

By John Balla

Open Text & Collaborative Commerce

A Meritox White Paper

February 8, 2001

Table of Contents

OVERVIEW OF COLLABORATIVE COMMERCE	2
COLLABORATIVE COMMERCE BUSINESS BENEFITS	4
BREAKING UP THE SUPPLY CHAIN BY MAJOR PHASES	5
E-BUSINESS EVOLUTION	6
E-BUSINESS CONVERGENCE	8
COLLABORATIVE NEEDS DEFINED	9
FROM COG TO COMMUNITY	11
CONCLUSION	12
OPEN TEXT AND COLLABORATIVE COMMERCE	13
OPEN TEXT PRODUCT/SERVICE OVERVIEW	14
LIVELINK.....	14
MYLIVELINK	16
B2BSCENE.COM.....	16
XIS, INC.'S NOVARE	17
CONCLUSION.....	19
APPENDIX A: ABOUT OPEN TEXT.....	20
APPENDIX A: ABOUT MERITOX CORPORATION.....	21



Overview of Collaborative Commerce

Collaborative Commerce marks the new e-Business paradigm that promises to bring competitive advantages to those who embrace it. But first, it's important to understand what Collaborative Commerce is (and what it isn't), where it comes from and why it is becoming so critical to e-Business.

Automating structured data is one thing, but automating unstructured text and content is quite another. According to Merrill Lynch, nine out of ten Internet interactions are collaborative in nature. What's more, static e-commerce exchanges (or emarkets) only yield about 20 percent of their potential supply chain value, according to Southwest Securities. In their opinion, "Today's emarkets must migrate to cmarkets or risk extinction."

*Today's emarkets must migrate to cmarkets or risk extinction.
-Southwest Securities*

Collaboration is both pervasive and paramount within the supply chain.

Transaction-based systems (or e-commerce) are relatively speaking, insignificant.

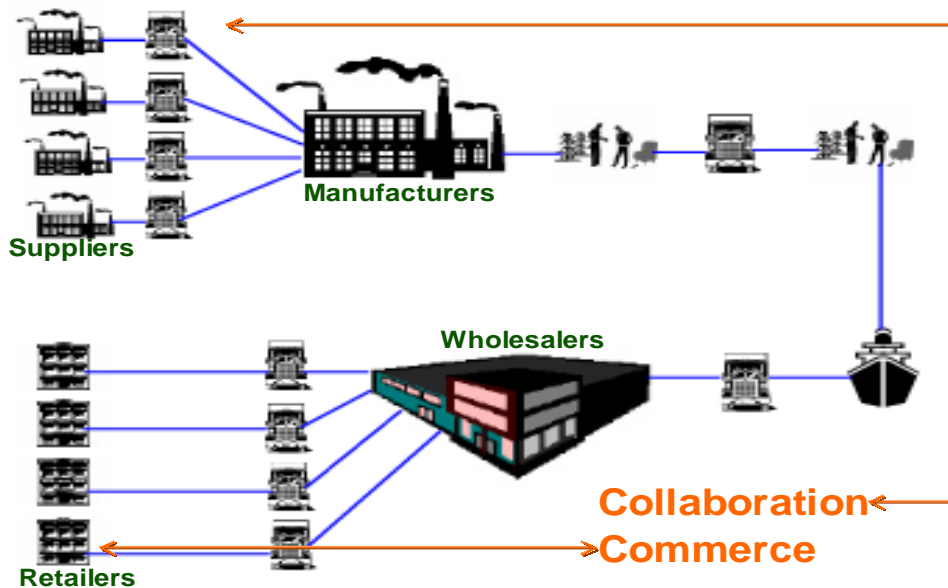


Figure 1 - Collaborative versus Commerce Needs within the Supply Chain – Source: Meritox Corporation

Whether interacting with suppliers or customers, collaboration is both pervasive and paramount throughout the supply chain. Transaction-based interactions (or e-commerce), on the other hand, are relatively speaking, insignificant (as illustrated above).

As depicted above, Collaborative Commerce advances the notion of managing all supply chain interactions through business automation, namely, collaborative and transactional (or e-commerce) technologies.





Collaborative Commerce supersedes the e-commerce paradigm by extending the reach of supply chain interaction to include all supply chain participants.

Collaborative Commerce supersedes the e-commerce model by extending the reach of supply chain interaction to include all supply chain participants. Consequently, this extension is realized through collaborative technologies since most pre-commerce (e.g., product design, sourcing and logistics management) is highly collaborative in nature, not transactional.

SUPPLY CHAIN PENETRATION COMPARISON



Figure 2 - Collaborative Technologies Enable Collaborative Commerce - Source: Meritox Corporation

Ultimately, Collaborative Commerce will integrate collaborative and transactional technologies (e.g., e-commerce, ERP, etc.) into a single Collaborative Commerce product.





Collaborative Commerce Business Benefits

Providing a collaborative platform to an entire supply chain can dramatically strengthen the links between all participants, which can render it more efficient, something for which commerce technologies are not designed to address.

