Summary of what has been done in MODA-ML

The Textile/Clothing sector is characterized by the fragmentation of the productive chain in a great number of actors who need to work together for realizing their final product. On the other hand, their small size prevents a wide consensus on a common exchange format (i.e. a standard), lacking a leading company capable of imposing such a format.

The concrete objective of the project was the definition of a common data format, suitable for the exchange of information via Internet along the supply chain: a format that can be easily embedded, at a low cost, inside both legacy information systems and in new solutions provided by technology suppliers.

The use of the results of Moda-ML gives a double benefit to the enterprises and to the whole sector: it makes available XML documents and a messaging software that are the result of a careful work of analysis and design and that contributes to spread the use of a common language among the enterprises of the supply chain.

The benefits

Today textiles enterprises are asked to open new communication channels, one for each of their clients, so a common interchange standard allows to solve the problem of exchanging data effectively, saving time and resources for creating newer and more complex services. These services are becoming more and more in demand, because they permit to optimize planning and to save days of work, reducing total time to market from the fabric supplier to the customer with a clear improvement of competitiveness.

By using Moda-ML messages for sending and receiving documents usually exchanged via traditional media (fax, mail), firms cut down the number of errors due to manually re-typing data inside their information systems and spend around 10%-20% of the present cost per operation.

Benefit description	Money / Time saved
Sending traditional business messages using MODA-ML format.	80% - 90% of the present cost per operation
Using a single common interface for all business partners instead of dedicated ones.	40000 € per year (estimate for a medium size fabric supplier).
XML messages are human readable and can be handled with software tools available on a PC.	No additional costs for hardware and savings on the software to read/write the messages
Moda-ML results are free and non-proprietary solutions.	No additional costs for using Moda-ML technologies.
Digital defects map of the fabric.	Save 1 – 2 days of work for clothing manufacturer
Availability of information on order status, despatching, collection forecast etc.	Optimization of the production planning

Background

In the textile/clothing (T/C) industry, the flexibility and the responsiveness of the supply chain are important competitive factors. In this supply chain, there is a need to address the gap between Electronic Document Interchange (EDI) technologies and the new Internet paradigm, which is mainly based on XML. EDI is used only by few big companies in the T/C sector, mainly because it is too expensive, too complex and its technology is too rigid. XML, on the other hand, lacks consolidated and widely accepted formats and tools adapted to the T/C sector. It has however a very low entry-level cost which enables any

company or technology supplier to create its own, proprietary, information exchange protocols. XML technologies are well established with internationally agreed standards.

The problem

The effective exchange of information across the T/C supply chain could enable significant savings by improving efficiency. This relates, for example, to the transfer of orders, technical data, order status and maps of defects. To be effective, this exchange of information must be automated.

The flow of data between the actors of the supply chain meets obstacles in passing through the different information management systems it encounters. This is because these systems are structurally dissimilar and not interoperable. To enable the information systems of these different companies to exchange data directly, without being constrained to adopt many *ad-hoc* interfaces application, a single common protocol is needed.

A second aspect is that, due to the heterogeneus composition of the supply chain, the technological solution must be simple enough to fit also SMEs, enabling them to co-operate with larger enterprises. These requirements can, however, be easily satisfied through the exchange of common documents written in XML and exchanged via Internet.

The solution

MODA-ML focuses on the analysis of the most important (actual or potential) exchanges of technical, administrative or management information amongst producers of textiles and clothing manufacturers.

The concrete results of the project have been the definition of a common data format, suitable for the exchange of information via Internet along the supply chain, realized through:

- the standardisation of a number of co-operation models among firms
- a set of XML documents, necessary to represent data used in international processes
- a front-end demonstration software to forward and receive XML documents based on the electronic protocol which is compatible with the ebXML specifications (MSH)
- a demonstration software to assist in the creation of trial messages (MCM)
- a methodology for rapid development and easy maintenance for "families" of XML exchange documents

The MODA-ML software and XML documents are freely available as a non-proprietary format for data exchange directly from the web site www.moda-ml.org .

Aiming to rapidly lead to an European standard for the exchange of information in the T/C industry, MODA-ML is involved in the TexSpin Workshop activities, promoted by CEN (European Committee for Standardisation) and leaded by Euratex (European association of tindustry trading associations of the textile/clothing sector).

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