

### 9.1 The market size and form

The market size and form is shaped by a wide variety of forces, all of which are at their most apparent – one might even say exaggerated – in the developed world. These include generally improved standards of living, a demand for greater and ever more diverse consumer choice, and the ready availability of a vast quantity of goods, of varying levels of achievement, merit, and distinction. This last force, the ready availability of enormous quantities of goods, seems to imply that still higher standards should also be both accessible and reasonably affordable. There is a widespread belief in the accessibility and affordability of desirable goods, which persists in seeing ease and plenty as the birthright of mankind. It is encouraged by a variety of attractive and effective publicity from the advertising industry, the printed press (magazines and journals), radio, television, the Internet, exhibition audiences, and in person-to-person conversations. All these factors in their own way encourage the consumption patterns that drive the innovation and design development that result finally in new products to sell.

It is not always possible to reflect accurately the activity throughout the world. This is partly a result of the sheer volume of data any such attempt would generate. However, the variety of different types of market area is also a contributing factor. For example, where labour and social costs are high, the added value inherent in such products as fancy yarns make production feasible when it most certainly is not sensible to produce commodity goods for the markets. This is because these niche products demand not only high and consistent quality in production, but an enormous contribution is also made to their value by a plethora of other factors. These include the innovations in design and production that create the new yarn or fabric, and the range of other facilities that combine to ensure that the customer receives the goods when they want them. Increasingly, this last issue, that of delivery, is acquiring an importance at least equal to that of cost, which was once the deciding factor. It has become clear to all that even if it is possible to source components at a very low price, this offers no

savings if a late delivery of the low-priced goods reduces throughput and loses business for the customer. If this is true of low-priced commodities, prompt delivery will become much more important when the goods are relatively expensive decorative or luxury materials, especially when fashion is involved.

The important innovations in production techniques or in design can be developed almost anywhere in the world. A trade show such as that presented by *ITMA* (the International Textile Machinery Association) concentrates on technologies already embodied in production machinery, and so a visit to such a trade show will give the visitor only a glimpse of the research being undertaken to produce better materials more quickly and consistently, or to produce new materials using a new range of raw materials that have never been used in the past. These developments, for much of the twentieth century, occurred first in the developed world, where the population density and the interplay of old and new industries and methods created a rich environment to stimulate the researchers. This research was given added impetus by the high social and labour costs of running any business in the developed world, since any reduction of the labour required reduces the employer's overheads by much more than the amount of the salaries or wages no longer paid. Nowadays, in fact, these reductions are not sufficient to ensure competitive prices, unless the producers of the developed countries can concentrate on the high-value niche markets, where the value of the materials is much higher even than the costs involved in producing them.

## **9.2 The markets available and marketing techniques employed**

Fancy yarns and fancy doubled yarns can offer the advantage of allowing the creation of many different effects in a finished fabric, while at the same time retaining a relatively simple fabric structure. They require some specialist equipment to produce and some care in converting to fabric but, especially where high quality goods are concerned, they create effects that can be obtained no other way.

Obviously, the lower the design input involved in producing an item, or the closer it is to being considered a commodity item, the less likely it becomes that a fancy yarn would be used. Indeed, since there is very considerable design and product development time required for the most effective use of these yarns, perhaps it is better to say that it is less likely that such a yarn *should* be used. However, in any case where the competition for sales is not based solely upon price, the use of a fancy doubled yarn will be able to contribute significantly to the perceived value of the fabric, garment, or item of furnishing.

