Time to Get Plugged In

John Scrimshaw explains why dyers and finishers will be obliged to take part in the Internet revolution

The use of the Internet in business communication is a growing, but often misunderstood, activity. Textile processors who think they can stand aside from this development, or who belong to a generation that thinks simple e-mail is a daring novelty, are in danger of being left behind.

The publicity received by the profusion of new companies, set up to market consumer goods and services via websites – a process often referred to as 'business-to-consumer' (B2C) – deflects attention from the area of deepest significance, which us in business-to-business (B2B). The sight of several high-profile website operations coming unstuck in the consumer market may have given the impression to some that this was a transitory fad or, at least, an immature technology that could be ignored for now.

In the textile supply chain this is decidedly not the case and there can be few dyers, printers or finishers that will not have to come to grips with the technology and its implications over the next two or three years.

The software industry delights in inventing acronyms to describe the various categories of IT application, and these can be a barrier to understanding -especially since there is no general agreement on these terms and different companies have their own working definitions. The expression 'supply-chain systems' can refer to software used for the general management of relationships between customers and suppliers, or it can mean software that controls the actual movement of goods.

The term 'e-commerce' itself does not have an agreed definition. There are some who use it only to describe actual buying and selling on the Internet, while others include all Internet operations. Some seek to fix 'e-commerce' as a term for B2C, preferring 'e-business' for B2B. As a result the subject often looks more complicated than it really is.

However, for the most part the applications that matter to dyers and finishers, and with which they should become familiar, are in the general categories of Product Data Management (PDM) and Enterprise Resource Planning (ERP).

PDM is a package that starts with the designer and contains all information relevant to its manufacture. This will include patterns, fabrics, accessories, suppliers, costings, etc. There will be colour images of the finished items and of the main components, and possibly even colour reflectance data.

The key software providers in sectors such as apparel and home furnishings are companies like Gerber Technology and Lectra Systemes, for which this has been a logical extension of Computer Aided Design offerings. Gerber's Internet-enabled PDM product is called WebPDM and its purpose is to give everybody in the supply chain access to the same reliable and timely data -the most obvious benefit being that any changes are immediately evident to all concerned.

Operating on the same principle is the colour-matching technology launched last year by **eWarna**, and which has already been described in detail by International Dyer. In January, Asia's largest sewing thread producer, Gunzetal, announced a contract with **eWarna.com** to develop and build the world's first interactive online shade card. Gunzetal's web page will connect directly to data measured into **eWarna**'s Labworks software, running recipe prediction and colour QC functions in Gunzetal's dyehouses.

ERP is any group of applications for managing the activities of an enterprise, where 'enterprise' is defined as being more than a single company, but includes all the 'partners' on which it depends -both suppliers and customers. Companies that install ERP usually do it with the aim of streamlining their supply chain so that everything arrives where it is needed with the least delay and at the least cost. This includes the way orders are processed the way factory capacity is planned - in the fashion sector, for instance, it will encompass retailer, fabric supplier, thread/fastener/lining suppliers, garment manufacturers and logistics providers. Where dyers and finishers are an integral part of this supply chain, they too will be in the net.

No one is suggesting that large numbers of dyers and finishers will go out and buy their own ERP packages. That is not the point. Communicating via the Internet will be an essential part of doing business with their customers, who will increasingly demand it. The pressure for this technology is coming upstream from the retailers, and if you are not 'plugged in' you will not be considered.

It is important to understand why this is happening. The development of globalised sourcing initially gave clothing retailers ample opportunity to cut manufacturing costs and get an advantage over their competitors, although often at the expense of quality. Now everybody is sourcing offshore and the quality differential has in many cases been eliminated.

Retailers are beginning to realise that the biggest area of waste in their operations is in unsold inventory-garments that did not sell because they were the wrong style or colour. Conversely, other styles or colours sell out before the season is over and revenue opportunities are lost. If both these problems can be solved, the retailer can either reduce its prices or gain significant margin across the season as a whole.

Quick-response replenishment from factories close to the customer is one means of matching product to market. But, if the cost advantage of offshore sourcing is to be maintained, quick-response can only be a minority share. The big challenge is to take time out of the chain from design to point of sale for the great bulk of production -where a UK brand might require fabric woven and dyed in Italy to be shipped to the Philippines, to be matched with trim from Thailand, made up into garments and air-freighted the to the USA.

The intricacies involved in sampling, in production and logistics planning and in inventory control, across a range that might contain more than a hundred pieces, is bringing an increasing reliance on technology.

And in the most recent trend - as with

PDM - the electronic transmission of data (EDI) is being supplanted by systems that use an Internet file server to which all supply-chain partners have controlled access. That way, each can instantly see the same 'snapshot' of the chain, input its own data, plan production and receive orders.

US expert Steve Kohler, of apparel IT developers Ecom Partners, has described the concept of an 'e-manufacturing network' that can "connect a participant as a network guest or host, with the benefits realised through total collaboration."

He said: "The brand manufacturer, for example, can react in real-time to retailers' demands by instantly integrating all producers, suppliers and service providers into its network. The result is a reduction of production lead-times by linking procurement to production planning, and monitoring the production process via alerts triggered by exceptions.

