SMALL BUSINESS EDI INTEGRATION

Integrating EDI for users of small business accounting and ERP software

The promise of EDI integration has always been alluring, but financially out of reach for the small business owner. With over 80% of data integration projects failing, small businesses have had reason to shy away - until now.
Introduction

EDI adoption often happens in stages. The vast majority of small businesses are forced into adopting EDI by a large retailer. This “mandate” brings the small business into an often confusing and technically difficult world where the promised financial benefits of “paper-less” transactions can be difficult to quantify and even more difficult to realize. This is phase one of EDI adoption and is often characterized by manual processes. As the business grows, it invariably enters Phase 2 of EDI adoption. In this “growth phase” the small business begins to process more and more EDI transactions and begins to realize that a critical deficiency exists in the receiving of EDI data from customers, printing that EDI data in the form of reports and re-keying that EDI data into the in-house accounting or ERP system by employees dedicated to this task.

At Phase 3 of EDI adoption the question of data integration, specifically EDI integration, becomes a key goal of the small business. Data integration is a brave new world of ultimate efficiency: increased inventory turns and reduced labor costs that every business aspires to achieve. The cost savings can be dramatic even for a modest operation that would ordinarily never consider a data integration solution. Realizing this utopia of paperless transaction processing, however, is fraught with dangers and has traditionally been costly and reserved for the financially wealthy businesses of the world. What’s a small business to do?

EDI to ERP integration is vital

Over 50% of medium-sized businesses will have ERP systems in-house by the end of this year. With keying errors responsible for thousands of dollars in costs, integrating ERP and EDI is mission critical.

The need for integration

As a small business, understanding why integration makes sense is the first step. EDI integration has been successfully implemented in large, Fortune 500 organizations for many years with concrete, measurable returns on investment. The surprising part for most small businesses is that EDI integration can make a significant positive impact even at low revenue numbers. This is due to two key factors that every small business that does not use integration must deal with every day.

1. Human beings make mistakes

One of the biggest challenges associated with doing business with a large retailer is the concept of chargebacks. Large retailers will charge their vendors for mistakes in shipments received by the retailer. These mistakes are most often a direct result of poor data entry and can run into the tens of thousands of dollars per year for a business with an even modest amount of transaction volume. In addition, there are usually financial penalties imposed on small businesses by their larger trading partners – these can run into thousands of dollars each year.

Can your software scale?

Any EDI integration solution must give you the flexibility to grow from the affordable requirements you have today to the high transaction requirements you will have in the future.

Figure 1: The 5 Phases of EDI Adoption
2. Data entry is expensive

Manual data entry of orders received by EDI has a direct impact on the bottom line in the form of hourly wages spent on data entry that could otherwise be re-purposed. At what level does a data entry clerk become unproductive due to the volume of orders being received? Figure 2 above shows a typical example of the costs associated with manual data entry. Calculating the baseline cost per transaction is relatively straightforward, assuming a data entry clerk requires 5 minutes to process each transaction and that their annual “burdened” labor cost is $55,000. Using the above data we can then calculate the annual cost of manually processing EDI based on the number of transactions per year as seen in the graph below. Looking at the associated costs of just entering EDI data manually it becomes obvious that even with as few as ten transactions per day (2,600 per year) manual data entry can quickly add up to large costs in time of people being used for manual tasks that could just as easily be handled by an effective data integration system. At this point the small business begins to enter the perilous Phase 3 of EDI adoption: data integration. Done properly this stage can help the small business grow and achieve incredible efficiencies, reductions in costs, and improvements in revenue and inventory turns; done badly it can lead to disaster.

Integrating EDI can lead to disaster

You’ve been sold on the concept of integrating your EDI data into your in-house accounting system. You’ve asked your IT staff to research available solutions, and then comes the shock: the realization that even if you can muster the exorbitant fees to purchase the necessary software to realize your integration needs, your lack of in-house expertise might cause the entire project to fail from the very beginning. In fact you are not alone: a 2003 report by the Standish Group found that over 88% of data integration projects fail, with over half of those being completed a full 170% over the original budgeted time. These dismal performance figures for data integration are attributable to key deficiencies from which all business suffer. Small
organizations often find that data integration projects fail due to three primary reasons:

1. **Poor understanding of the business processes**

   Small businesses are well known for lack of planning and for working in ad-hoc methods. It’s the nature of a small business to be reactive instead of proactive. This business philosophy, unfortunately, runs completely counter to what is required for proper data integration planning. Before even commencing a data integration project, a business must understand the processes behind the systems being integrated. How many transactions will need to be sustained? What type of growth will the system need to absorb over the next three, five, or ten years? What systems and procedures inside the company will be affected? How will the company need to change over time to account for integration requirements?

2. **Lack of technical skills and knowledge**

   The second challenge is one of lack of domain expertise. Small businesses are experts at their business, not data integration. Often small business owners fail to realize the technical complexities involved in data integration: What transaction sets will need to be integrated? Where does that data live, inside the ERP or accounting system? What file format will be used to transfer the data? How difficult is the data integration software to use? What will our learning curve be?

