

White Paper



Data exchange and information sharing

We highly recommend a move away from hand coding (for enabling partner networks) and Informatica B2B Data Exchange is worth serious consideration as a more cost-effective and productive alternative

Philip Howard

Executive summary

The title of this paper may be somewhat misleading: it is about data exchange and the ability to share information but, specifically, it is about those exchanges and that sharing taking place outside the confines of your organisation. Technically speaking we would say that it is 'outside the firewall'. In other words we are talking about sharing information with third parties of various types, whether these are other organisations, partners, agents, customers, resellers or any other entity.

There are a number of reasons why you might want to do this, depending on the type of organisation you are, and the first section of this paper will attempt to highlight some of the benefits that can be derived from this sort of data sharing. Rather than discuss this from a purely theoretical perspective we will illustrate what may be achieved by means of some use cases. Note that all of these use cases are real-life examples and are not simply conceptual.

In practice, all the use cases described in the following section are based around the use of the Informatica B2B Data Exchange suite of products. Now, historically, B2B products have been about exchanging things such as SWIFT, HIPAA and EDI messages. In this paper we will not be discussing this traditional role. What we are interested in here is the use of Informatica B2B Data Exchange outside of this familiar setting and in the much broader capacity that we will illustrate in the following use cases. Once we have done that we will discuss how Informatica B2B Data Exchange works and how it enables the sorts of capabilities that we will discuss.

Use cases

We have a number of use cases to discuss: some are short, some are longer, some are from named customers of Informatica while others have to, unfortunately, remain anonymous but all illustrate how an innovative approach to data exchange and information sharing can help to improve business processes, reduce costs and/or increase profits.

In practice there are two types of benefits that derive from the use of data exchange software:

- **Generic:** these benefits include such things as faster on-boarding for new partners or customers, improved communications with existing partners or agents (for example, one UK-based travel company uses data exchange to underpin its Travel Agent portal, where the company can share trends and other information with its travel agent partners), faster time to market for new products or services and the ability to collect and aggregate information from any source in a formalised manner. In the last of these cases this is particularly useful for data aggregators (as we shall see) but also potentially applies to retailers or manufacturers, for example, who sell through distributors: in this case it is commonly the case that sales figures are reported back using miscellaneous formats include comma separated value (CSV) files and spreadsheets, typically delivered as email attachments, and these are often aggregated using more spreadsheets and cut-and-paste in a manner that is not (formally) repeatable, is error-prone and which has no audit trail (data lineage) for compliance (Sarbanes-Oxley) purposes. This ad hoc approach can be automated through the use of data exchange, provided (as is the case with Informatica) that the software can read and understand all relevant formats.
- **Innovation:** while many use cases simply allow organisations to do what they are doing now, only faster and better and more accurately, some companies have used data exchange to do things that they simply could not do before. One example is the insurance company (discussed below) that used Informatica B2B Data Exchange to improve the efficiency of its agents. Another is supermarkets or other retailers looking to sell customer loyalty card information: in effect becoming data aggregators. A third is an Australian wine producer. Historically, it collected inventory rather than point-of-sale data from the various wine merchants. This was because of the data challenges involved with collecting the latter. However, the consequence was that the company was unable to track changes in customer buying patterns, for example Pinot Grigio suddenly becomes particularly popular, with the result that the company was three to six months behind the curve when it came to understanding trends in its market and therefore perhaps did not have enough Pinot Grigio on its shelves to meet demand and, potentially, by the time it had ramped up supply the fad for Pinot Grigio might be over. What the use of Informatica B2B Data Exchange enabled the company to do was to overcome the issues it had with point-of-sale data so that it can now monitor trends in the market in a timely fashion and react appropriately.

The following specific (brief) case studies involve both generic and innovative benefits.

Use cases

GfK Retail and Technology France

GfK Retail and Technology France is a data aggregator in the retail space for consumer technology and entertainment media. It has been in this market for over a decade and has recently expanded into the tourism sector, aggregating data about travel and holiday bookings. The company's basic approach is that it collects point of sale information from thousands of retailers, distributors and resellers dealing with these product types in order to be able to provide intelligent market research (dashboards, scorecards, trend analysis and so on) about this domain to its customers, who are the manufacturers and suppliers of these goods.

