

Dynamic response: its impact on the textile marketing chain.

Part 1 – the fabric supplier, garment maker and retailer

Mike Bradbury and John Kent

Retailers, garment makers and fabric suppliers measure the success of the finisher in terms of product and supplier performance, response time, and costs and margins. Mike Bradbury and John Kent look at the introduction of a dynamic response management style, an approach which can meet the rapidly changing needs of the textile chain and provide improved financial performance. The second part of this article, looking at the implications for the finisher, will be published in the next issue of the *Journal*.

The textile marketing chain is long and complex. It is full of variables and imponderables that have generated a business environment in which failure to produce to specification is frequently encountered; the user therefore has to allow for non-conformance. However, the increasing level of competitiveness in the market place resulting from increased consumer choice, and the need for the retailer, garment maker, fabric supplier and finisher to improve financial performance, has changed the climate in which the industry operates. The industry can no longer profit by working in a laissez-faire manner in which one element of the chain may adversely affect the efficiency and effectiveness of the total supply chain as it attempts to serve the consumer.

A fully integrated approach – dynamic response, an approach that complements the move towards total quality but has an emphasis on total service – can meet the needs of the supply chain, and at the same time meet the needs of the fashion-conscious consumer.

Changes in the market

The disposable income of the world's population increased sharply during the boom years of the mid to late 1980s, and this income was channelled towards 'throw-away fashions'. During this period, advances in communications have transformed fashion into a global business with reduced regional variations. The domination of European producers,

traditionally provided by the leading European fashion houses, has been eroded. Consumer choice has increased as the retail base expanded with new entrants claiming a share of a growing market, setting new consumer service standards. These external influences have brought a more competitive edge into the purchasing policies of the retailer, garment maker and fabric supplier, and created the opportunity for all finishers, irrespective of location, to compete for business. This has resulted in an increase in import penetration in all the developed markets.

Technology has revolutionised the consumer/retailer transaction. Bar coding individual garments and the introduction of EPOS (electronic point of sale) data capture through computerised tills now allows the scheduling of deliveries of individual products on a daily basis; the more advanced retailers communicate with their suppliers using EDI (electronic data interchange). This reduces the need for the retailer to carry stocks and has a significant impact on the working capital required to finance the business, and will minimise lost opportunities and mark-downs. It will also allow rapid and accurate monitoring of sales of new items.

Delaying colouring and garment sizing instructions to a date as near as possible to the point of sale will increase the accuracy of demand forecasts, reduce lead times and will further reduce mark-downs and lost opportunities [1]. This technology will provide the impetus for growth in sales and improved financial performance.

The late 1980s and early 1990s saw the onset of recession. Demand in developed markets has declined and, to maintain market position, retailers have challenged tradition. The historical approach towards seasonal buying (spring/summer and autumn/winter collections) created by the leading European fashion houses has been eroded. The High Street is now highly reactive to new ideas, irrespective of the calendar. Speed of response to changes in fashion or the ability to influence fashion are critical to the retailer's success. These developments favour local manufacturers who can offer flexibility and requires short lead times to supply fabric and garments.

The recession has seen the disposable income of the consumer fall; garment price points play a more important role in the purchasing decision. Many retailers have been unable to increase the selling prices for core products for three or even four years. In the ultra-competitive market-place, retailers must offer value for money and differentiate through quality, availability and service. Suppliers who can offer flexibility, quality, and maintain low unit costs of production will be favoured.

The increased influence of the High Street has put pressure on garment makers and fabric producers, and has created a highly competitive environment where the need to service the retailer's demands is paramount. The consumer is swayed by marketing, reputation, style, availability and price, and to survive retailers must offer the right product at the right price at the right time.

The pressure is obvious in the commodity area where price is the dominant factor. Where fashion and style oriented garments are concerned, the pressure is different; higher margins may be available to the whole supply chain because of higher price points related to extra added value, but the risk is higher.

Influence on the garment manufacturer

The rapidly changing market-place presents a challenge to the garment maker. To meet the challenge, the boundaries of supplier/customer relationships have to be examined and redrawn, stimulating a realignment of the industry in a manner in which the fabric producer and finisher can play a major role. It is vital that the roles of the garment maker, fabric producer and finisher in the supply chain are fully understood, and the way in which they can become integral parts of each other's strategies must be determined. A basic understanding of the needs of individual elements of the supply chain, and the capabilities of suppliers, is required.

The aspects which influence the garment maker's business can be summarised as:

- Product and supplier performance
- Response time
- Cost and margins.

Product and supplier performance

The garment maker should be able to specify the performance criteria for the purchased fabric in order to maximise production efficiencies. It is essential that the supplier and the garment maker have full and mutual agreement on the technical specification for the fabric at the pre-production stage. It is too late to open discussions on fabric performance at the time of the first bulk delivery. By this time, the garment maker will be committed to supplying the retailer with a specific garment at an agreed price, and it is unlikely that changes will be possible once the contract is signed. Under-performance of the fabric will result in losses.