"Similarly, suppliers can significantly reduce their inventory costs and provide better customer service by accessing their customers' production operations and by cutting reaction times for sourcing materials from days to minutes. Producers are able to maintain far fewer bulk materials on-hand and are able to virtually eliminate the inefficiencies of spreadsheet, fax and e-mail reporting."

Among the leaders in ERP systems for the clothing sector is the Swedish company Intentia, which has a worldwide distribution and support network. Just over a year ago it launched what it called the world's first plug-in-and-play collaborative Internet trading portal, allowing businesses to create their own 'private marketplaces' regardless of their existing IT system (known as their 'legacy' system).

Such a development makes the Internet a more inviting proposition than before, because it preserves the value in previous IT investment and reduces additional infrastructure costs up and down the supply chain.

An Intentia spokesman said the new portal made the procurement, ordering, production-planning and fulfilment cycles visible and accessible to everyone within the organisation, and to external suppliers and customers.

It created consolidated information for demand forecasting by providing, if required, minute-by-minute data on sales enquiry conversion rates. Companies with multi-site manufacturing and supply units in several countries could integrate the portal with production and supply-chain planning tools.

Companies operating in a number of countries could also achieve significant reduction in the cost of sales and administration.

Among the companies that have bought into this idea is the Israeli underwear and fabric manufacturer Delta Galil, which has 40 factories in 11 countries, employs 13,000 people and has more than 1,000 suppliers.

IT director Avi Pinhas said in an interview for ID's sister publication Fashion Business International: "The production of each piece can involve movements through five different factories, crossing three borders before it reaches our goods warehouse for onward shipment to a customer's distribution centre. Our supply chain is particularly complex and militates against us maintaining high service levels.

"That's why we've also started a supply-chain planning (SCP) project with Intentia. It will connect suppliers to our business-to- business system and create demand visibility. This will give us the opportunity to focus on two important key performance indicators, lead times and transaction costs. To issue a purchase order currently costs us between $172 and $275. We think we can get his down to $70."

As dyers and finishers come under pressure to link with their customers' Internet operations, so they too will find it convenient and more efficient to handle their procurement in this way. ID reported last month on Clariant's new European e-Business Centre, which allows registered customers to place new orders online and check the status of existing orders.

And moving further upstream Ciba Specialty Chemicals, which sells online to its customers via its mybusiness@cibasc website, has begun to carry out its own purchasing through Elemica, a 'neutral' e-marketplace in which it is a partner together with other leading chemical companies such as BASF.

Terry Gorman, head of e-business, said: "The new Internet approach will enable Ciba and its partners to build such links more rapidly and more easily in the future Ciba expects to move a significant proportion of its chemical purchasing transactions to Elemica within the next year.

Ciba said Elemica services harmonised with those offered by mybusiness@cibasc, not only allowing order entry and tracking for more than 4,000 registered customers worldwide, but also providing services such as the retrieval of Certificates of Analysis (COA) and Material Safety Data Sheets (MSDS) for all customers placing an order.

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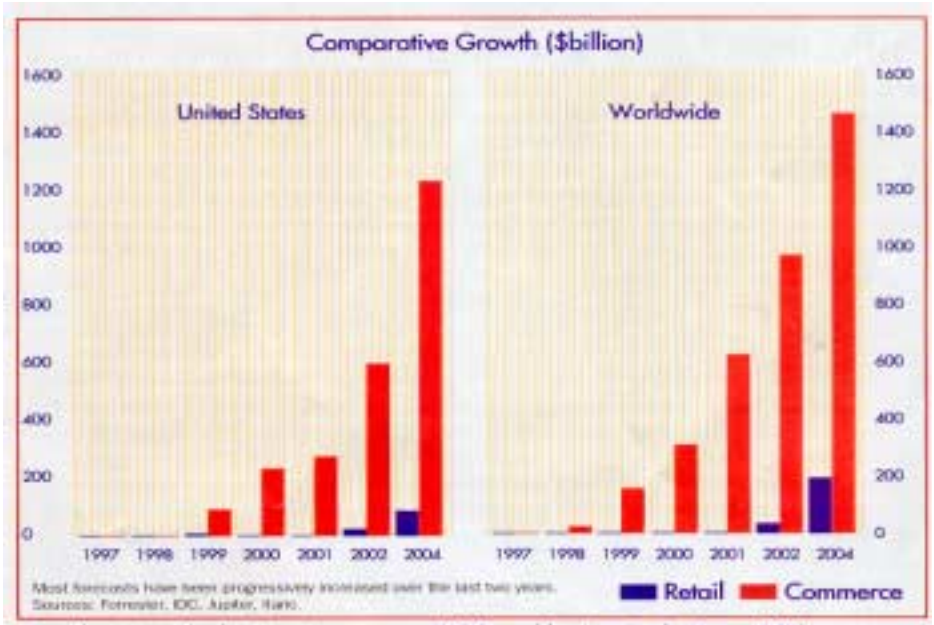

Growth patterns for business-to-consumer (B2C) and business-to-business (B2B) e-commerce