There is still a debate concerning the variety of yarns currently available and the need (or otherwise) for further research and experimentation. Many textile journalists and even some involved in academic research feel that, with the enormous wealth of yarns available, there cannot possibly be any unmet need. This view is worthy of some consideration, although it is clearly one that would inhibit research if it were to become widespread. This in itself would reduce the interest in fancy yarns within the fabric and garment producing sector, since if nothing new is devised, there will be no incentive to look at the available yarns which are not new. We should, after all, bear in mind that an event like *Expofil* or *Pitti Filati* attracts some 200 or more spinners to exhibit. All of them will be showing a range of fancy doubled yarns devised to meet their ideas concerning the prevailing fashion in colour and texture, as well as the less extravagant, plainer yarns suitable for producing the more traditional fabrics and garments. Each of these spinners will have their own expertise in certain areas and they will be able to offer yarns in every fashionable colour range and style that they can produce. It is therefore said that designers need only go to the spinner and choose their yarns, since almost every possible effect must already be in production. What else can be required?

First of all, let us briefly consider the question of primary research in yarn production, such as that which was responsible for developing the chenille machine. Obviously, research in yarn production techniques will address one of the following issues:

- improving consistency of quality in existing plain yarn production techniques
- improving speed of plain yarn production using existing techniques
- improving consistency of quality in existing fancy yarn production techniques
- improving speed of fancy yarn production using existing techniques
- developing new ways to produce familiar structures
- developing entirely new production routes that produce new yarn structures.

Of these, the first two will be of interest to all spinners, whether or not they produce fancy yarns, because they have the potential to improve the profit margin available from producing the existing, standard yarns. The next three will be of interest to spinners of fancy yarns, and may be of peripheral interest to fabric designers because they will make certain fancy yarns easier to make, and consequently these yarns may become cheaper and easier to obtain. Indeed, if new ways are devised to produce new structures, we may also find that although the structure is superficially the same, the new production route in fact creates a yarn that is easier to use in further manufacturing processes. The development of new production methods that

produce new yarn structures is of course much rarer than any of the others, but without the background of expertise developed in the other areas of research, it would be impossible, and therefore the driving innovative force of fancy yarn production and usage would be lost.

Now let us consider what actually happens to the yarns and yarn designs displayed at a yarn show. Any discussion with either the designers or the spinners will soon make it very clear that a great deal more is needed, and that the ranges on display at a yarn show are only the beginning of the story. Certainly, many customers (perhaps even the majority) do buy yarns directly from the sample book, but for the others, more is needed. For example, the designer may wish to see a particular yarn in their own range of colours, or in a slightly heavier or finer count; perhaps they will have in mind a particular effect using a completely different fibre or combination of fibres. Indeed, in some cases, the designer may have searched in vain for the yarn they have in mind, and then they will choose to work with a particular spinner specifically in order to develop that yarn. It is true that spinners are very well accustomed to producing yarns for dyeing in shades other than those they use as standard, and this is not particularly challenging since at least some of the yarns will be made in the uncoloured state as a matter of course. However, changing the fibre or the count of the yarn to be produced means that sampling must be done again, perhaps several times, to produce exactly the effect being sought.

Therefore, while it is certainly the case that there is a huge range of yarns and fibres available, it is also true that, in some cases at least, the immediately available item is not exactly what is wanted. Equally, it is often the case that the designer, at whatever level, may have a specific effect in mind that is unlike anything in the present catalogue, and that therefore requires the yarn manufacturer and the designer to collaborate on its development from the beginning. In all these cases, the spinner's range of yarns and colours are viewed as inspirations, starting points or ideas. They are certainly not seen as catalogues from which stock would be selected. We should therefore remember that, perhaps more than in any other area of textiles, the question is not one of 'need' at all: it is one of motivation, of design, of innovation, of new fibres, new machinery, new combinations, all intended to produce novel effects, or to contribute, after further processing, to novel effects. We must always bear it in mind that any striking innovation can, in and of itself, create its own new market.

