Overcoming the B2B Solution Gap: Business-to-Business Interaction with Small to Mid-Size Businesses

Automating Interactions with more Trading Partners to drive Business Success

All businesses, big and small, manage many interactions with different communities each day. The enterprise interacts with employees, consumers, small businesses, mid-size businesses, and large businesses (see figure 1). These interactions are critical to the daily operation of the business. Inefficiencies that exist in the interactive processes of the enterprise create several business problems. These problems range from costly delays and errors in business execution, to slow responsiveness to market shifts. Delays often arise from tracking down faxes, e-mails, and phone conversations to determine the status of a purchase order, invoice, or shipment. Labor-intensive processes have a direct impact on the bottom line of business: profit margins and shareholder value.

The technologies that support automated interaction vary across these communities. In the business-to-employee (B2E) scenario, Intranets have recently played a central role in facilitating interaction, and employee-facing portals support an expanding number of business processes.

In the past several years, the Internet has dominated Business-to-Consumer (B2C) initiatives, enabling the addition of another interaction channel. The need to capture customer information across multiple channels spawned an entire solution industry, appropriately called Customer Relationship Management (CRM).

But what about business-to-business?

Business-to-Business (B2B) processes support interactions with trading partners (i.e., Suppliers, Customers, Channel Partners), and represent the most complex and costly processes within and across companies. When these processes are manual, they can be very costly.

- Overall costs per paper transaction are five to twenty times higher than electronic transactions
- Errors can approach sixty percent of transaction cost and are very expensive to fix
- Poor visibility can lead to higher inventory, out-of-stock situations and lost sales
- Errors and exceptions result in greater demands for customer service
- All of the above impacts customer satisfaction and leads to lost customers
- Manual processes can inhibit growth

Manual processes are generally not an issue when dealing with interactions between large businesses. For years, interactions automated by Electronic Data Interchange (EDI) have driven communication between large businesses. EDI has resulted in a significant reduction in overall costs and an increase in operational efficiencies. However, EDI itself is both costly and complex. Many large companies are beginning to leverage new communication mechanisms to drive their B2B interactions (See figure 2).

These solutions will further reduce the cost of procurement, and the costly infrastructure supporting EDI, but generally as an evolution from current solutions and processes. For example, the EDI networks and integration software offerings that large business uses today will evolve into collaborative hubs that manage many trading partner processes.

One tier down from the large business, the use of B2B technology varies among the mid-size businesses. Some mid-size businesses act very small in their use of technology. Manual processes are the norm, and the realization of cost savings and operational efficiencies is elusive. Others are more sophisticated in their use of Web
EDI solutions, possibly also using hosted applications to support sales or other business processes. Still other mid-sized businesses have full IT staffs, and embark on internally managed ERP and EDI initiatives of their own.

For the most part, small businesses interact with their trading partners via manual processes. These businesses usually run their operations using popular PC packages like QuickBooks, and have no option but to utilize labor-intensive approaches.

**So, what about the small guy?**

The small and mid-size business (SMB) sector, as defined by the SBA, now accounts for more than 50% of U.S. GDP. A small snapshot of several vertical industries highlights this point.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastics industry</td>
<td>Over 5,000 plastics suppliers and 18,000 plastic processors who trade in 30,000 grades of materials</td>
</tr>
<tr>
<td>Chemicals industry</td>
<td>Over 500 global producers of thousands of complex products; complicated distribution through over 50,000 intermediaries</td>
</tr>
<tr>
<td>Healthcare industry</td>
<td>Over 7,500 distributors selling complex, regulated products to 275,000 hospitals</td>
</tr>
<tr>
<td>Food Services industry</td>
<td>Over 2,000 producers; 20,000 distributors, and 750,000 restaurants/operators</td>
</tr>
<tr>
<td>Printing industry</td>
<td>Hundreds of national printers and over 50,000 regional printers in the US alone</td>
</tr>
</tbody>
</table>

A large percentage of SMB firms have unique needs. They operate with limited IT resources, continuous cost pressures, and limited discretionary capital for long-term IT investments. These firms require quickly deployed solutions that are cost-effective and adaptable to meet the needs of a growing business. Solutions that automate customer and supplier interactions are outside the reach of most small businesses, or actually add more work and complexity to their processes. Some of the issues that small businesses face with such solutions are:

- **More work** – Lack of integration means additional data entry for the small business. Instead of just printing and faxing an invoice for example, they are expected to re-enter it on a website or other non-integrated EDI system.
- **No consistency** – Partners often have different systems, making each one a different exception process. Paper is presently the preferred solution for the SMB, as it is the only common denominator.
- **Tools are difficult and costly** – Many tools are hard to use, requiring training and IT resources. Additional IT effort is required to integrate these tools with existing systems.

These issues cause the SMB to resist difficult and costly automation initiatives. In most cases, these solutions are not cost-effective for SMB relationships, as demonstrated by the lack of EDI adoption in the SMB community. This lack of software adoption among smaller value chain members prevents the large firm from realizing further cost reductions and operational efficiencies. This is significant, given that small and mid-size businesses account for typically 20-50% of transactions, and the higher costs of handling these transactions means that small and mid-size trading partners can drive 70-90% or more of total processing costs.

Increasingly, these large firms are looking for both current and new partners to interact with them via online channels. Driving partner adoption of B2B automation is an active initiative within these firms, and increasingly encompasses the smaller as well as major partners. Some large firms are willing and able to mandate adoption by partners; despite the pain, this causes them. Their importance as a customer enables these tactics, and fear of replacement drives partner adoption.

