



MICROSOFT BUSINESS NETWORK

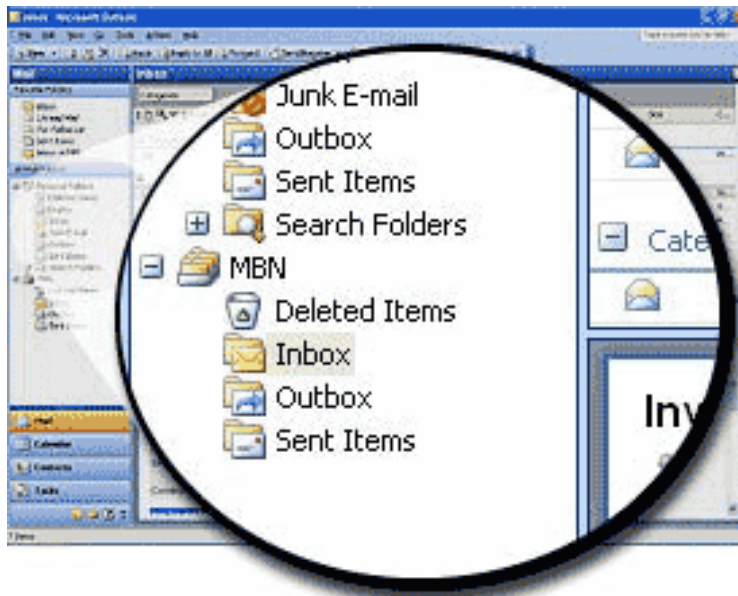
Chapter 12

MICROSOFT BUSINESS NETWORK

Microsoft Business Network offers a solution for small and mid-sized companies to automate electronic documents, such as sales orders, with their trading partners by using XML process templates and a subscription service run by Microsoft. The focus of Microsoft Business Network is primarily on supply chain-oriented services for physical goods companies. Microsoft Business Network can streamline the way your business connects with customers, vendors, and other business partners and help consolidate your business documentation in digital form in one central location.

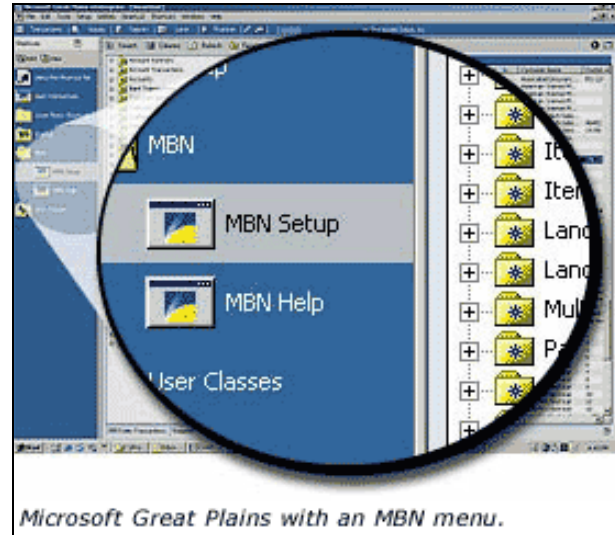
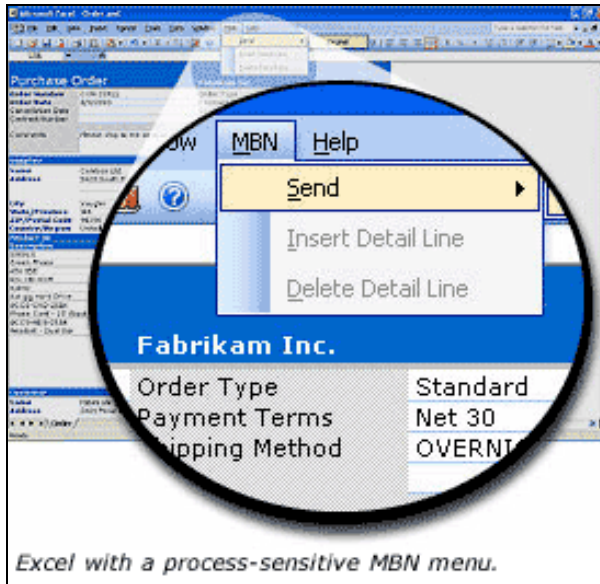
INTEGRATING WITH EXISTING APPLICATIONS