The company's problem, before it selected Informatica to help, was that the company had to collect and integrate 50 files per month when it started, whereas this number had now grown to 1,700 per month. Moreover, the range of formats in which these files were presented were extremely disparate; so much so that the company now supports (with help from Informatica) some 400 different Excel variations, PDF files, Word documents, emails (12,000 per month) and imagery. According to GfK Retail and Technology France, it has not only been able to launch new services (for example, its Total Store Report and its Weekly Monitor) more quickly than would have previously been the case, but the use of data exchange has enabled it to accelerate integration time by 400%, reduce development resources by 75% and cut the number of data errors by 80%. GfK Retail and Technology France also use Informatica's data quality solutions, which integrate with B2B Data Exchange.

A US life insurance company

This company wished to improve the efficiency of its sales channel. In particular, the issue was that with all of the different life insurance options available it was very tempting for agents to sell what was easiest to sell rather than what was best for the customer. This, of course, results in more cancellations and more unhappy (eventually ex-) customers. There was also an issue with agents keeping up-to-date with the latest available options as well as identifying trends in the market. Further, collecting information from agents was a problem in its own right, as some reported using PDF documents and some didn't, some reported daily and others reported weekly or monthly and, moreover, they were prone to using different versions of the ACORD standard forms. So, all of this had to be understood in order to integrate and aggregate the data in the first place and, prior to the introduction of Informatica B2B Data Exchange, the company was not up to analysing this data in a timely fashion, let alone feeding it back to agents in any useful way. However, once the Informatica software was in place this was not only enabled but the company was able to feed back information about what products had been sold, how much and so on. The company's emphasis was very much on sharing information in a way that could be most easily consumed by its agents.

As a result, the insurance company retained its most productive agents, who, in turn, continued to generate the majority of the business. In addition, the company saw a reduction in cost of future feeds by over 70%, reduced development costs by over 70% and reduced ongoing maintenance costs. Most importantly, the business user was empowered to support customer requests without extensive IT intervention and address customer issues through proactive monitoring. This all added to the increasing competitiveness of the company in the market to retain the best, most productive agents. And IT was able to concentrate on addressing other strategic concerns.

Use cases

Zyme Solutions

Zyme Solutions, which is based in California, provides channel intelligence for technology companies running sales channel programmes. It collects, consolidates, cleanses and analyses point-of-sale and transaction information from channel partners before feeding it back to the customer to support their own business processes and decision-making. The company also offers Payment Management Services, which manages the calculation, validation and payment processes involved with running a channel-based approach to market.

In total, Zyme Solutions processed in excess of 10 million transactions per week during 2009, from over 140 countries, with volumes expected to double during the course of 2010. Needless to say this information arrives in a variety of formats, ranging from formal EDI exchanges to spreadsheets, Word documents, free format text and even faxed-based text. Further, the amount of detail provided varies widely from a total figure for the whole company down to individual transactions by store by geography.

Historically, Zyme Solutions had used an in-house developed Java application for collecting and processing the data it received, as well as data cleansing routines that it had purpose-built. However, the problem was that every time a new partner came on board, with a new format for presenting data, then the Java application had to be modified. This was taking approximately three weeks per new partner and the company wanted to drive this number down so that it could be more responsive to its customers and reduce the development effort involved. The bottom line is that, since introducing Informatica B2B Data Exchange, Zyme Solutions has been able to drive this figure down to less than one week, meaning faster customer on-boarding as well as reduced developer effort.

Ensenda

Ensenda is a San Francisco-based logistics and software as a service (SaaS) company, with logistics services provided through a network of local delivery firms spread across North America. The basic premise behind the company's business model is that it can accept orders in whatever B2B data exchange protocol or file format so that the supplier does not have to change their back-end logistics systems. However, like Zyme Solutions, Ensenda used hand-coded routines to parse incoming orders, checking the syntax and creating appropriate data structures that its software could process. Again, these routines had to be modified by hand whenever a new customer joined Ensenda, resulting in unnecessary delays and a lot of development work. In addition, as its relationships with existing customers evolved, the company found that customers would make changes to the data formats they were using, to add a new delivery type for example, which meant further delays and costs.

On the other side of its business, Ensenda faced similar problems because some of the delivery firms it works with are large organisations with sophisticated IT systems while others are local firms more likely to use spreadsheets or paper forms.

By now the story will be familiar: Ensenda implemented Informatica B2B Data Exchange to replace its hand-coded systems. As a result, customer on-boarding time has been cut by 80%, from two weeks to four hours; maintenance costs have seen a reduction of 90%; and SLA (service level agreement) escalations have been reduced by 95%.

