

Effective Data, Inc.
White Paper:

*The Benefits of EDI
Outsourcing for Increased
Profitability*



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Introduction

During the last year, Effective Data has seen an unprecedented surge in the number of companies approaching us about outsourcing their EDI operations. While we continue to provide detailed analyses of individual companies' situations as requested, we felt that a general summary of the issues surrounding EDI outsourcing was appropriate. In the pages that follow, we will present our view of the benefits gained with an EDI outsourcing solution. From there, it is a simple task to perform a high-level cost/benefit analysis for any size business based on their EDI initiatives.

Effective Data specializes in *EDI Consulting* and *Data Integration*. Founded by EDI experts, ED has been a pioneer in the electronic commerce-consulting arena since 1991. ED believes that a successful EDI solution requires more than technical expertise on emerging trends. Each Effective Data EDI solution is based on a unique collaboration of strategists, developers, and project managers. ED's Consultants are all full-time, unbiased EDI veterans with the desire and determination to succeed. Our specialists deliver EDI solutions aligned to meet the client's specific technology needs, business objectives, and desired time to market.

The analysis of EDI outsourcing for a given business depends upon their starting point: is the business just beginning EDI operations, or are they currently engaged with one or more trading partners doing EDI? The answer to the first question is summarized in the Afterword to this paper, and those starting their EDI operations from scratch are encouraged to skip to that section for a discussion specifically tailored to that circumstance. The rest of this paper will be dedicated to the study of EDI outsourcing for those companies that are currently engaged in EDI operations with one or more trading partners.

Executive Summary

The initial proposition of EDI for any business is an attractive one: make a one-time, up-front investment in hardware, software, and mapping, and then reap the benefits of decreased per-transaction costs in perpetuity. But once the organization has recovered its initial investment, many times it begins to see their EDI operation as a cost center, and begins to look for ways to decrease EDI expenses. The issue in front of management becomes how to continue to process EDI at an equivalent level of efficiency while reducing operating costs. Another way of saying this is: companies that do not look at lowering costs become uncompetitive in the global marketplace.

For most businesses, EDI outsourcing represents a means for them to provide the level of efficiency and effectiveness of their current EDI operations, but at a reduced cost. The primary cost savings is in the area of staffing, but other gains are possible in the areas of software, maintenance, and error handling. There are also intangible benefits such as improved trading partner relationships, decreased ramp-up time with new trading partners, decreased down-time, on-demand mapping resource availability, and eliminating a department not in line with the business' core competencies. In all but the most unusual circumstances, EDI outsourcing will provide businesses with a more cost-effective means to continue their EDI operations.

Statement of Problem

The EDI department in most companies falls into one of three categories. The first is a one-man shop with minimal transaction volume, where apart from the occasional mapping changes or version upgrades, the resource spends most of his or her time waiting for new EDI activities. The second is the opposite, a one- or two-man shop overburdened with long-overdue change requests, constant production problems, and new trading partners stymied at their attempts to come on-line due to the backlog. And finally there is the robust EDI shop, where a department of 3 to 10 people manage round-the-clock EDI production operations, handle mapping requests, implement version changes, perform backups, interact with trading partners, develop implementation guides, and rotate on-call schedules.

In all three of these scenarios one can pick out the inefficiencies. In the first, the company is allocating resources towards staff that goes underutilized. The second is worse, as business opportunities are not being advanced, and revenue is lost, due to understaffing. Finally, the last example, where despite its efficient appearance, the company has dedicated a huge annual budget to develop proficiency in a discipline that it may have a difficult time turning into a profit center.

The two main issues here are efficient use of staff and core competencies, but there are other considerations for any EDI operation: the investment in hardware and software, including maintenance; error handling, and its effect on trading partner relationships and the bottom line; site and network security, and the investment required to maintain them; down-time management; environmental stability; system redundancy and backup procedures, including disaster recovery; and employee acquisition, retention, and career path management. All of these factors play a role in determining a company's direction for its EDI operations, and all of them have a direct effect on the IT budget.