Through integration with Microsoft Business Solutions applications and Microsoft Office Professional Edition 2003, Microsoft Business Network makes Microsoft Office Outlook 2003, and Microsoft Office Excel 2003 into even more productive business applications. The use of process templates allows you and your trading partners to exchange business documents, regardless of individual technology preferences. Smaller trading partners can use Outlook 2003 and Excel 2003 to interact with you. Large trading partners can interact on the Internet using Web services or BizTalk Server. Outlook 2003 becomes the centralized location for viewing all business documents exchanged with trading partners.



Outlook with an MBN inbox.

With the Microsoft Business Network Solution, Excel 2003 can be used to create business documents such as orders, invoices, and ship notices, as well as view document history. Thereafter, Microsoft Business Solutions such as Great Plains® collects your transaction data and integrates it into your general ledger.



Microsoft Business Network is a Microsoft .NET-connected solution that integrates with Microsoft Office Professional Edition 2003 and optionally with Microsoft BizTalk® Server and Microsoft Business Solutions applications, starting with Microsoft Great Plains. Process templates expand on the traditional template concept by addressing a complete, end-to-end set of business activities. In fact, process templates can enforce that certain steps of a business process occur in the proper sequence as defined by the publisher of the template.

For example, the orders-to-cash process template in Microsoft Business Network includes the following key activities: price list, order, acknowledgment, shipping notification, and invoice. This process template and others can reduce the time and effort involved in all phases of order processing.

COMPARISON OF MICROSOFT BUSINESS NETWORK EDITIONS

Task	Standard Edition	Professional Edition
Manage a directory of trading partners	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Use Microsoft Office Outlook® 2003 and Microsoft Office Excel 2003 for managing business documents	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Integrate with Microsoft Business Solutions–Great Plains® 7.0 or 7.5 and Microsoft BizTalk™ Server versions 2000 and 2002		<input checked="" type="checkbox"/>
Create and distribute business process templates		<input checked="" type="checkbox"/>
Invite customers and suppliers to join a trading community		<input checked="" type="checkbox"/>

SUPPLY CHAIN DISCUSSION

Supply chain solutions are now well-proven and readily available to virtually all companies through solutions such as Microsoft Biztalk and others. It is predicted that there will be an unprecedented explosion in supply chain automation throughout the United States and as well as the rest of the world over the next decade, and in fact this revolution has already started within many industries. It is also predicted that many of those who fail to embrace supply chain technologies will ultimately be left behind.

Wal-Mart Sets the Standard for Supply Chain Automation

Over the past twenty years, we've seen dramatic improvements in accounting system supply chain technology – so dramatic in fact that those who do it well are able to dominate their competition and drive them out of business. Consider Wal-Mart for example. In the early eighties, Wal-Mart placed heavy emphasis on developing and implementing tight supply chain solutions which has catapulted them not only to the top of the retail channel – but into the history books. Consider this example:

Let's assume that you purchase a flashlight at Wal-Mart. The cash register reads the bar code price tag and reportedly within fourteen seconds, the Wal-Mart central warehouse is notified that the Wal-Mart retail store needs a new flashlight for the shelf to replenish the purchased item. Further, the manufacturer is also automatically notified that the Wal-Mart central warehouse needs a new flashlight. Even the raw material suppliers are notified that the manufacturer now needs a little more raw materials (plastic housing, switches, light bulbs, etc), and so it goes – all the way up the supply chain. *(According to industry analysts J. Carlton Collins, CPA – “Sometimes just for fun, I like to let the Wal-Mart cashier ring up an item, then I wait fifteen seconds, then I tell the cashier that I changed my mind – I no longer want the item. I have no idea what impact this has on Wal-Mart's supply chain, but it gives me a great feeling of power.”)*