The spinner's catalogues, however, do more than simply offer a talking point. The range and variety of effects is a testimony to the skills and ingenuity of their designers and the inventiveness of their technical staff. It provides a 'visiting card' that indicates the range of equipment at the spinner's disposal and their expertise in handling a variety of fibres. In addition, and far more important than it may seem at first sight, each new season and

each new range provides a reason for the agents and sales representatives to revisit their customers and their potential customers. Even in the retail market, sales are not achieved simply by setting out the goods in the marketplace and hoping to catch a buyer's eye. In the industrial markets, there are many considerations over and above the superficial suitability of the goods offered for the end in view. Consequently, in industry, sales are achieved by building a relationship of trust between buyer and seller, so that the buyer knows that they can rely upon the seller to provide the goods specified, on time and to the appropriate quality. Thus, season upon season, the regular visits by the sales representatives and agents offer them the opportunity to develop their relationships with these customers and potential customers.

As a consequence of this, the trade shows offer, not a platform for sales as such – although it is true that spinners at these shows will often make significant sales – instead, they offer the opportunity to create the basis of the relationships between the spinners and their customers, relationships that then can be fostered during the year as they work together to extend specific yarn designs for their own particular purposes.

### **9.3 Historical evidence for the status of fancy yarns**

We are all aware that the attractive effects of texture, drape, and sheer eye-catching glamour in fabrics produced using fancy yarns are by no means new. Even though many archaeological discoveries have been on sites inimical to the survival of textile materials, still some artefacts have been discovered. Furthermore, in some cases, we have the writings of the ancients themselves to tell us of some of their achievements for which we have no other evidence – for example, there is a description of Egyptian printing using a variety of mordents given in the works of Pliny, who seemed to regard it as pure magic! There is little evidence in the archaeological record for many of the types of fancy doubled yarns we know today, but there is some evidence of the use of metallic threads. In 1999 and 2000 in London, visitors flocked in their thousands to see the 'Roman Princess', as the Roman woman discovered at Spitalfields became popularly known, partly because among the remains of fabric found in her sarcophagus was a tangle of gold thread, made of fine gold strips that had been coiled around a core. It is thought that the core was probably of silk, although so little remained that verification of that supposition has not been possible.

We have some material evidence elsewhere in the world that has taken the horizon of our knowledge back to 1000 BC, in burials at Ürümchi<sup>2</sup> and we know that the early weavers could be very inventive in their creation of fancy yarn effects at the loom, but the spinning of fancy effect yarns as we understand and recognise them today is of a much more recent date.

Although many of the innovations that have been discussed in this volume were designed to create structural effects by combining spun yarns, the cover yarn of gold-wrapped silk found in Spitalfields probably offers some of our earliest evidence for fancy yarns – as it most certainly offers clear evidence of the implied status they afford. And it is this point that has caused many headaches for modern designers: the high status and consequent price implications of fancy yarns are not favoured by manufacturing concerns which have ‘cost’ presented to them as the prime consideration.

## 9.4 The challenge of marketing

All marketing departments, in any industry, face a two-fold challenge – that of maintaining customer interest in their current product ranges while at the same time creating interest in new products immediately before and after their launch. Fail in the first and the company will steadily lose market share; fail in the second and years of product and process development work may go for naught, and may in extreme cases take the company with them.

In the high-technology industries or in the market for production equipment, this potential for disaster is exacerbated by a combination of factors. These include the exceptionally high investment required in research and development, and the existing general pattern of relatively slow market penetration, which although market penetration has accelerated in the years since the Second World War still means that the return on investment is neither immediate nor certain. Whereas in the food or cosmetics industries, it is straightforward, and often profitable, to simply hand out samples, perhaps together with vouchers for a first full size purchase, in high-technology or heavy industry, ‘try before you buy’ is not an available option.

### 9.4.1 The market for spinning equipment

It should cause little surprise, then, that in the specific markets with which we are concerned, radically new spinning processes are few and far between. Nor should it be surprising that the market available for any such new processes is initially very small. Although the textile industry as a whole extends throughout the world, the equipment it employs has a long life-span. Not only that, but there is a considerable market for second-hand machinery, which reduces still further the potential for sales of new equipment. Thus, except in rare times of expansion, the *actual* market every year is very small as compared with the *potential* market. An even smaller proportion of that potential market will care to take the risk of investing in a novel and untried technology.