Informatica B2B Data Exchange

We have discussed a number of use cases and customer examples, using data exchange and information sharing. However, while we have mentioned Informatica on a number of occasions the purpose was not to extol the benefits of Informatica B2B Data Exchange per se, but rather the advantages that can accrue from employing automation in order to serve this function: you could, at least in theory, use other such products and gain the same rewards. That said, Informatica B2B Data Exchange is a robust and mature product within this category and we will now briefly explain how it works and how it supports the various functions and capabilities that its users have deployed. This is not intended to be a detailed product evaluation.

The first point to make is that Informatica B2B Data Exchange subsumes Informatica B2B Data Transformation. This is a facility that provides transformation capabilities between different standard document types, some of the most common of which are shown in Figure 1. It should be noted that these are maintained and updated by Informatica on a regular basis.

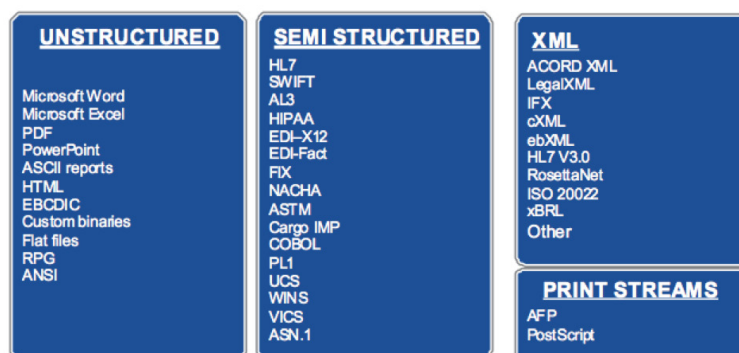


Figure 1: Informatica Data Transformation - some of the data formats supported

Specifically, these formats are provided in pre-packaged, industry-specific libraries, which include transformations that are automatically generated, validation rules and acknowledgement generation. In addition, Informatica B2B Data Transformation is a visual design environment that means that you do not have to do any coding in order to define transformations to or from any of these document types, and a light-weight transformation engine that will do the run-time processing for you. This is embeddable so that it can be built directly into applications where that is appropriate. Transformations may be run in either real-time or batch mode, as required.

Informatica B2B Data Exchange

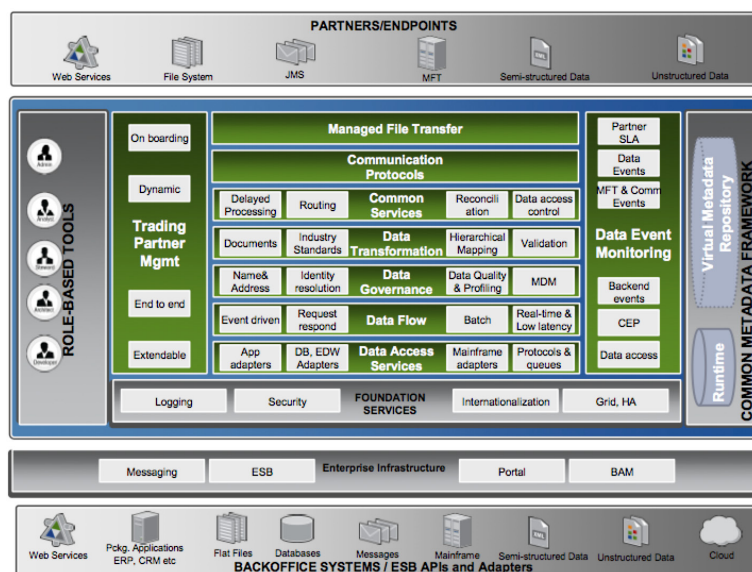


Figure 2: How Informatica B2B Data Exchange fits in the complete environment

Informatica B2B Data Exchange extends beyond the transformation capabilities just outlined. To begin with it is tightly integrated with other Informatica products, notably Informatica PowerCenter as well as the company's data quality offerings: Informatica Data Quality and Informatica Data Exchange. This provides a complete environment whose architecture is illustrated in Figure 2.

In terms of specific capabilities that extend beyond Informatica B2B Data Transformation, these include:

- Support for dynamic business partner management: this allows you to define custom properties within partner-specific data flows. The way that you do this is by defining trading partner profiles, each of which may contain customisable properties, so that B2B applications will react appropriately at run-time according to partner preferences. This is illustrated in Figure 3.