Properly designed and implemented, collaborative technologies can not only impact the efficiency of a supply chain, they can also improve quality, increase innovation, time-to-market (or TTM) and a series of other business essentials that benefit both the buy-side and sell-side of the supply chain community (as depicted in the diagram below).

BUSINESS VALUE BENEFITS SUMMARY

Buy Side

- Buying Power
- Availability
- Price
- Access
- Custom Svc
- Time

Sell Side

- Innovation
- Time to Market
- Logistics Mgmt
- Quality
- Time
- Revenue

Celestica, Inc. estimates a 25 percent increase in TTM and a 6 to 8 percent margin increase through the usage of collaborative technologies during the product design and creation process alone.

Figure 3 - Collaborative versus Commerce Supply Chain Benefits (Collaboration in brown) - Source: Meritox

In fact, estimates by Celestica, Inc., estimates a 25 percent increase in TTM and a 6 to 8 percent margin increase through the usage of collaborative technologies during the product design and creation process alone.





Breaking up the Supply Chain by Major Phases

Bringing products to market presents a plethora of logistical challenges for the average manufacturer.

Today, most interaction takes place via phone, fax and email.

Simply too many people and entities involved in multitudes of collaborative decision-making renders supply chain inefficiency a foregone conclusion.

Bringing products to market presents a plethora of logistical challenges for the average manufacturer. Not only must products be designed and tested, both for functionality as well as market appeal, they must also go through the rigors of sourcing various components to manufacturing specialists, many of whom operate on different continents and time zones.

Depending on the complexity of the product being manufactured, it is not uncommon for dozens or even hundreds of manufacturers and suppliers to participate in the creation of a single product. Such logistical challenges only multiply with the number of products being sourced simultaneously. And virtually all of the supply chain interaction in the pre-commerce phase requires an active dialogue with the supply partners in order to ensure quality, time-to-market (TTM) and cost controls.

Surprisingly, it is commonplace for most pre-commerce collaboration to take place via phone, fax, email and courier. While suitable for simple and ad-hoc interaction, these communication tools lack the robust control mechanisms such as virtual project rooms, discussion threads, business process automation and document management to keep complex interactions between multiple individuals, teams and companies on schedule.

Using this fairly typical scenario, the enormity and complexity of supply chain management becomes evident. Simply too many people and entities involved in multitudes of collaborative decision-making renders supply chain inefficiency a foregone conclusion.

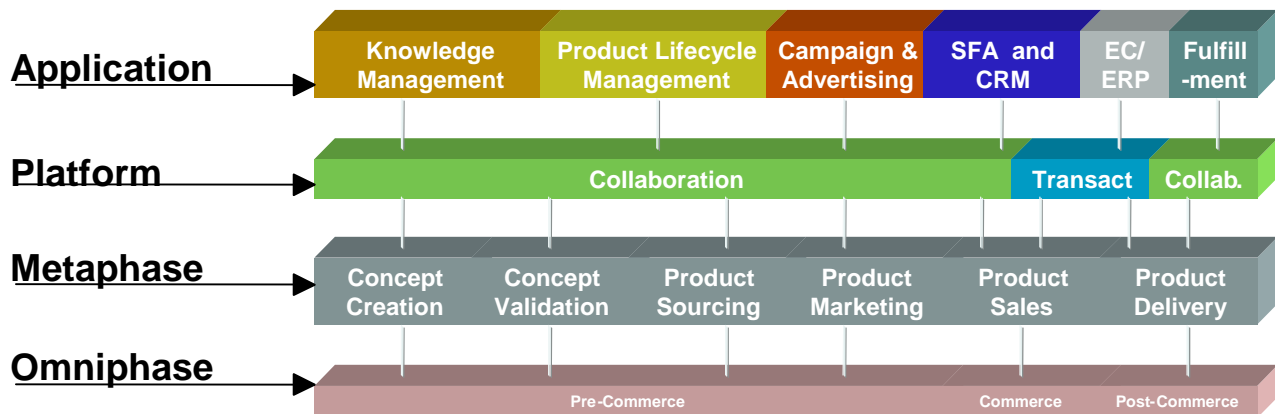


Figure 4 - How Collaborative Technologies bring forth the Realization of Collaborative Commerce – Source: Meritox

The good news is that collaborative technology brings the notion of collaborative commerce to realization. As depicted above, collaborative technology can play a primary role in managing the entire pre-commerce process of supply chain management.





e-Business Evolution

In less than a decade, we have witnessed three e-Business paradigms, all of which were sparked by the advent and popularization of the Internet. And we are beginning to see the emergence of the fourth – collaborative commerce.

From a pure Web perspective, the first paradigm occurred in tandem with the prolific growth of Web browsers. As people began to surf the Internet, it became increasingly important to have a Web presence. Virtually overnight, corporate Web sites started propagating the World Wide Web (www) with a vengeance. Thus, publishing took on a whole new meaning. Publishing paper content such as brochures, advertisements in magazines and general corporate information was no longer enough. The same content and content types now had to be published to the Web as well.