It is perhaps a reflection of this situation that, although the newer technique for producing chenille yarns was invented in the middle of the 1970s, it was twenty years before that yarn was to be found on the High Street in any significant quantity. In this case we are choosing to interpret that appearance on the High Street as providing an indication that the technology is no longer in its infancy. In other words, the equipment has been installed in a relatively large number of mills, and therefore as a consequence of that installed base the particular yarn structure can be produced at a reliable and acceptable quality, in sufficient quantities to be economically viable. In particular, that it can be produced in sufficient quantities to satisfy the level of demand at the height of its popularity.

It is reasonable to remind ourselves that the conceptual gap between the maker of spinning machinery and the wearer of a garment is so large that the effects of the one upon the other must necessarily be expected to be long in coming. If for no other reason, the quality of the intervening stages of product design are as important as the initial technology or the marketing effort that accompanies the final item. However, we are all aware that technological advances sometimes offer successful by-products, in addition to the primary products. The most famous example of this is now the American space programme. Even though it has developed its own mythology and even though its original goals and the missions that have been accomplished are famous in their own right, the space programme is now almost equally well known for ancillary advances in technology that have created new products affecting such widely ranging areas of ordinary life as cookware, textiles and stationery.

In the same way, however wide the conceptual gap, we can expect changes in manufacturing technology to inspire or direct the creation of new products, which may even appear in due course in the ordinary retail markets. It is clear that as new techniques are invented, new markets or market sectors open up to receive them; as an example of this, as discussed earlier, we can consider the huge growth in fabrics for upholstery that take advantage of the uneven light reflectance of the chenille yarn to produce the effect of a comfortable, worn fabric in brand-new items.

#### 9.4.2 The marketing of fancy yarns

The basic marketing of fancy doubled yarns tends to follow a traditional path, generally combining a stall at yarn shows such as *Pitti Filati* or *Expofil*, with a team of agents or sales representatives who visit the existing and potential clients to talk about the yarns and the service provided in greater detail. Although some might consider eliminating one or the other, the combination offers both parties synergistic effects that allow the benefits conferred to be greater than the sum of the parts.

On its own, the trade show offers an advantage, from the exhibitor's point of view, in that within the duration of the show, many more potential customers may become aware of the exhibitor than could be reached by any other means. Since there are relatively few yarn shows, this will include many who may be almost impossible for the exhibitor to meet any other way, either because they are new to the industry or because they are based far away from the exhibitor's base, or for other reasons. Furthermore, the shows will often have trends and forecasting sections, and additional displays from fibre producers or other equipment manufacturers, and all these combine to provide an environment that can inspire and encourage the delegates. From the customer's point of view, the show offers a concentration of potential suppliers that again is not found under any other circumstances, and that in particular is useful when seeking out a particular effect.

However, there are two disadvantages that can easily be anticipated – the sheer number and range of the possibilities available, which make it difficult to maintain a clear overall picture, and the relative scarcity of truly technical advice. There is little that can be done to reduce the impact of the large scale of these events, except for the rather counter-productive method of restricting the number of exhibitors. The second disadvantage is more easily approached, since technical details will be available, and it is relatively straightforward to devise a list of questions that may be passed on to the most appropriate member of the technical staff for a response.

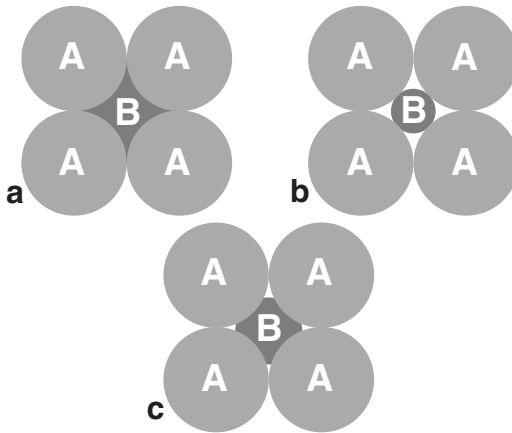
Bearing these points in mind, however, and given our earlier point that Marketing in its essence involves building up a relationship between the supplier and the supplied, there is an additional path. This is one, moreover, that, although it involves more effort, reaps dividends in the stability of the relationship that it builds – that is, the path to which we have already referred, which involves the spinners and their clients working together to design the yarns in order to ensure that they not only meet the designer's requirements, but that they can be easily processed at the next stage.