The need for the garment maker to define the specification, and the need for the supplier to provide fabric to standard with the assurance of a Certificate of Conformance, is gathering pace and will quickly assist in the elimination of repetitive and costly quality control testing, reduction of lead times and minimisation of risk. However, there is a word of caution. This sophistication places stringent demands on the fabric supplier and finisher who may be held financially liable for excess 'seconds' garments and ultimately consequential losses for stopped factories and cancellations if it is proved that the fabric does not conform to the agreed specification.

Communication is vital at all times to avoid technical and quality-based problems, and to foster a positive relationship on all fronts. This will lead to a better understanding of the needs and capabilities of the supply chain, and will contribute to the resolution of problems for mutual benefit. The garment maker will have an expectation that every aspect of paperwork associated with deliveries will be beyond reproach.

Response time

Just as retailers do not wish to hold stocks, garment makers likewise do not want the financial burden of high stocks of fabric or garments. Supplying garments on a 24 or 48 hourly request, seven days a week is now common practice. Balancing stocks and production to cope with demand is an emerging science based on the use of complex computer software packages that demand a discipline of agreeing and keeping to delivery schedules.

Right-first-time production and delivery just-in-time are demanded by the garment maker if the financial burden of stock-holding is to be minimised. This inevitably demands shorter production runs and accurate reproducibility of the shade and physical properties of the fabrics supplied.

The reducing seasonal influence and greater reactivity of the market require that new colours, fabrics or styles are produced in trial quantities and at high speed. Assuming the trial is successful and the garment sells, the garment maker must respond with quick repeat orders to exploit fully the competitive advantage gained. This requires not only fast track production but fast track development. The ability of the garment maker to reduce the lead time taken to place new products in the market will result in higher margins for the garment, and will require the full cooperation of the fabric supplier and finisher. However, working at the leading edge of fashion is recognised as a high risk strategy. Only around 5% of garment samples survive into bulk production [2].

Response time or lead time is critical to the success of the garment maker. Clearly, the advantage lies with the local garment maker who is supplied with fabric that is either produced and coloured or coloured locally. The regional variation in average lead times for the first and repeat orders is illustrated in Table 1, and is the current perception of Europe's leading retailers.

Figure 1 provides a more detailed analysis of lead times and illustrates the comparative lead times for the manufacture of polyester/cotton and cotton shirtings sourced in the Far East and the UK. Even when produced by traditional methods, it clearly demonstrates the advantage of local

production. It also illustrates the considerable time savings that can be achieved by forward booking of fabric production and finishing capacity, agreeing fabric performance specification and approving the shade palette prior to bulk production commencing.

Costs and margins

As the recession has bitten, it has made the competition in the High Street fiercer. Retailers have been reluctant to change price points for their core ranges and are pricing their fashion garments as keenly as possible. Faced with this situation, the garment maker is unable to achieve better prices and has been forced to reduce costs to stay alive. The garment maker has the option to reduce overheads and wastage, and increase efficiency in an attempt to drive down costs. The fabric supplier and finisher become an integral part of this programme. Their performance directly influences every aspect of the garment maker's business. An alternative strategy is to restructure the business and move manufacture to a low cost area and find alternative sources of fabric. This will reduce both the cost of labour and raw materials, reduce the total cost of manufacture, and achieve a competitive edge in the market.

In an effort to reduce raw materials costs, the garment makers have, over the last few years, spread their nets wider in the search for new low cost sources of fabric. Traditionally, this has been achieved by competition amongst converters. The trend now is to source fabric directly, reducing costs further by removing the 'middle-man.'

The prospects of sourcing garments and fabric at low unit cost certainly has its attractions, but there are hidden costs that must be added to the basic cost. These costs, such as the cost of pre-production planning, controlling fabric production

Table 1 Average lead times

Source	First order	Repeat orders
China	6-7 mths	3 mths ^a
Bangladesh	6-7 mths	not possible
Other Far East	4-5 mths	3-5 mths ^b
E Europe, Maghreb ^c		
Turkey, Greece	3 ^d -6 wks	3 ^d -6 wks
Other EC	2 ^d -4 wks	2 ^d -4 wks

Source: EIU

^a Repeat orders possible but facility rarely used

^b Minimum 7 wks if goods are shipped by air

^c Algeria, Morocco and Tunisia

^d If fabric is readily available at the factory

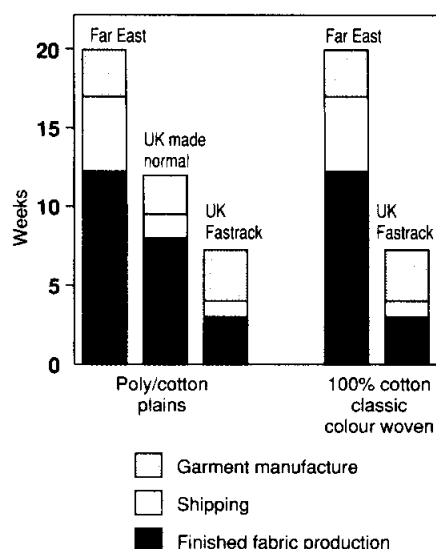


Figure 1 Typical lead-times to make garments in UK.