At almost the same time, email emerged as the preferred method for interacting with friends, peers and other professionals. Indeed, the pervasive use of email has gone from virtually zero five years ago to over 100 million per day (according to Forrester Research) – and still growing. As the second e-Business paradigm, basic interactivity via email and Web forms is now an essential business and consumer tool.

There are over 100 million emails generated each day and still growing – Forrester Research

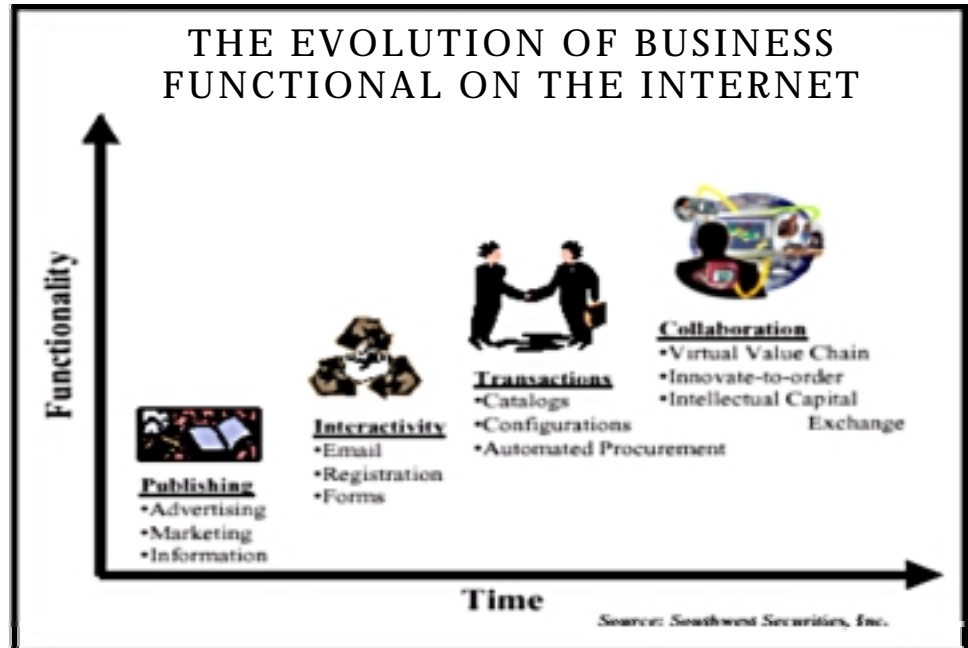


Figure 5 - e-Business Evolution from an Emergent Perspective - Source: Southwest Securities

e-Commerce, the third e-Business paradigm, is only about three years old, even though it's hard to remember the world without it. Pioneered by Dot-





e-Commerce, the third e-Business paradigm, is a solid provision for buying commodity. Shopping, on the other hand, is still best suited for traditional brick-and-mortar stores. But Collaborative Commerce will prove disruptive to buying/shopping distinctions.

Collaborative Commerce, the fourth e-Business paradigm, begins to blur the distinction between buyer and shopper.

Coms such as Amazon.com and American Online (AOL), e-commerce quickly became the preferred means for buying goods and services for consumers (B2C) and businesses (B2B) alike. So-called brick-and-mortars, or traditional business, have also entered e-commerce to the point where today, most companies have both e-commerce and traditional commerce options for prospective buyers.

However, we still maintain that e-commerce is best suited for consumers and business that know what they want to buy and are educated in the product or service they are considering. Shoppers, on the other hand, are best suited to venture into the traditional store to assess different options and prices as well as seek professional guidance from sales personnel. This distinction is important because commodity is in the eye of the beholder. Moreover, we all interchange from shoppers to buyers depending on what our needs are and our level of knowledge about those needs.

Collaborative Commerce, the fourth e-Business paradigm, begins to blur the distinction between buyer and shopper. By providing collaborative technologies in line with commerce technologies, even shoppers who are not certain what they want can interact with product or service experts over the Internet for the assistance and guidance they seek. Still, virtual interaction cannot and will not fully replace face-to-face interaction. After all, certain products must be seen with the naked eye and touched to determine their value. Nonetheless, Collaborative Commerce will undoubtedly migrate significant shopping behavior from physical locations to virtual ones.





e-Business Convergence

The profundity of Collaborative Commerce, while evident in context with e-Business evolution, is even more ironic in the context of structured versus unstructured business automation.

At no time in computer automation history has structured (or transaction-based systems) and unstructured (or collaborative-based) systems converged – until now. The reasons for this are many, including the very nature of the environments themselves, which naturally don't share much in common.

At no time in computer automation history has structured and unstructured systems converged – until now.