## **9.5 Management and marketing issues as they affect the fashion and fabrics industries**

### 9.5.1 Interconnectivity, irritation and their implications

Traditionally, there has been relatively little functional 'interconnectivity' between the various groups concerned in the development and manufacture of items for the fashion and furnishing world and, in particular, there has been relatively little sign of interconnectivity between the spheres of design and manufacturing. In the future we should hope that increasingly this will not be the case, and we offer here an example from the physical world to demonstrate why such a change could be considered to be an





9.1 Interconnectivity.

improvement. Interconnectivity has for a long time been of great interest to workers in the physical sciences, in particular metallurgy, ceramics and geology. It is all a matter of relationships; 'phases' – that is, the various structural forms – may be miscible with each other, or they may not be; either way, these phases define the physical structure of a body and its properties.

A possible process is illustrated diagrammatically, and may be shown by the two most extreme situations, as in Fig. 9.1.

The two 'phases' may be mineral or metallic, and may have interrelationships that depend upon the 'interfacial free energies' between *A* and *B*. These interfacial free energies are the forces which determine the structural combination of *A* and *B*. In the first case, shown in diagram **a**, *B*, whilst not miscible with *A*, 'wets' it totally, that is to say that it covers all the surfaces of *A* that are available to it. This creates a strong and stable structure in which the phases are connected to the greatest possible extent. In the second case, diagram **b**, it does not – there is imperfect 'wetting'. There is likely to be pores delimited by the adjacent structures and there is likely to be deformation of the grains of *A* and *B*. There is little cohesion within the structure of the material, which is therefore unlikely to withstand significant pressure or tension. The intermediate stage is shown in the third diagram, **c**, in which the grain of *B* is deformed to follow the shape of the grains of the material *A*. Since there is a greater degree of wetting than in the case shown in diagram **b**, the structure will be somewhat stronger, but since this is gained at the expense of some deformation, what is gained in the 'wetting out' may be lost because the increase in the wetted surface area is insufficient to counteract any lost in the deformation.

The inference for us should be obvious. Strange incompatibilities of behaviour are, as we well know, not conducive to good commercial rela-

tionships, while perfect, constant and consistent good communications are the key to success in business. It also suggests that the damage done to a company and its personnel if some of their aspirations or ideas are radically at odds may be reflected, in the end, not merely in a high staff turnover (although that in itself is worrying) but in the longevity or otherwise of the company itself, or in the health of its balance sheet.

The potential harm to a company that results from poor inter-departmental communications has always been a matter of concern, and now it is increasingly so. Many organisations simply are no longer of a size to absorb the impact of internecine rivalry among their departments. In addition, the influence of the Internet on our thinking is not limited to the increasing technological sophistication which is perhaps the most obvious. The fact that it is now possible to buy a pashmina shawl from the manufacturers in Tibet, without travelling to Tibet or even paying someone else to do so, or that we can research a variety of topics on the other side of the world without leaving our desks, is gradually bringing forth the truth of John Donne's comment in his Meditation XVII, 'No man is an island, entire of itself'. As these new technologies, which are still in their infancy, begin to make it easier for us to discover what is going on far away, so we begin to expect that we should communicate easily, indeed almost effortlessly, with those near at hand. In this way, the gradual erosion of physical distance as a barrier to the transmission of information will begin to erode in its turn our previous acceptance of differences in training and background as barriers to the transmission of information.

