

The European e-Business Market Watch

www.ebusiness-watch.org * info@ebusiness-watch.org

CASE STUDY: TEXTILEBUSINESS.IT1

Abstract

This case study features an example of electronic integration of the supply chain, allowing participants to take advantage of an advanced e-business solution at low cost. It illustrates how critical the standardisation issue is in B2B integration. It also shows that SMEs migration towards e-business may be a long term process even under favourable conditions and despite the support of external funding.

Case characteristics	
Sector focus	Textile
Business focus	Small companies
Geographical focus	Como, Italy
Case objectives	
Supply chain integration	***
E-standards usage in B2B communication	***
E-business and process innovation	**

* = some relevance for case; *** = high relevance

Background and objectives

This case study describes an experience in an important Italian textiles district in the Como area (Northern Italy). The supply chain in the sector, also in this particular district, is governed by a consolidated network of relationships between suppliers, contractors and customers. It is a highly fragmented industry in which relations between various players are handled primarily in traditional ways (by telephone and fax).

The district produces textiles for high end apparel and for the home, primarily upholstery fabrics. Companies in the area are increasingly subject to fierce price competition from enterprises in the Far East. It is difficult for them to bear the competitive challenge represented by price. But positioning or repositioning at the high end of the market (based on product and service differentiation, quality and technological innovation) is a choice which is difficult to sustain over time, as innovation can easily be copied in this sector. For these reasons, rapidity of response to the market, flexibility in dealing with particular and customised needs, and the ability to guarantee reduced cycle times (taking advantage of location close to customers) and produce very small lots are becoming increasingly important success factors.

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This case study was conducted by Databank Consulting, Corso Italia 8, 20122 Milan, Italy.

Textilebusiness.it (www.textilebusiness.it) is an initiative supported by the Chamber of Commerce of Como, the Industrial Association of Como and the Politecnico of Milan and the Lombardy Region. The aim of Textilebusiness.it is not only to improve visibility, (as in first generation marketplaces), but mainly to digitise the entire process of relations among various players in the industry in order to fully exploit the benefits of online integration.

Activities

The solution offered

The solution is based on a peer to peer ("P2P") architectural paradigm in which communication among participating firms is totally symmetric. With respect to traditional marketplaces where a central server manages the system (where problems related to privacy and data security may arise), in Textilebusiness.it, the central platform acts as a directory which localises the counterpart. Once the identification has taken place, direct communication is established between the two parties. Participants need to simply use an interface bridging XML standardised messages from other knots with their own information system.

The real challenge, however, has been the standardisation of the communication protocol (in practical terms, the definition of a commonly shared "vocabulary") that describes documents to be exchanged, e.g.: orders and sub-contractors specifications, confirmation or modification of orders, transport documents and packing lists, fabric technical sheets. The initiative got underway in 2002, and operations were due to start up in February 2003, although in actual fact standardisation and fine tuning of the system required another year.

The experience of two businesses participating in the initiative

To understand how and to what extent an initiative such as Textilebusiness.it can effectively change the way participating enterprises do business, the e-Business W@tch interviewed one medium-sized and one small supplier company that participate in this initiative.

Fiorete is a company that covers the complete textiles cycle, from warping and weaving to the finished product. Some of these activities are partially contracted out, in particular dyeing. The company has about 50 suppliers of raw materials and intermediate products and 245 employees, and had a turnover of 31 million Euro in 2003. The company already had its own integrated management system and was planning to integrate the purchasing function and relations with its principal suppliers and customers. The introduction of Textilebusiness.it therefore offered an ideal opportunity, in line with the company's strategy. It was preferable to starting up its own system, as the company was able to benefit from the technical support of the consortium that took care of the translation and standardisation of language, the training of human resources and the promotion of the initiative among various interested parties.

The investment required of the company was very limited: about 20 man/days for one employee, the investment for upgrading the connection with migration to DSL, plus the annual participation charge and a fee for every document transacted. The technological centre supporting the initiative took care of standardisation of the vocabulary.

So far, the company has involved suppliers of dyeing activities and about 80% of this type of supply is now managed online. The activities handled by the system are processing instructions, including handling of goods.

The main benefit reported by the company is integration with the company's management system, which has in turn led to:

- saving time,
- drastic reduction of error margins, as well as
- tracing and control of productive phases handled by the system.