TWO WORLDS COMING TOGETHER

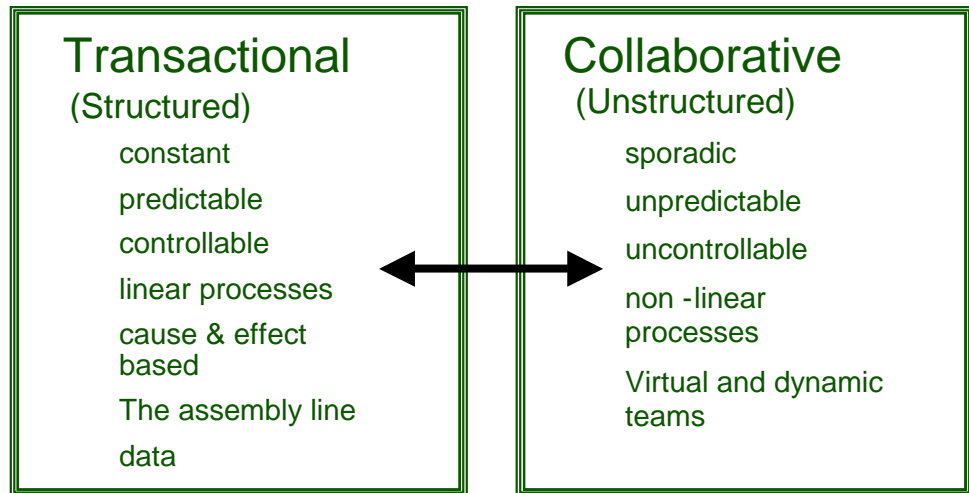


Figure 6 - Business Automation by Structured versus Unstructured Distinctions - Source: Meritox Corporation

For instance, the structured domain tends to have a constant and predictable business process flow. As such, standard operating procedures (SOPs) are common in structured environments, whether automated or not. Moreover, the process tends to be linear in nature and very focused, much like an assembly line operation. And finally, data capture, management and analysis are of paramount importance.

Examples of structured environments include inventory replenishment, fulfillment, commodity sales, accounts payable, customer service (call center) and claims processing.

Unstructured environments, on the other hand, bear little resemblance to their structured counterparts. The flow of work and tasks – even responsibilities – tend to be sporadic, unpredictable and relatively uncontrollable. And the very nature of the work requires a broader and more holistic understanding of inter-relationships and other inconspicuous dynamics. These non-linear processes, by their very nature, afford the assemblage of virtual or dynamic teams to





address specific projects or issues.

Examples of unstructured environments include professional services, research, product design, marketing and non-commodity sales.

Until the advent of the Internet and the popularization of portal and e-commerce sites, these two environments coexisted as line of businesses (LOBs) or departments within an enterprise and with relative disharmony.

But as e-commerce and portal community sites began to emerge, the absurdity of using one site primarily to buy and sell products and services and another to collaborate around the same issues and topics, became apparent. Users should be able to do both from a single site, as they see fit.

This disconnect is even more lofty in the context of an industry supply chain. For instance, today's B2B e-commerce sites, whether marketplaces or closed communities, primarily exist for sale and delivery of products and services. What collaboration capabilities they have center around this interaction. In other words, all pre-commerce activities – the lion's share of supply chain interaction, occurs elsewhere.

Collaborative Needs Defined

Like the unstructured domains that are commonplace within the enterprise, the supply chain possesses the same collaborative needs and characteristics. This should come as no surprise since, with Web interactions now common both in a variety of application flavors, including Internet, intranet and extranet, the distinction between enterprise and supply chain applications is quickly becoming a moot point.

In other words, distinctions begin to wither away when they are no longer needed. And once again, Collaborative Commerce will prove to be the primary force behind the obliteration of transactional versus collaborative distinctions as well as enterprise versus supply chain distinctions. Indeed, both distinctions are simply the residue of the old, purely physical economy.

While collaborative needs will vary by industry and metaphases within each industry, the following list illustrates the platform features that comprise collaborative offerings today:

- ④ Project Metaphor – allows all project participants to share a Web page to contribute content, manage progress and collaborate on work product development. The project metaphor typically operates as an intra-collaboration within a single supply chain metaphase.

The distinction between enterprise and supply chain applications is quickly becoming a moot point.

Collaborative Commerce will prove to be the primary force behind the obliteration of transactional versus collaborative distinctions as well as enterprise versus supply chain distinctions.





- ④ Community Metaphor – allows community participants to share a Web page to contribute content, manage progress and collaborate on work product development. The community metaphor differs from the project metaphor in that it allows for inter-collaboration between all supply chain metaphases (though a community can be established for other purposes as well).
- ④ Document Management – furnishes DM capabilities within each project or community. Also, provides searching for content across projects and communities. Common DM features include document check in/check out, version control, complex document management, and the ability to capture and manage other electronic files from a single repository, e.g., email, Web content, legacy data, etc.
- ④ Asynchronous Discussions – furnishes threaded and multithreaded discussions within a project or community around certain topics or content.
- ④ Synchronous Discussions – furnishes real-time chat or instant messaging capabilities within a project or community; can also provide awareness of team members who are online (much like AOL Instant Messenger)
- ④ Process Automation – allows tasks, schedules, milestones, escalation procedures and time constraints to be automated as the project team or community sees fit.
- ④ Meetings – furnishes virtual meetings or presentations within a project or community setting whereby all participants can engage in synchronous collaboration, e.g., application sharing, voice-over-ip, voting, chat, etc.
- ④ Personalized Portal Interface – allows each user to configure their UI as they see fit, including exposing applications inside the portal, changing look and feel of portal and organizing the portal around projects, enterprise issues, community issues and personal issues.