Wal-Mart's legendary supply chain technology has allowed them to break the three-day barrier that some economists in the eighties felt was largely unbreakable. In other words, Wal-Mart is often able to replenish items on the Wal-Mart shelf in less than three days – not from the central warehouse to the shelf, but all the way from the manufacturer to the shelf. With quick and reliable 2-day turn around, Wal-Mart is able to maintain lower levels of inventory and still meet customer demand. These lower inventory levels result in either a reduced floor plan with lower carrying costs and lower interest expense – or a greater diversity of products on the store shelves. *(ie: With faster replenishment, Wal-Mart can get away with carrying just 5 toasters instead of 10, thereby freeing up more shelf space for those George Foreman Hamburger cookers.)*

Additionally, because Wal-Mart is better able to order inventory on demand, the company is in a better position to meet customer demand. Today's fads (pet rocks, crazy bones, Pokemon cards, etc.) are tomorrow's obsolete inventory. Wal-Mart's superior supply chain technology allows the company to better avoid carrying an oversupply of fad items. Consider that just twenty years ago, companies like JC Penny's was ordering goods a full three months ahead of arrival, making the ordering process mostly guess work trying to determine if a particular leisure suit would still be in style by the time it hit the shelves. This was such a big problem that an entire industry emerged to address this problem. Companies such as T. J. Max and Big Lots emerged to take

obsolete inventory off the hands of companies that had over-ordered and move those items through deeply discounted outlets.

To fully appreciate the benefits Wal-Mart reaps from its' superior supply chain solution, consider the traditional labor-intensive paper approach which is still employed by millions on companies today. Without an automated supply chain, an employee must make a periodic physical inventory count – usually using a clipboard and inventory report. Later, the actual quantities on-hand are then compared to the target quantity levels in the back office to flush out the re-order quantity. From there, employees fill out purchase orders and phone them into the central warehouse – all the while generating expenses for labor costs, paper supplies, and even the long distance phone call. Inefficiencies are a certainty. On many occasions, employees placing orders via the telephone are placed on hold for several minutes, costing valuable time. Eventually the purchase order details are read aloud to the order taker at the central warehouse – a very inefficient process by today's standards. Even in the event that a fax machine is used, there are great inefficiencies there as well. Fax machines are sometimes temporarily unavailable as other documents are sent or received. Fax machines can also feed documents poorly on the originating side, or run out of paper on the recipient's end. Once received, faxes can sit for hours or days before they are processed. As processed, faxed data can be inaccurately entered into the system due to illegible documents or keystroke errors. And so it goes down the supply chain from one supplier to the next supplier – the same inefficient process costing many days of turn around time, many hours in labor costs, and much higher risks of errors.

As a real life example, consider J. Carlton Collins, CPA's personal supply chain experience, which is actually quite comical:

“In 1994 I built a new house in Atlanta, Georgia and installed a personal fax machine in my basement. Almost immediately I began receiving internal fax orders from a large national heating and air conditioning company called [Pameco](#). I was very concerned that their important purchase orders, service requests and administrative documents were not reaching the proper recipients. For several years, I made diligent efforts to contact the parties who had faxed me in error to inform them of the problem. In each case I then forwarded the errant faxes to their proper destination. I estimate that this actually cost me several hundred dollars in long distance charges, not to mention my time, paper and toner. After a while, I grew tired of Pameco's intrusive faxes. They continuously gobbled up my fax paper and prevented me from receiving my own faxes properly.”



“Eventually I tried other tactics in an attempt to get Pameco’s attention. At times I used WinFax Pro to send their faxes back to their senders one thousand times. Along with these faxes I sometimes inserted nice messages, and at other times I inserted messages that were not so subtle. Mostly I just threw Pameco’s internal orders and faxes and messages in my trash can. Then one day in 2000, I received sensitive employee review information. I called Pameco the various Pameco employees referenced in the faxes and I read them their social security numbers, their salary levels, and intimate details of their employee reviews. This caught their attention. Finally, I was able to talk to a Pameco person who identified and resolved the problem. Apparently if you dialed an internal fax number from the Pameco phone book, and you mistakenly matched the prefix on line 4 with the 4 digit number on line 5 – you got my fax number by mistake. To solve the problem the Pameco representative inserted a blank line between each fax number and finally, this seemed to take care of the problem.