Figure 3: Dynamic partner management is supported through customisable profiles

Informatica B2B Data Exchange

- Exception management and event monitoring. It is important both for compliance reasons and in order to support service level agreements that you can monitor the success or otherwise of individual transactions and respond accordingly when that is appropriate. Informatica provides a range of capabilities that does precisely this.
- Data flow orchestration and business process management. It will often be the case that you will want to embed B2B transformations within business processes. In order to allow this, Informatica B2B Data Exchange supports both BPMN (business process management notation) and BPEL (business process execution language) so that you can integrate your B2B environment, not only through Informatica PowerCenter but also with third party products such as IBM WebSphere Process Server or other Java compliant flow engines.
- Business rules are supported within Informatica B2B Data Exchange for scheduling, which can be either event or time-based.
- Security: a range of authorisation and authentication measures are provided and you can also integrate with third party environments if you wish. There is support for multiple protocols (HTTP, HTTPS, ebXML, FTP, FTPS and so on), a fully featured certificate manager and support for a variety of encryption and decryption standards.
- In the context of the use cases that we have previously discussed there are specific capabilities to support partner on-boarding. As an example, Figure 4 shows a version of one of the relevant dashboards that is provided for this purpose.

Status	Name	Template	Partner	Due Date	Start Date	End Date	Progress	Edit	Delete
Overdue	newCheckListInstance	newCheckList	part3	4/16/10	4/16/10	4/16/10	0%		
Overdue	newCheckListInstance	newCheckList	part3	4/16/10	4/16/10	4/16/10	0%		
Completed	newCheckListInstance	newCheckList	part3	4/16/10	4/16/10	4/16/10	100%		
Completed	newCheckListInstance	newCheckList	part3	4/16/10	4/16/10	4/16/10	100%		
Completed	newCheckListInstance	newCheckList	part3	4/16/10	4/16/10	4/16/10	100%		
Completed	newCheckListInstance	newCheckList	part3	4/16/10	4/16/10	4/16/10	100%		

Figure 4: Dashboard support for partner on-boarding

Conclusion

There is clearly value to be had in enabling (trading) partner networks, across a variety of market sectors. To enable this in a rapid and cost efficient manner requires consideration of both the run-time requirements of the network and the establishment of that network in the first place, and its subsequent growth. The traditional approach to such networks is to use hand coding, but this is inefficient not only in terms of direct costs (continually changing and maintaining the code) and manpower utilisation, but is also slow. A number of the companies discussed in the previous sections use the fact that they can on-board new partners and customers very quickly as a competitive differentiator when compared to rivals that are still stuck in the coding era. We highly recommend a move away from hand coding and Informatica B2B Data Exchange is worth serious consideration as a more cost-effective and productive alternative.

Further Information

Further information about this subject is available from <http://www.BloorResearch.com/update/2077>

Bloor Research overview

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- Describe the technology in context to its business value and the other systems and processes it interacts with.
- Understand how new and innovative technologies fit in with existing ICT investments.
- Look at the whole market and explain all the solutions available and how they can be more effectively evaluated.
- Filter "noise" and make it easier to find the additional information or news that supports both investment and implementation.
- Ensure all our content is available through the most appropriate channel.

Founded in 1989, we have spent over two decades distributing research and analysis to IT user and vendor organisations throughout the world via online subscriptions, tailored research services, events and consultancy projects. We are committed to turning our knowledge into business value for you.

About the author

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Philip started in the computer industry way back in 1973 and has variously worked as a systems analyst, programmer and salesperson, as well as in marketing and product management, for a variety of companies including GEC Marconi, GPT, Philips Data Systems, Raytheon and NCR.



After a quarter of a century of not being his own boss Philip set up what is now P3ST (Wordsmiths) Ltd in 1992 and his first client was Bloor Research (then ButlerBloor), with Philip working for the company as an associate analyst. His relationship with Bloor Research has continued since that time and he is now Research Director. His practice area encompasses anything to do with data and content and he has five further analysts working with him in this area. While maintaining an overview of the whole space Philip himself specialises in databases, data management, data integration, data quality, data federation, master data management, data governance and data warehousing. He also has an interest in event stream/complex event processing.

In addition to the numerous reports Philip has written on behalf of Bloor Research, Philip also contributes regularly to www.IT-Director.com and www.IT-Analysis.com and was previously the editor of both "Application Development News" and "Operating System News" on behalf of Cambridge Market Intelligence (CMI). He has also contributed to various magazines and published a number of reports published by companies such as CMI and The Financial Times.

Away from work, Philip's primary leisure activities are canal boats, skiing, playing Bridge (at which he is a Life Master) and walking the dog.

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