Given that a company has a significant investment in EDI infrastructure and established relationships with numerous trading partners, how can a company reduce costs for EDI operations while still providing equivalent (or better) service to the organization and its trading partner community?

Hypothesis

An EDI outsourcing company that is equipped and trained to deliver quality EDI services to any scale business, and through economies of scale can extract efficiencies impossible to achieve at most trading partner companies. Outsourcing EDI may also alleviate numerous headaches associated with EDI delivery. As a result, EDI outsourcing allows companies to continue to realize the benefits of EDI while reducing direct and indirect costs in the areas of staffing, software, maintenance, and error handling.

Support

Superior EDI Delivery

An EDI outsourcing company must be properly equipped to accommodate the most stringent requirements from its customers. They have secure physical sites, and as appropriate, can provide redundant power supply, environmental control, fire suppression, restricted physical access, hack-proof network firewalls, 24/7/365 monitoring, emergency natural disaster plans, and excess capacity for telecommunications. They will most likely have the option of things such as co-located mirrored servers, RAID-5, daily backups, off-site tape backup storage, and archive capability. And most importantly they will have the staff needed to accommodate any circumstance that arises. They will have a networking and infrastructure team ready to install, configure and maintain any needed hardware, software, or communications. They will have operations staff monitoring processing and handling inquiries, errors, and failures. And they will have EDI mappers with expertise in most common translator packages and platforms.

Staffing

Justifying an EDI outsourcing solution by eliminating staff is the most common approach to earning management approval for such a transition. In many cases, the total amount spent by a given company for one year of EDI outsourcing is less than the annual salaries and benefits paid to the personnel in that company's EDI department. But let's assume that this fact is not true, and look at some of the other aspects of EDI staffing that should be considered.

The first is staff acquisition. Turnover is inevitable with any IT department and staff acquisition costs are high. Chances are better than 50/50 that you will have to pay the new employee more money than you paid the previous employee. Perhaps significantly more, especially if you have an older, out-of-favor, or complex translator package for which trained personnel are difficult to find. The associated acquisition costs in dollars and man-hours can be high to recruit qualified individuals. Remember also that the former employee's duties must be assumed by other staff until a replacement is found.

Next is staff retention and career path management, which are difficult tasks with EDI personnel. EDI is very specialized, tedious work that is very focused on maintenance over the long run, meaning EDI personnel are more likely to get bored and restless. Furthermore, EDI has a very visible ceiling on an employee's advancement potential in any company. As a result, the turnover rate for EDI personnel tends to be high relative to other areas of IT. With salaries in other areas of IT quickly exceeding those of EDI, more and more people are choosing more lucrative disciplines.

Software

The trading partner is adamant about sending it this way, but your back-end application will only accept it the other way. In order to accommodate them you need the translator to perform a certain function, which it won't do. You need the latest version of the translator software, which you can have for free, except it won't run on your current operating system. And if you must upgrade the operating system, you will need to upgrade the entire server, because the new operating system won't run on the old hardware. So to accommodate this one request by your trading partner you have to spend large sums of money on new hardware.

This is merely one of numerous debacles faced by companies doing EDI in-house. Most of them center on software upgrades to acquire new functionality or retain support services from the software publisher. Then there is switching from a basic translator to a more robust system. Another possibility is the emergence of XML, and the demands of a major trading partner to switch to that format.

All of these problems can be eliminated by utilizing an outsourcing solution. A well-equipped provider will have up-to-date software running, and will ensure state-of-the-art functionality for all of its customers on an as-needed basis. Furthermore, some software version upgrades can be made on the fly with little to no interruption in service.