While this fix worked for about one year, I soon began receiving Pameco faxes again. I was perplexed at how to solve the problem. After nine years of errant faxes, Pameco finally went bankrupt in 2003 and was absorbed by United Refrigeration, Inc. Looking back on the nine year ordeal, I am amazed at how many internal errors were generated by Pameco’s errant faxes. The hand written Pameco sales orders which I routinely threw in the trash can were for tens of thousands of dollars. I can only imagine that these mistakes cost the company tens of thousands of dollars over the years, if not a whole lot more. I can only imagine that their inefficient, hand written, slower faxed based method of communicating left the company wide open and prone to errors and problems like the ones I intercepted. The dozens of phone I made to Pameco personnel over the years apparently feel on deaf ears.

Today millions of companies transact hundreds of millions of transactions each day using the same in-efficient hand written, “faxed-in” or “phoned-in” method I just described. It is easy to imagine that many of these companies are suffering from same problems described above – improperly dialed phone numbers, illegible orders, inherent keypunching errors, time delays, and the list goes on. Even those companies who are operating their supply chains manually without losing orders are still suffering from expensive labor and a slower turning inventory ordering process. This is definitely worth thinking about.

Automating Your Supply Chain Technology

The first step in implementing an automated supply chain is to establish a connection between the supplier’s and customer’s accounting systems. This requirement used to represent an enormous barrier. Prior to the widespread adoption of the Internet (1995 or so), companies were basically forced to lease a dedicated line from the phone company at very high costs typically ranging from \$75,000 to \$250,000 annually. This barrier alone made automated supply chain solutions out of the reach of most companies. Today, the Internet easily meets this need for a nominal cost – especially since most companies have already established high-speed connections to the Internet. Chances are very good that your company can automate its’ supply chain using your existing Internet connection.

The second step to automating your supply chain is to make sure that your accounting software system can communicate with your supplier's accounting system. If we all used the same accounting system, this would be easy. This is because the information contained on the typical purchase order is the exact same information contained on the typical sales order. Your purchase order that you intend to send to your supplier contains the customer name and address, shipping address, terms, shipping method, and detailed information regarding the inventory (or services) being ordered. Once you have created this PO in your system, it should be a relatively easy process to send it directly into your trusted supplier's system. In this manner, your supplier does not need to re-enter the information – the electronic transaction is posted in the blink of an eye – virtually without error and without the need for human intervention.

The only problem with this scenario is that we don't all use the same accounting system – a given customer may use MAS 90 while the supplier uses Navision. Therefore, a supplier's Navision system will not be able to read and interpret the data from the customer's purchase order as produced by MAS 90. To resolve this problem, intermediary companies arose more than a decade ago to address this issue. Companies like Harbinger acted as an intermediary (also referred to frequently as an electronic bridge), receiving PO's from one customer, translating the data into a new format, then sending that revised PO to the supplier – all still in the blink of an eye. In this case, Harbinger tacks on a nominal surcharge (for example 20 cents a transaction). This solution is commonly referred to as Electronic Data Interchange (EDI). EDI represents a well-proven approach to linking together dissimilar systems to achieve an automated supply chain.

Selected EDI Solution Providers:

1. Microsoft BizTalk Server Solutions (<http://www.microsoft.com/biztalk/>)
2. GE Global Exchange Services at www.gegxs.com
3. Edict at www.groceryec.com or www.retailec.com
4. ICCnet at www.icc.net
5. Quick Response Services (QRS) at www.qrs.com
6. Sterling Commerce at www.stercomm.com
7. Tradewinds at www.tradewindec.com

Direct Supply Chain Solutions

EDI and supply chain solutions have proliferated for more decades, however newer solutions that are easier to use and far less-expensive have recently emerged. Accounting software vendors have embraced these solutions and have introduced functionality that allows dissimilar systems to talk directly to one another. For example, Navision Software has built in functionality to the Navision product that allows it to interact directly with other well-known products such as SAP R/3 and R/4 software. It is time for all companies everywhere to investigate supply chain automation possibilities to meet their own supply chain needs.