According to company's evaluation, time saving in operation can be estimated at about 15-20%. The company's initial goal was to extend its on-line orders system to all suppliers. But Fiorete did not push other suppliers as the system had not yet been completed in full.

Having completed the start-up phase, Fiorete now intends to encourage all its partners to adopt the system. Standardisation of vocabulary, the most difficult and most expensive phase, must be performed separately for each type of supplier, just as was done with dyeing plants. This is why the company aims to involve as many suppliers as possible, to divide up the investment required and to maximise benefits.

There are two major hurdles to overcome:

- The types of information system present in the partner enterprises (some of which have no management systems) and
- the level of the investment they would be required to bear which, though limited (the estimate is around 10,000 –12,000 Euro), still represents a major hurdle.

In the company's opinion, these hurdles will make expansion difficult. Even with clear benefits to be gained, the highly conservative attitude of the textiles industry and the unfavourable market trends make enterprises extremely cautious.

Being aware of these difficulties, the consortium decided to broaden its base of potential participants by creating a platform accessible via the web. Lack of integration with the company system means that this experiment offers fewer benefits to its participants. The primary goal of the experiment, however, is overcoming the cultural barrier.

Tintoria Sala, the other company interviewed in the context of this case study, is a small local firm active in industrial dyeing. The company brings in about 10 million Euro in turnover, with customers located within the same district. It is strongly oriented toward quality and product innovation and is one of Fiorete's selected suppliers.

Tintoria Sala joined Textilebusiness.it in response to pressure from Fiorete, which piloted the initiative as its primary customer. Tintoria Sala is therefore participating in the initiative as a Fiorete supplier and solely for transactions with this customer.

Its participation in the initiative enabled Tintoria Sala to participate in a training course in which the staff member in charge of business relations with Fiorete could obtain the technical know-how required. The investment in training had public support, and the cost to the company was less than 15,000 Euro, including adaptation of the information system. Creation of the basic common vocabulary was the most complex phase, but was supported by Textilebusiness.it

At present, only trade with this particular customer is organised through the platform, and it represents less than 10% of total orders. While the experience is quantitatively

limited, the company has noted considerable benefits in terms of saving time, data quality, response speed and improved customer service quality.

Lessons learned

The experience and the competitive advantages from participation in Textilebusiness.it are definitely viewed as highly positive by both companies interviewed. Economic savings, response speed, reduced frequency of error, customer satisfaction and the possibility of freeing up resources for greater added value activities, are all essential to SMEs. The principal benefit, however, is that independent SMEs had the opportunity to implement methods of trade which are not normally open to them. The absence of a large hub company usually limits the possibility of implementing complex trade systems, due to the level of investment required and to cultural barriers. In this case, independent SMEs undertook an integration process even without the leadership of a parent company.

The limit to the initiative is the very small number of transactions conducted and, consequently, the small overall impact on the companies' operation. Such an impact can, obviously, be significant for the company only when its full network of partners, customers and suppliers are covered by the system.

One important lesson to be learned from this experience is the amount of time required to implement an initiative of this kind. In technological terms, the complexity is relatively limited, but translation and standardisation of communication vocabulary is very time-consuming, even for companies from the same district that have always worked together. For companies that could potentially be involved, there are still some inhibitors:

- The presence of partners who do not have a minimum infrastructure sufficient for participation in a process such as this one. As demonstrated by the figures on access and use of the infrastructure (see Exhibit 2-5), this is a common problem in the textiles industry.
- The need to adapt the information system, with the investment and commitment of resources this requires. The companies interviewed attempted to promote participation by their other customers and suppliers once they realised the benefits offered by the initiative. However, they found that this was the biggest hurdle and that this hurdle is aggravated by the need to turn to external suppliers of technology to adapt the system.
- The cultural issue, relating to limited perception of the benefits and mistrust of information-sharing. This is still a major hurdle for the smallest businesses, even though clear and well-documented advantages can be demonstrated.

Sources and references

- Interviews with Professor Noci, Politecnico of Milano (May 2004), Fiorete (Ms. Roncoroni Responsible for ICT department, June 2004), Tintoria Sala (Mr. Sala, Owner, May 2004)
- Information available at www.textilebusiness.it

Contact

- e-Business W@tch, c/o empirica GmbH, Oxfordstr. 2, 53111 Bonn, Germany info@ebusiness-watch.org
- European Commission, Enterprise & Industry Directorate General, entr-ict-e-commerce@cec.eu.int