Most large firms however, have partner relationships that are more multi-faceted and require the use of a carrot not just a stick. These firms realize...
they need solutions with an improved ability to meet their partners’ needs. This is obviously even more important when it comes to connecting customers & channel partners.

The “large Firm” focus of traditional B2B solution providers, combined with the issues faced by the SMB, creates a “Solution Gap” as depicted in figure 3. The small business, with 100 employees or fewer, is highly affected by this gap. Interactions supported by manual processes continue to be the norm. The telephone, fax machine, and email represent the common approach to B2B communication.

The mid-size business, those businesses with 100–999 employees, is somewhat affected by this solution gap. Those businesses that are technology-savvy, and have the resources, have adopted some of the new solutions. Others continue to rely on the same manual processes that small businesses rely on.

Several barriers to solution adoption create this gap. Non-integrated solutions pushed by larger partners create more work. These solutions are generally partner-specific and create exception processes. New technologies, capable of eliminating these barriers, are too expensive and complex. The barriers to adoption for the SMB have historically been too high to overcome; this however is changing.

The barriers are falling

Several forces are converging to eliminate the barriers to SMB solution adoption. The Internet is enabling access to B2B solutions, while the rapid acceptance of XML has enabled cost effective solutions that connect with traditional EDI infrastructures. XML facilitates the exchange of data between disparate or hybrid platforms, operating systems, applications and trading partners. Increasingly, the Internet and XML-based technology combine to remove other barriers to easy B2B connectivity. This powerful combination promises to extend the EDI infrastructure, enabling broader adoption of automated B2B interactions.

Web Services technology is another significant force that contributes to the elimination of adoption barriers. Web Services are a new set of Internet standard technologies that further simplify the process of connecting the various links of the B2B chain. In particular, they enable the creation of lighter-weight solutions that can plug into the traditional EDI and B2B service infrastructure, making it accessible to a broader market.

Although XML and Web Services technologies enable effective and accessible integration, the solution gap still exists for many small and mid-sized businesses. New technologies and solutions for these businesses lack the ability to go the last mile, that is, they do not integrate with their existing systems.

Going the “Last Mile”

In order for solutions to overcome the barriers to SMB adoption, they must have several key characteristics.

- Easy to deploy and use, with little to no IT required
- Integrated “out of the box” with SMB applications and processes
- Saves time by providing a complete solution from the perspective of the SMB, not just the enterprise
- Delivers one process for all of the SMB’s partners, not just another exception process
- Priced for the SMB market

The Traxian Inc. solution has these characteristics. Traxian’s Tmail application is desktop software that works from within popular small business applications such as QuickBooks, Peachtree, and Excel. A pre-configured setup using a web or emailed link, automates the technically complex setup of trading partners, via their existing service provider or software solution. Alternatively, Traxian Tmail provides easy-to-use tools for integrating with other applications via SQL or flat file format.

This allows fast, low cost setup of SMB partners. In addition, the Tmail client integrates with service offerings from EDI, logistics, and financial service providers. Their transaction, translation, mapping, validation, and delivery
services, ensure full compliance with enterprise requirements, enabling Traxian to deliver end-to-end solutions for the entire trading community.

For the SMB, Traxian delivers value by making it easy to automate their transactions. For example, from within QuickBooks, a small business manager can automatically transmit an invoice by clicking a button without the burden of knowing the receiving environment; likewise, they can eliminate data entry by receiving an order from a large trading partner directly into QuickBooks.

The small business can easily comply with their partners requirements, and save time by automating their transaction processes. The large trading partner eliminates the costs and inefficiencies associated with paper transactions while further leveraging their investment in their EDI network.

Figure 5 portrays a high level view of the Traxian solution. This view underscores how Traxian enables B2B adoption by entire trading communities. All players within a particular value chain reap the benefits of integration by plugging into the chain.

Small and mid-size businesses link to the trading community via a Traxian connection. In some cases, the SMB will use a Traxian connection and a hosted service connection. Mid-size and large businesses with sophisticated infrastructures link to the community via existing service providers or software infrastructure. This end-to-end solution enables the SMB to interact with the existing infrastructure of larger firms.

**Summary**

Significant barriers to adoption have prevented the SMB from realizing the benefits of B2B solutions. The small and mid-size business can overcome these barriers with the use of “Last Mile” integration technology from Traxian.

The “Solution Gap” is closed. Traxian goes the last mile to enable automated interaction between all the members of a value chain.

**Frank Diana, Vice President of Business Development**

Frank has over 20 years of strategic management experience in the Information Technology industry. Before joining Traxian, Frank was a Chief Technology Officer at Fujitsu Consulting (formerly DMR Corporation), where he developed strategic offerings around web services, XML, enterprise application integration, Internet EDI, EDI to XML translation, ERP, ASP, and B2B communities. Frank has published several articles on the future direction of the B2B and Business Process Management marketplaces and delivered keynote speeches at industry conferences.

Frank began his career at AT&T, holding various roles including CIO for AT&T International. He received a BS in Computer Science from Rider College.

**About Traxian** ([www.traxian.com](http://www.traxian.com)). Founded in 2001, and headquartered in San Francisco, California, Traxian is dedicated to enabling companies of all sizes to eliminate paper by making electronic transactions easy for their mid-sized and small business partners. Traxian’s intuitive Web Services software meets the needs of trading partners at both ends, delivering “last mile” integration between popular small business software such as QuickBooks, and enterprise transaction systems such as EDI.