Maintenance

The main focus of daily operations for any EDI department is maintenance. These tasks include such things as production monitoring, production issue resolution, trading partner requests (version changes, map changes, map additions, etc.), trading partner additions, backups, and the occasional systems crash. The problems arise in that the staff required to handle the minimal day-to-day operations is most often not appropriate for increased levels of activity in other areas. The difficulty lies in managing staff levels against these increased or decreased demands.

For instance, consider a given EDI department with two full-time staff and a small but growing backlog of trading partner requests is informed that two new trading partners need to be brought on-line in the next 60 days. They hire two more staff for the extra workload, eliminating the existing backlog, and handling other requests that come in. Consequently the staff expense has doubled and the EDI budget is destroyed. And in 90 days there is barely enough work for one person, let alone four, but there is a reluctance to reduce staff because more work may be imminent.

With EDI outsourced to a third-party provider, you have the opportunity to handle such fluctuations in the most cost-efficient manner. As part of your contract you should negotiate a per-hour time-and-materials rate applicable to any work done by the outsourcing firm over and above a certain threshold. The outsourcing firm will provide you with an estimate of the number of man-hours required to complete a given task, dedicate the necessary staff to meet your needs and your deadline, and provide you with advance knowledge of the approximate cost. And since it is done on an hourly basis there is no waste of resources: you merely pay for what you need, as you need it, and no more.

Error Handling

With any IT operation comes its pitfalls, and with EDI the area of error handling is where most trading partner complaints originate. What happened, who did it, why, when, why wasn't it caught earlier, can I get the VAN to re-spool it, when can you re-send it, are common complaints from trading partners. On the whole, most problems with EDI get worse the more time that has passed since the error occurred. Revenue can be lost and trading partner relationships can be damaged. Generally there are three ways to minimize the impact of production errors on a given business.

First, do it right the first time. People make mistakes, and when deadlines are important they tend to rush, which increases the likelihood for error. New staff members come on board, they have to be trained, and invariably mistakes have to be corrected when something is built improperly. An outsourced EDI provider will minimize the probability of initial mistakes with fully dedicated personnel and documented testing procedures.

Second, catch and resolve errors quickly. Batch processing may take place at night, meaning an error isn't caught until morning. With an EDI outsourcing provider you will be able to negotiate a level of monitoring, all the way up to a dedicated resource 24/7. Errors are discovered immediately, diagnosed faster, and remedied sooner. This can be particularly beneficial for companies doing business overseas, such as between London and Los Angeles where the normal business day does not overlap and communication delays exacerbate the problem.

Finally, an outsourced EDI solution means none of the support phone calls come in to you. You can direct all trading partner inquiries to your service provider.

Intangible Benefits

There are many benefits that fall into this category, such as improved customer service, better trading partner relationships, faster ramp-up time with new trading partners and/or transactions, etc. But the majority of them fall generally into the category of focusing on core competencies. Few manufacturers, distributors, logistics companies or service providers ever had notions of becoming an EDI service bureau or IT recruiting firm. Yet handling EDI in-house forces many companies to develop expertise in these and other areas, focusing scarce resources and immeasurable man-hours on disciplines that may not yield benefits or show a profit.

EDI is a highly specialized and labor-intensive discipline, and EDI skills are not normally transferable to other areas of the company. Barriers to entry are high, as are staffing costs and ongoing software maintenance, and return on investment is gradual and abstract.

Businesses are asking themselves the question, why attempt to acquire and maintain the equipment and personnel necessary to handle these duties ourselves when there are companies better suited to the task ready to take them over and do a better job? Returning to core competencies will allow a company to focus on profitability. A well-planned and executed outsourcing of tangent operations can play a key role in maintaining the bottom line.