Far East and *UK made normal* assume: a) No forward cloth commitment, b) No approved lab dyes or yarn shades;

UK Fastrack assumes: a) Forward cloth commitment, b) Approved lab dyes or yarn shades

and finishing, the cost of communications, management time and travel, increased administration, the cost of all seconds garments and substandard fabric, the cost of financing the transaction and the risk involved are seldom accounted for in the calculation of price quotation to retailer. Quantifying these costs is difficult, but it is estimated they can add up to 20% to the cost of the garment or fabric [3].

The first two columns of Table 2 summarises the results of a study carried out in the USA as part of the 'crafted with pride' initiative [1]. It compares the profit made by the US garment maker for the production of ladies' blouses from fabric

produced locally and sourcing the garment from the Far East. Importing the garment looks to be the highly desirable option. Even though there are increases in returns and mark downs, cost of stock and increased overheads, profit is increased to provide a 6.5% return on sales.

Whilst off-shore sourcing has its attractions, the benefits in profit are modest in relation to higher level of risk involved and the impact on reputation and future business of returns and mark downs increasing by over 40%. An alternative scenario was studied. In this case, the garment maker manufactured the same garment using locally manufactured fabric and coloration, but agreed fabric performance specifications with the fabric manufacturer, finisher and fabric supplier and garment price with the retailer, reserved and scheduled fabric manufacturing and dyeing capacity, agreed the colour palette, reviewed any potential problems, all before bulk production commenced. The chosen fabric producer, finisher and fabric supplier subscribed to total quality management techniques and were capable of right-first-time production, delivery on time, just-in-time.

The impact on the financial performance of the garment maker is also detailed in the third column of Table 2. This approach reduces the cost of the fabric and garment manufacture when compared to the traditional production route using locally produced fabric, but not to the level of the imported garment. However, there is a substantial reduction in the cost of returns and mark downs, stock holding, and fixed costs, resulting in improved profitability. The return on sales is increased to 15.4% and, at the same time, the reputation of the garment maker as a quality supplier is enhanced.

This approach to the management of the supply chain is the essence of dynamic response.

Dynamic response

Each element of the marketing chain must evaluate its own and its competitors' strengths and weaknesses, and devise a strategy to develop partnerships with all the elements of the supply chain. In order to form the partnership the critical aspects of the service provided and the specific measures that can generate competitive advantage must be considered.

There are common objectives:

- Right-first-time production
- Delivery on time
- Delivery just-in-time
- At the right price
- Development and innovation
- Service.

The driving force is the need to service the High Street and, having made a commitment to these principles and made the promise, it is essential that they are actually carried through so that the garment maker can service the retailer and the consumer in the most dynamic and cost effective manner.

Conclusion

The dynamic response concept shows a clear way forward for all of the supply chain participants. Operated in harmony by all of those parties and with vigorous commitment, the High Street will be serviced dynamically and cost-effectively. The real benefits will then be felt in increased margins and more profit for all concerned. This is the most positive contribution we can make to our industry at a time when the breakdown of the Multi-Fibre Arrangement and new world order in trade threaten even more low-cost imports.

References

1. *Quick response in apparel manufacturing*, Textile Institute, Manchester
2. 'Computer-aided design and manufacture in the UK textile and clothing industry', *Textile Outlook International* (May 1993).
3. 'Garment sourcing options for EC markets', *Textile Outlook International* (May 1993).

Table 2 Total cost of garment manufacture; traditional and dynamic response routes (figures in US \$)

	Traditional manufacturing						
	US domestic		Far East import		Dynamic response		
Sales price to retailer	7.94		7.94		7.94		
Less: Costs							
Fabric	1.50		1.03		1.46		
Garment manufacture	4.06		3.60		3.29		
Returns/mark-downs	0.98		1.41		0.86		
Stock costs	0.25	6.79	0.27	6.31	0.16	5.77	
Gross margin	1.15		1.63		2.17		
Less: Fixed costs	1.05		1.11		0.95		
Margin	0.10		0.52		1.22		

Mike Bradbury is international industry manager for exhaust dyeing of cellulosic substrates at Zeneca Colours, Manchester and John Kent is managing director of Second Sight, Londonderry.