While a personalized portal interface is not a collaborative need in the strictest sense, furnishing this capability is critical to gaining mass user acceptance and long-term satisfaction.

Note: While a personalized portal interface is not a collaborative need in the strictest sense, furnishing this capability is critical to gaining mass user acceptance and long-term satisfaction.





It is also worth noting that since most supply chain interaction today is constrained by use of phone, fax and email, significant business value would be realized even if not of all the aforementioned are provided. However, we consider the must-have collaborative capabilities to be project collaboration, document management, synchronous discussions and process automation.

From Cog to Community

The supply chain itself will experience a radical transformation as Collaborative Commerce engulfs the entire supply chain. And there is good reason for this. Recall that most supply chain interactions are non-linear and thus collaborative in nature.

While omni and metaphases of the supply chain still adhere to the chain metaphor, the processes within these groupings do not. Consequently, the supply chain acts like a chain if viewed from a very high level. However, a closer look reveals that most supply chain activity is requires finesse, creativity and problem-solving abilities that cannot be referenced from a procedural manual.

Today, supply chain interaction (at the metaphase level) is largely oblivious to other metaphases that impact it and vice versa. Thus, while interactivity is high within a given metaphase (even if it's manual), e.g., product sourcing, interactivity is conspicuously absent across metaphases, even though this interdependency is of vital importance. For example, suppliers typically have little interaction with their customer's marketing personnel, manufacturing seldom communicates with end-customers, etc.

Collaborative Commerce, on the other hand, not only strengthens the interaction within a given metaphase, it also establishes interaction between metaphases, thus providing a feedback loop that brings efficiencies:

- 🌐 Within metaphases, e.g., engineering.
- 🌐 Across metaphases, e.g., customers and engineering.
- 🌐 Across companies, e.g., suppliers and other suppliers.
- 🌐 Across projects that allow all metaphases to participate as an appropriately represented community thereby contributing all relevant perspectives at each major supply chain stage.

Today, supply chain interaction (at the metaphase level) is largely oblivious to other metaphase that impact it and vice versa.





Conclusion

We believe that Collaborative Commerce will eclipse e-commerce in terms of importance, business value (both strategic and tactical), revenue and most importantly, customer satisfaction.

In conclusion, we believe that Collaborative Commerce will eclipse e-commerce in terms of importance, business value (both strategic and tactical), revenue potential and most importantly, customer satisfaction. This disruptive technology, particularly derived from collaborative platforms, is well poised to deliver considerably more value than its e-commerce predecessor and at a fraction of the cost.



Open Text and Collaborative Commerce

Open Text's Livelink and myLivelink products, names that serendipitously resonate well as supply chain applications, can positively impact all metaphases within the supply chain, with significant weight afforded to the pre-commerce omniphase.

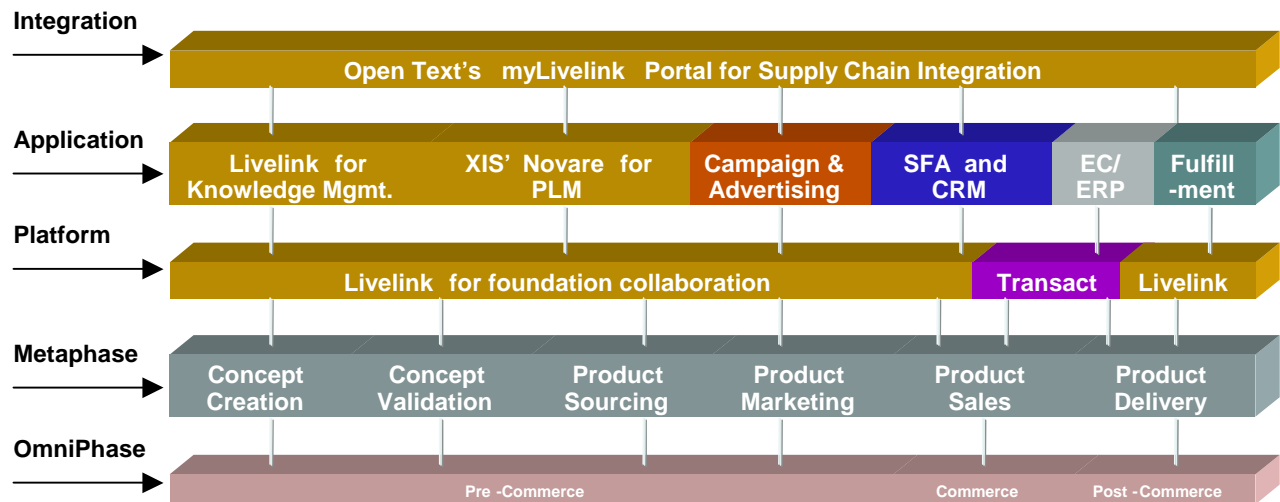


Figure 7 - The Supply Chain and Where Open Text Fits

Specifically, Open Text addresses the following collaborative needs within a Collaborative Commerce market setting:

- 🌐 Livelink as collaboration platform throughout the supply chain, with considerable weight being afforded to pre-commerce interactions.
- 🌐 Livelink for post-commerce interactions for the purposes of expediting reconciliation of out-of-tolerance invoices, bill of materials (BOMs) and other fulfillment inconsistencies.
- 🌐 Livelink as a knowledge management application for product concept and validation metaphases. *(Note: the KM aspects of Livelink can also bring considerable value to the product marketing metaphase as well).*
- 🌐 Open Text's partnership with XIS Inc.'s Novare product life cycle management (PLM) product provides seamless integration with the Livelink collaboration platform.
- 🌐 MyLivelink as a supply chain or community portal that can expose and integrate both Open Text and all other supply chain applications and platforms into a single, customizable UI, and extend it through partnerships with Enterprise Portal platforms such as Oracle Portal, Top Tier and Epicentric.



Open Text Product/Service Overview

Open Text has two fundamental products that translate quite well for Collaborative Commerce – Livelink and myLivelink. In addition, Open Text’s product mix includes a series of modules that integrate with Livelink and myLivelink. Some of these modules also add considerable value to Collaborative Commerce, including:

- ④ OnTime (for integrated project scheduling that furnishes automated synchronization between project and project participant calendars).
- ④ PDF Forms (for data/text capture, storage, retrieval and analysis of structured content that is not being captured by transactional systems).
- ④ Activators (or pre-built connectors to SAP/R3, PeopleSoft, MS Outlook, Lotus Notes, and CORBA).
- ④ Outlook integration that embeds all Livelink functionality inside the MS Outlook client, thus precluding the need for users to learn a new application.

In addition, Open Text has a formal partnership with XIS, Inc., a company that develops and markets Novare, a product lifecycle management (PLM) product. Finally, Open Text’s ASP division, b2bScene.com, can provide all these products as a hosted Collaborative Commerce solution.

Livelink

Open Text’s flagship product is Livelink, a multi-functional platform that furnishes integrated document management, process automation, knowledge management and project collaboration, all of which translate well into a Collaborative Commerce environment.

For document management, Livelink offers check in/check out, version control, complex (or multi-layered) document support and a robust repository that can store and manage many other types of digital content, including:

- ④ Email (including attachments)
- ④ Discussion threads
- ④ Process automation attributes
- ④ Web content

Livelink furnishes integrated document management, process automation, knowledge management and project collaboration.





As a process automation tool, Livelink offers a graphical workflow design utility that project leaders can use (without IT assistance) to build business process automation rules, roles and escalation procedures. And with the new release of Livelink (9.0), all process automation metadata is XML-based which provides an open standard for data sharing between legacy systems. In addition, users can search for any content and process attributes resident in a given workflow process.

For knowledge management, Livelink furnishes a series of push and pull mechanisms for searching, indexing and retrieving both structured and unstructured content from a variety of disparate information stores, be them resident on the Web or from internal repositories.

For content pull, Livelink offers parametric, Boolean and full text search mechanisms. And for content push, Livelink uses a series of search agents that are completely user-configurable to search and deliver content on a scheduled basis. Push results can be configured for automatic notification via email or to automatically populate a designated area within Livelink – or both. Moreover, presentation of search results, be it via push or pull, presents a unified and relevancy ranked display of content irrespective of content origin.

As a project collaboration product, Livelink offers all of the above capabilities under three standard presentation metaphors: 1) personal space (or a unique Livelink url that allows users to store and manage personal information); 2) project space (or unique Livelink urls where teams perform their work); and, 3) Enterprise space (or a unique Livelink url where all employees can review corporate information such as 401K plans, company events and so forth.

With Livelink, users are not limited to searching content that is only resident in a given space. They can search across multiple projects and spaces as they see fit.

Note: The enterprise space can be easily reconfigured to support a supply chain community. In addition, the knowledge management capabilities within Livelink can be accessed from any Livelink space (or unique Livelink url). And users are not limited to searching content that is only resident in a given space. They can search across multiple projects and spaces as they see fit.

Finally, Livelink offers robust, object-level security that can be invoked across discrete page attributes, users, groups, projects and all other Livelink spaces. In addition, Livelink supports 128-bit encryption via HTTPS.





myLivelink

An additional benefit of myLivelink is to search across multiple Livelink repositories. This ability could prove critical in a Collaborative Commerce environment.

Organizations within a supply chain using Livelink and myLivelink would have complete control over to whom corporate information is exposed, both internally and externally.

