be easily shared both inside and outside the firewall, and data can be aggregated and synchronized with the underlying business processes so that trading partners have a transparent and accurate assessment of activities. These features enable an enterprise to present a unified front to trading partners.
- **Business process flexibility** — Constant change driven by new partnerships, new customers, new business rules, and new economics mandates the ability to change business processes. With the Commerce One Collaborative Platform, companies have the flexibility to create new processes, change existing processes, and manage processes across the extended enterprise.
- **Leverage of Internet-based services** — The platform liberates companies from reliance on rigid enterprise applications. Instead, services can be accessed anywhere, via the Internet, and tied into the enterprise's collaborative business processes. The capability to leverage third-party web services enables the enterprise to utilize services such as logistics without the operational overhead of physically implementing applications and operating the service. The Commerce One Collaborative Platform also enables an enterprise to offer its own applications as Web-based services so that trading partners can link to them more efficiently. Using the platform, an enterprise can truly tailor its business processes to provide maximum efficiency and effectiveness.
- **Global Trading Web™ participation** — The Commerce One Collaborative Platform provides access to and interoperability with the Global Trading Web™ (GTW), the world's largest community of buyers, suppliers, service providers, and e-marketplaces. Interoperability with the GTW is achieved by combining open standards-based technology with business content defined by different industries, regions, and countries. Enterprises connect to an appropriate vertical or regional marketplace, which in turn will connect to a relevant industry or regional hub. Thanks to standardized business processes and data formats, companies can connect once to the marketplace and do business with anyone who participates in the GTW.

- **Information visibility** — By integrating multiple applications and people across enterprises into a seamless business process the Commerce One Collaborative Platform provides visibility to key information not only within the enterprise but throughout its network of trading partners. This advanced intelligence can be a tool for better decision-making, and can be used by the enterprise to direct collaboration between systems and people based on policies, exceptions, business logic, and context built into the business processes.
- **Secure, scalable, high-performing environment** — The Commerce One Collaborative Platform was designed to meet the security, scalability, and performance requirements of major public e-marketplaces throughout the world. These capabilities are extended to ensure that a company can use the platform to build a reliable collaborative business network. The platform is flexible, and can enable change without great cost by leveraging existing IT investments and reusing application components, and it has been successfully tested in demanding environments. The platform also provides key security capabilities, such as digital signatures, single sign-on, encryption, and central user administration.



The Commerce One Collaborative Platform: Benefits

By using the Commerce One Collaborative Platform to create a collaborative business environment, enterprises can take advantage of significant business benefits including:

- Significant competitive advantage, and reduced cycle times thanks to highly efficient collaborative business processes linking the organization and its trading partners
- Reduced administration costs for managing networks of business partners
- Greater control and visibility across enterprises by connecting and orchestrating disparate systems, organizations, and individuals.
- Better decision making due to information visibility
- Automation and improved management of processes such as procurement and sourcing between the enterprise and its suppliers.
- Easily configured applications and process flows tailored to specific industries, companies, and supplier relationships
- Integration of e-commerce and legacy enterprise applications to ensure sourcing and purchasing best practices
- Fewer errors, thanks to streamlined communication and easier collaboration both within the enterprise and with its business partners
- Increased ROI from existing enterprise systems by incorporating them into collaborative business processes

The Commerce One Collaborative Platform: Components

The Commerce One Collaborative Platform orchestrates critical business processes and information between enterprises, their customers, their suppliers and other trading partners. This is accomplished through the platform's open architecture and support for industry standards, which provides a technical foundation that leverages and extends a company's existing application and infrastructure software.

The platform is composed of a set of integrated components that provide a comprehensive foundation for building, running, and managing an enterprise's collaborative business network. Each component provides capabilities that, when combined with those from the other components, enables an enterprise to effectively communicate and collaborate with its network of business partners. The components include:

Community Manager™: Create a seamless user experience

Community Manager gives an enterprise the ability to manage its interactions with a community of business partners, and ensures that customers, distributors, and suppliers have secure access to the appropriate services and information. Each trading partner has a personalized view of the enterprise's systems, and is treated as a unique participant in the business process. This optimizes operations, ensures proper decision-making, allows better exception handling, and enables improved trading partner relationships.

Process Manager™: Tailor business processes to enterprises unique needs

Process Manager orchestrates processes, data, and information flow across systems, enterprises, and people, knitting together the fractured business processes caused by disparate systems and application silos. Process Manager enables the seamless creation, execution, and monitoring of business processes across a heterogeneous system environment within and outside the enterprise. This results in optimal decision-making, enhanced communication and collaboration with trading partners, and greater market responsiveness. The Process Manager includes the Graphical Process Builder for modeling the business process, and monitoring capabilities to ensure that processes are proceeding efficiently. Processes can be changed easily on an as-needed basis, and executives can use Process Manager as a window into the business process status.

Transaction Manager™: Secure communications inside and outside the firewall

Transaction Manager leverages an enterprise's investment in multiple Procurement, ERP, SCM, and CRM systems by extending them into a single, open, real-time environment that is robust, secure, and proven. Through context-based integration of applications and business partners, Transaction Manager enables an enterprise to create an open standards-based collaborative network of employees, customers, suppliers, distributors, and other trading partners. Transaction Manager provides guaranteed transaction and business process routing based on a secure and scalable infrastructure, and allows the enterprise to interconnect with the Global Trading Web.

xCBL (XML Common Business Library™): Communicate in a common language

Endorsed by industry leading companies and standard bodies, xCBL is the largest library of process-based business documents that automate enterprise interaction based on a common language. It covers a majority of business-to-business transactions, including those relevant to SCM and SRM. All xCBL documents have been created with end-to-end business processes in mind, so every document has a corresponding response document, allowing business partners to converse with one another. At the data level, xCBL provides the business process context necessary for efficient collaboration. In October 2001, xCBL was selected as the foundation for the OASIS Universal Business Language further cementing its role as a universal business standard.