3. **Lack of time and resources**

   As a small business having enough people to do the work required to run the business is difficult enough - after all that’s why you decided to integrate in the first place, to free up resources - but who will lead the data integration? Is IT properly staffed? How long will it take? How expensive will it be? If the data integration company does it for me how much will that cost?

   Navigating the maze of data integration is at best a risky proposition. It’s for these reasons that a 2003 Standish Group study found that nearly 88% of data integration projects fail with half of those being stopped before completion and the other half being completed late and at an average of 173% over the original time estimate.

So what’s a small business to do?

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**Making EDI integration easy and affordable**

With more than a dozen years of experience successfully completing data integration projects for both small and large organizations, DiCentral has carefully considered this challenge to determine how best to solve it for our customers. We have come to understand that data integration requirements tend to fall into one of three areas:

1. **Large scale data integration**

   This is the most obvious area where in-house data integration skill is required and must be performed using traditional tools and processes. Large-scale data integration typically involves multiple systems (ERP, EDI, CRM, SCM, etc.) and is typically performed by larger companies that can measure return on investment in years instead of weeks or months. These projects are fraught with the most danger and require the largest amount of planning and expense. These types of integrations can easily costs millions of dollars.

2. **Continuous data integration needs**

   The second type of project that requires in-house data integration expertise as a pre-requisite is when the data being integrated will be changing on a frequent or regular basis. A typical example might be a supplier whose trading partners change their EDI specifications on a regular basis or one that expects to make frequent changes to the in-house systems to which the EDI data is being mapped. These data integration projects are significantly more limited in scope but require dedicated personnel who will take the time to plan the integration, learn to use the mapping tools, and make changes over time as required.

3. **Fixed-term, small data integration projects**

   This type of integration, once completed, changes at a very slow pace and will not need modification for a number of years. Companies that need this type of EDI integration can benefit from data integration but are often dissuaded from doing so because of the associated costs and risks of failure. Until today, this type of business had only two choices: maintain the existing manual data entry processes and all their associated inefficiencies, costs and risks, or venture into the equally daunting world of data integration and hope for the best.
Data integration for the small business

To resolve the challenge of data integration for the small business DiCentral set out to create a new product that could provide data integration without the challenges typically associated with it. We understood that in order for data integration to succeed for the small business DiCentral would need to take the place of the domain expert. Both the large scale and continuous change models of data integration have domain expertise, but this is lacking in the typical small business. As the domain experts we set out to resolve a number of issues:

- EDI data must be mapped from the EDI software to in-house ERP and accounting systems.
- The customer should be provided with all of the software needed to get operational quickly and at the lowest possible cost.
- Because each data integration project has its own nuances and unique needs, the customers would need dedicated help in setting up and configuring the data integration project.
- Any updates and changes must be made available to customers quickly and easily.

With the requirements listed above we offer DiTranslator, the first EDI data integration package for small businesses designed around the financial and technical needs of the small business. DiCentral DiTranslator makes data integration easy with four key benefits:

- A strong, robust EDI package that can handle a growing business and its EDI needs. DiTranslator provides a reliable EDI platform that can scale from as few as one transaction per day to as many as thousands per day.

- An integration adaptor pre-crafted to map EDI transactional data from DiTranslator to popular ERP and accounting systems. With support for systems like QuickBooks Pro, Microsoft Dynamics, and many others, DiCentral DiTranslator provides the adaptor each business needs to bring EDI data into their in-house system quickly and efficiently.

- A communications package to help you get started with EDI transactions. Translating the data and bringing it into your in-house system is only the beginning. You eventually need to send the data to your trading partners. DiCentral DiTranslator comes with software for FTP communications with an upgrade path to an AS2 compatible product.

- The peace of mind of knowing that DiCentral is there to support your system. As ERP providers and trading partners change their requirements, our software will change with them, giving DiTranslator customers the benefit of a fully supported system without the worries of in-house maintained data integration projects.

- An upgrade path to an enterprise-class data integration platform. Of course businesses grow. With DiTranslator your investment is safe. As your business grows and your needs for data integration grow we will be there by your side, ready to provide you with tools like DiCentral DiUnite - a powerful any-to-any data integration platform rated at over 17,000 transactions per minute.

About DiCentral

Founded in 2000, today DiCentral is a leading global innovator in the EDI (Electronic Data Interchange) industry segment. A broad range of Software plus Services solutions enables a seamless exchange of data throughout supply chain networks. DiCentral’s integration solutions are scalable to the size, growth, and unique requirements of each business. In addition, DiCentral develops and markets a complementary suite of supply chain applications for retailers and suppliers, including EDI Testing, Global Enablement, Web EDI, Managed Services, and more. Visit http://www.dicentral.com to learn more.