As a hosted service paid by a monthly recurring subscription fee, b2bScene.com will be a major factor in Open Text's Collaborative Commerce initiatives.

myLivelink is Open Text's portal product that integrates with and sits on top of the Livelink platform. The product bears a strong resemblance to myYahoo which has become the *de facto* standard for portal personalization. As such, most users find myLivelink intuitive and easy to use.

Each window inside myLivelink is a view of content that can include an email inbox, Livelink projects, tasks, etc., newsfeeds, weather or any other content that can be accessed via TCP/IP. In addition, users can re-size these windows (called widgets), change their color and font size and their physical location within the myLivelink portal.

An additional benefit of myLivelink is the ability to search across multiple Livelink repositories. This ability, coupled with Livelink's granular security could prove critical in a Collaborative Commerce environment. For instance, individual companies within a supply chain may prefer to establish their own repository for overall security purposes while exposing certain slices of their repository to other supply chain partners on an *as needed* basis.

Indeed, cultural issues will be significant as collaborative technology enables more openness between trading partners. In our opinion, myLivelink is essential to this end, providing the requisite security discretion to reduce anxieties over intellectual capitol, trade secrets and so forth.

The bottom line is that organizations within a supply chain using Livelink and myLivelink as a Collaborative Commerce platform and portal (respectively), would have complete control over to whom corporate information is exposed, both internally and externally.

b2bScene.com

b2bScene.com is Open Text's ASP division that delivers Collaborative Commerce solutions to a variety of vertical industries, including Broadcasting and Telecommunications, Computers, Electronics, Finance and Insurance, Health Care and Pharmaceuticals and Oil, Gas and Coal.

Established in February 2000, b2bScene.com now has over 40 ASP customers, including Exostar (aerospace), eBuild.ca (construction) and e-STEEL.com (steel). In addition, b2bScene.com also provides collaborative services to the ASP consortium, the world's leading ASP think-tank that touts over 700 members.

B2bScene.com's technology partners include XIS, Inc. (for product lifecycle management), Edeal (for online auctions), eCertify (for PKI, firewall and





security monitoring), Formarket (for custom integration services) and PSIGate (for payment services).

Livelihood is used as the primary collaborative platform for b2bScene.com as well. And the ASP has secured partnerships with several content providers, including Accu Weather, Hoovers, WAVO, Double Click, Business Wire, Big Charts and PR Newswire.

As a hosted service paid by a monthly recurring subscription fee, b2bScene.com will be a major factor in Open Text's Collaborative Commerce initiatives. Indeed, it already has made considerable inroads into several verticals, most notably, aerospace and construction. And its contract with the ASP consortium further legitimizes its position in the ASP market at large.

In summary, we are of the opinion that ASP models will prove critical to customer acceptance of strategic Collaborative Commerce initiatives for supply chain communities. By removing most of the friction that would be required to establish such a community from a conventional method, including integration, resources and a common collaborative platform standard, b2bScene.com could become an almost irresistible proposition. Moreover, the monthly subscription fee dramatically reduces entry costs, thus making a Collaborative Commerce community both affordable and viable.

XIS, Inc.'s Novare

Open Text can also bring application-specific Collaborative Commerce to market via its partnership with XIS, Inc. Novare, XIS' product lifecycle management (PLM) product has already been fully integrated with the Livelihood platform. Recent customer successes include Intel, SGI, Philip Morris, Nortel Networks and Pfizer.

For Collaborative Commerce, Novare would sit on top of the Livelihood platform to add value to the product sourcing metaphase of the supply chain.

Specific value that Novare brings to the Collaborative Commerce mix includes discrete management of all product development and sourcing tasks as well as the ability to aggregate all product development/sourcing initiatives into a single window for a quick view of overall progress. By having access to all product development data from a single screen, managers and executives can easily identify slippages and rectify them accordingly, even reallocating resources on-the-fly.

Today, both companies actively market and sell Livelihood and Novare.

By removing much of the friction that would be required to establish a supply chain community from a conventional method, b2bScene.com could become an almost irresistible proposition.

Open Text can also bring application-specific Collaborative Commerce to market via its partnership with XIS, Inc.





Open Text can bring a best-of-breed Collaborative Commerce solution to market.

In summary, Open Text can bring a best-of-breed Collaborative Commerce solution that includes a collaborative platform (via Livelink), PLM (via XIS), a highly customizable and user friendly portal that can integrate all supply chain applications and components (via myLivelink) as an affordable and easy to deploy ASP model (via b2bScene.com).

In summary, Open Text has a product mix that can serve notice to the Collaborative Commerce vendors of where the market is heading. As stated previously, the overwhelming majority of Collaborative Commerce vendors focus their efforts on the product development and sourcing metaphases, also known as Collaborative Product Commerce (or CPC). Few have collaboration platform solutions, not to mention both.