Conclusion

Every business is in a different position with respect to EDI. There is no one-size-fits-all answer to EDI outsourcing. Everyone's budgets are different, everyone has different needs, different idiosyncrasies that affect the specific analysis of whether outsourcing EDI operations is a financially viable and justifiable change. This paper has shown the areas in which a company may benefit from EDI outsourcing, which will allow decision-makers to weigh those benefits against the costs unique to their business. When all factors are considered, EDI outsourcing may prove to be a beneficial change for almost any size or type of business. Outsourcing delivers value to the customer and balances strategic thinking with practical action. Successful outsourcing is managing business functions not technological innovation. Outsourcing is ideal for both large and small companies that do not wish to allocate the system resources or devote the significant technical expertise necessary to successful implementation.

About Us

EDI is our forte and nobody does it better. Over the past decade, ED has supported companies of all sizes - in every industry. From mom and pop shops - to the Fortune 100, ED has developed and implemented an EDI solution for them all. We have worked on every platform and with every EDI software package under the sun - whether home grown, off the shelf, or custom. Through all the difficulties over the past decade, one thing has remained constant; the nation's top companies have continuously relied on Effective Data for EDI support.

Effective Data builds and maintains long-term business relationships with our clients. Offering a unique approach to each project and unsurpassed responsiveness, our clients receive EDI services that are aligned to meet their specific technology needs and business objectives. Before you move ahead with your next project, evaluate our past. Clients include:

	
	
	
	
	
	
	

Company names and/or trademarks are the properties of their respective companies

Further details and testimonials from our client base can be obtained by contacting our offices, or visiting us on the web at www.effective-data.com.

Afterword: A Separate Problem

Occasionally a business is faced with the problem of implementing EDI operations from the ground up, whether being forced to by an existing trading partner, taking on a new trading partner that requires it, or just as a corporate necessity. With this situation comes a whole new analysis of the costs and benefits involved in the EDI outsourcing decision. Fortunately, the analysis is much more lopsided and therefore easier to resolve.

The first and arguably the most costly issue is acquisition of the hardware and software necessary to handle EDI. While the necessary hardware may be a relatively small investment if you don't have the equipment already in-house, the translator software required to process EDI transactions begins in the neighborhood of \$30,000.00 for a basic, server-based translator and runs all the way up to a half-million dollars or more for robust, any-to-any-capable translator/mappers. With an outsourcing solution, you should be able to utilize the existing software on the provider's system, which eliminates these acquisition costs and reduces ramp-up time.

Next is the issue of staffing. The type of software you choose to employ may be dictated by the availability of personnel who are capable of working with it. The last thing you want is to acquire a piece of software that is either difficult to staff or will cost twice the rate of another package. Similarly you don't want to have your software choice dictated to you by the availability or cost of properly trained personnel, and get stuck with a package that may not suit your needs. With an outsourced EDI solution, these issues are bypassed completely. Furthermore, the bulk of the work in EDI is during ramp-up: once the initial set-up is complete, there is often barely enough work to keep even a part-time resource on hand. However, not having somebody in-house to handle the occasional (but mission-critical!) minor disaster is asking for trouble, so you are stuck paying for an underutilized resource. You may want to return to the **Support** section of the main body of this paper and review the Staffing sub-section for more potential pitfalls in this area.

Several other issues are relevant and bear mentioning. With an outsourced solution, there should be no training necessary, so the provider can get immediately to work reviewing specifications, mapping, establishing communications, selecting a VAN, establishing a relationship with the trading partners, and so forth. Most outsourcing providers will already have mechanisms in place for such things as environmental stability, UPS, disaster recovery, site security, network security, and backup procedures.

And finally, there is the issue of focusing on core competencies. The processing and maintenance of EDI is a tedious and time-consuming endeavor, and one that most companies have no desire to develop any expertise in or devote resources to. Outsourcing EDI to a third-party provider allows a company to reap the benefits of EDI without the headaches of dealing with day-to-day operations.

From the position of starting from scratch, EDI outsourcing provides a very attractive alternative to in-house EDI operations. Not only is the financial justification very sensible, but the intangibles associated with outsourcing are also very persuasive. The combination of these factors makes it easy to make the right decision for your business.