[EAI Connectors: Easily connect existing enterprise systems](#)

The Commerce One Collaborative Platform includes out-of-the-box enterprise application integration (EAI) connectors for linking enterprise applications into the Transaction Manager. These connectors provide the necessary mappings from the enterprise applications' proprietary formats to standard XML. They are critical to extending enterprise applications to trading partners and incorporating them into the business process. Commerce One is leveraging industry proven EAI connectors through its partnership with SeeBeyond, the leading global provider of eBusiness and Application Integration (eAI) solutions.

[Business Web Services Framework™: Easily deploy web based services](#)

The Business Web Services Framework provides an enterprise with the tools to turn its existing applications into Web services that are accessible by its network of business partners. These Web services can then be easily deployed as part of an inter-enterprise business process. In addition, the Business Web Services Framework enables an enterprise to utilize external web services provided by business partners, service providers, and e-marketplaces.

[Business Intelligence: Analyze data and business processes](#)

The Commerce One Collaborative Platform includes key business intelligence capabilities that provide information visibility for cross-enterprise business processes. The business intelligence framework can be utilized by any application running on the Commerce One Collaborative Platform, enabling the application to track key information-and then to deliver that information to the right people at the right time, driving critical decisions.

[The Commerce One Collaborative Platform: Customer Profiles](#)

Hundreds of organizations have successfully deployed the Commerce One Collaborative Platform as part of a public e-marketplace, and thousands of enterprises connect to these marketplaces to streamline their business processes, integrate their systems, and collaborate with trading partners at various levels. Buying, selling, sourcing, planning, and auctioning activities around the world are facilitated by the Commerce One Collaborative Platform.

Many companies that have experienced the benefits and power of the Commerce One Collaborative Platform via an e-marketplace are now implementing the platform within their enterprise to automate and streamline processes with key business partners, while still leveraging some services from public e-marketplaces. Following are two examples of organizations that have benefited from the Commerce One Collaborative Platform:

[The United States Naval Sea Systems Command](#)

NAVSEA, the United States Naval Sea Systems Command, has established a private services network — SeaPort — to improve efficiencies and streamline costs within the professional support services acquisition process.

NAVSEA's objectives were to:

- Automate the professional support services acquisition process
- Reduce operating costs by \$250 million (US) over five years
- Leverage economies of scale
- Enable shift to "Performance Based" contracting
- Integrate systems to manage 350 contracts with 100+ contractors

The marketplace allows for planning, awarding and monitoring of all professional support services, as well as capturing business intelligence for improved decision making, acquisition planning, and funds management.

Through the use of SeaPort, NAVSEA expects to lower their contracts management costs by drastically reducing decision cycle times for professional service contracts — from up to 12 months to four weeks or less. The eventual goal is to reduce the complete acquisition cycle to between three to five days.

After just ten weeks in operation, NAVSEA realized a return on their investment. With 20 Navy and 60 contractor personnel online, NAVSEA quickly awarded nearly \$10 million in services contracts, reducing both the cost of services purchased and the time required to complete the purchase.

Siemens

Siemens, the largest electronics and electrical engineering firm in Europe, and the 21st largest such company in the world, operates in 220 countries as a conglomerate of fairly independent subsidiaries. Managing such vast and highly diversified operations is not an easy task — each subsidiary has its own supplier and trading partner base, its own processes, and its own applications, resulting in inefficiencies and lost opportunities.

Siemens purchased a hosted version of the Commerce One Collaborative Platform to solve these problems. After realizing real benefits and ROI — a 60% reduction in requisition to fulfillment cycle and a 75% decrease in administration costs — the company implemented a version of the Commerce One Collaborative Platform within their enterprise. This platform now orchestrates purchasing, payment, sourcing, and auctioning processes across the global enterprise. A central organization within Siemens runs the operation and services and offers it to all subsidiaries of Siemens. This allows Siemens to aggregate and synchronize similar processes company-wide, and to better leverage common suppliers.

The Commerce One Collaborative Platform enables Siemens to leverage existing systems and build a common process around them, and also to offer services to their contract manufacturers. This provides better visibility when planning, designing, sourcing, and buying components — which helps Siemens build better and more cost-efficient products.

Conclusion

The Commerce One Collaborative Platform enables an enterprise to orchestrate people, systems, and processes based on a secure business network to achieve the next level of efficiency. With the platform, businesses can:

- Maximize ROI from legacy applications by extending the benefits of those applications to customers, suppliers, and other trading partners.
- Create and manage repeatable procurement and sourcing processes that connect people and systems inside and outside of the firewall, to improve time-to-market and drive efficiencies.
- Achieve significant cost savings and increased productivity by cutting cycle times, lowering inventory levels, and reducing errors through real-time information exchange in the sourcing and buying processes.
- Increase visibility across enterprise business processes, and improve communication with suppliers, enabling faster market responsiveness.

For more information about the Commerce One Collaborative Platform, visit www.commerceone.com or call +1 925 520 6000.

Commerce One (Nasdaq: CMRC) is the Business Internet Company. Through its software, services, and global network of interconnected enterprises and e-marketplaces, Commerce One enables organizations to reduce costs and drive productivity by automating business processes between buyers and suppliers. E-mail info@commerceone.com for more information.

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