Collaborative Commerce Component	Open Text Provision
ASP Model	b2bScene.com
Collaboration Platform	Livelink
Knowledge Management Application	Livelink
Product Lifecycle Management (PLM)	XIS, Inc.'s Novare
Supply Chain Personal & Community Portal	myLivelink

Table 1- Key Components for Collaborative Commerce and vis-à-vis Open Text Provisions

Open Text does and also raises the ante by furnishing a highly customizable portal product for which all supply chain components and applications can be embedded and integrated for a complete, seamless Collaborative Commerce solution.





Conclusion

Collaborative Commerce is about exchange of goods, money and information. Open Text provides an extensible platform to manage interactions across the supply chain, including:

- ④ Livelink as a collaborative platform to be utilized throughout a supply chain community.
- ④ Livelink as a knowledge management application be use primarily during the concept creation, validation and marketing metaphases.
- ④ Partnership with XIS, Inc. to furnish a PLM application for the product sourcing/development metaphase via Novare.
- ④ myLivelink as a personal and community supply chain portal.
- ④ b2bScene.com for a hosted Collaborative Commerce solution comprising the aforementioned.

From a product/service capabilities standpoint, Open Text addresses the lion's share of collaborative needs within a supply chain and thus enjoys considerable competitive advantages as a Collaborative Commerce solution.





Appendix A: About Open Text

Open Text Corporation (NASDAQ: OTEX; Toronto Stock Exchange: OTC) pioneered Web-based project collaboration, knowledge management and document management solutions as far back as 1994.

Founded in 1991, Open Text has approximately 1,000 employees across 31 countries, with worldwide headquarters in Waterloo, ONTARIO, Canada and U.S. headquarters in Bannockburn, Illinois. The company touts over 3,500 customers comprising over 4 million seats of Open Text software.

Livelink is Open Text's flagship product and is currently is on its 9th major release – Livelink 9.0. The product comprises integrated project collaboration, knowledge management, document management and process automation, all accessible from a single Web browser. As an industry pioneer, Open Text has become one of the largest suppliers of collaborative Web-based solutions for the enterprise.

As an enterprise solution, Livelink has been deployed to thousands of users within a multi-continental enterprise, the most notable being Nortel Networks where Livelink supports some 80,000 users.

Open Text also participates in several professional associations and standards, including the ASP Consortium, The Document Management Alliance, Open Document Management API (ODMA), SGML/Open, HTML Working Group, W3C, Calendaring and Scheduling Working Group of the IETF, AIIM and The Simple Workflow Access Protocol (SWAP) Group of the IETF

In February 2000, Open Text established b2bScene.com, a wholly-owned ASP division of Open Text that delivers Collaborative Commerce solutions to a variety of vertical industries, including Broadcasting and Telecommunications, Computers, Electronics, Finance and Insurance, Health Care and Pharmaceuticals and Oil, Gas and Coal.

b2bScene.com now has over 40 ASP customers, including Exostar (aerospace), eBuild.ca (construction) and e-STEEL.com (steel). In addition, b2bScene.com also provides collaborative services to the ASP consortium, the world's leading ASP think-tank that comprises over 700 members.

Additional information on Open Text and b2bScene.com can be found at www.opentext.com and www.b2bScene.com.



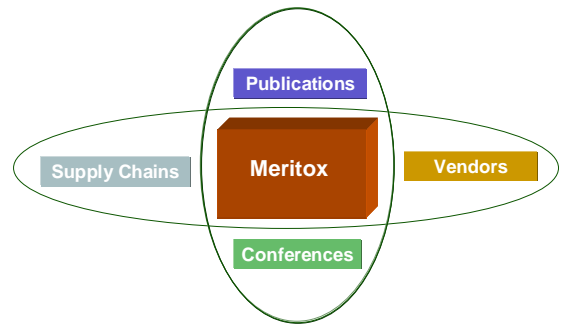


Appendix A: About Meritox Corporation

Founded in January 2001 by eBusiness analysts and supply chain experts, Meritox Corporation is a strategic advisory firm dedicated to the advancement of collaborative commerce (C2) markets and technologies. As the first to evangelize C2 benefits, Meritox has built upon this message to carve-out and validate numerous market opportunities within various industry supply chains.

By working congruently with a variety of industry supply chains as well as with collaborative-centric and commerce-centric vendors, Meritox specializes in bringing the correct technologies to the correct markets.

Our business model embodies two concentric feedback loops that drive supply and demand efficacy, and just as important, collaborative commerce market awareness. After all, corporations have little chance of securing the appropriate tools to strengthen their supply chain if they are not cognizant that such tools exist, not to mention the vendors that provide them.



Based on our business model, we have two mission statements that together, solidifies our market approach:

For e-Business Vendors:

To augment existing markets and to create new ones by assimilating industry-specific supply chain inefficiencies into application-specific products that meet industry needs.

For Organizational Users:

To augment market reach and operational efficiencies by developing blueprints, strategies and tactics for attaining the proper mix of new and existing markets that ensures organizational health and longevity.

Additional information on Meritox Corporation can be found at www.meritox.com