In the field of textile design and manufacturing, successful designers may work in partnership with technical experts to create as close an approximation of the desired effect as is possible within the externally-imposed manufacturing parameters. These designers and technologists are demonstrating the practical interconnectivity that is possible between their individual fields of interest. They are not forming a mixture of design and technology that offers in some way the worst of both worlds; they are demonstrating that by making efforts to communicate with each other in language that both can understand, they create a 'structure' within their organisation that offers the strength of the structure shown in the diagram in Fig. 9.1. This in turn results in the production of items that approximate more closely to the first idea and that can be manufactured with relative ease – the company benefits from a reduction in lead time, the designers benefit by seeing their novel ideas translated into product rather than simply left to one side, and the technologists benefit from the opportunity to develop something new and interesting rather than simply devising small variations on basic products. If the design fits the mood of the moment, sales increase; if not, redevelopment is still likely to take less time than used to be spent on the initial development. Of course, the

precondition for this delightful scenario is that all those involved are inventive people, both in the design and technical fields.

Several of the more successful users of fancy yarns demonstrate the benefits of this scenario – it becomes clear in visiting them that although designers and technologists retain their specialities, there is considerable understanding and great respect between them. Certainly, they benefit from the years of experience within the company in dealing with fancy yarns; certainly, also, for the more flamboyant fabrics, they target customers who are concerned more about the exact effect they achieve than about the exact price they are charged. But at the core of their success lies the realisation that both the designers and the technologists are necessary to the success of the company, and that neither would be able to maintain it alone. At present, this level of understanding is inculcated only in some organisations – it is not, except in rare cases, a strong feature of courses in undergraduate courses in design. This is in part because of the extreme difficulty of expounding such vague ideals as ‘understanding’, and in part because it is not possible, in the short time available, to provide students with projects of a scale that require such collaborations, when the emphasis lies primarily on ensuring that they develop their own portfolio of design and examples of their designs brought to fabric or garment form. Furthermore, and very importantly, the success of a collaboration is determined partly by the personalities involved and the circumstances surrounding them.

In the companies that demonstrate this level of partnership, the technologist may be regarded, not as a technician or production supervisor, but as a design engineer – that is to say, the one who provides the link between the designer and the producer of the goods. Indeed, in a company specialising in spinning fancy yarns to commission, it is often the case that the sales representative (the link between the customer and the production department) is actually a technologist by training and inclination, capable of operating the machinery unaided, but also sufficiently experienced to be capable of interpreting the customer’s requirements for the yarn, and therefore able to contribute not only to the production department’s understanding of the customer’s requirements, but also to assist the design department. Thus, the sales representative is able to act, as seems necessary, as the interface between the client and the production or design departments, or indeed, between the production department and the design department within their own company. They interpret not only the design idea, but also the production parameters that will apply in the next process.

In particular, this interconnectivity, this willingness to collaborate, becomes especially vital in the development of new production techniques and methods. We know that new technologies will create new markets, and that in terms of textiles a new production method will produce new effects

or new characteristics in the yarn or fabric so processed. These new characteristics in turn provide the impetus for creating the elements of the new market. The technical input is therefore crucial, since it contributes in developing new effects, and in ensuring that technically feasible, but perhaps unusual, existing effects can be used within the framework of the ordinary manufacturing processes.

However, we should not overlook, in our desire to create a perfect working environment, the creative and enlivening effects of conflict. Just as pearls are made when the animal is seeking to protect itself from irritation, so a uniformly pleasant environment, free of all conflict, does not necessarily result in a company that performs well in the marketplace. Thus, the success of the collaborations described above is based upon the fact that the design and technical specialists have developed a mutual language in which to think about and discuss what they want from the yarn or the fabric and the best way to achieve it. It is unlikely that this has been achieved without some frustration on both sides!

Equally, at different times in their evolution, companies will require different forms of leadership in order to develop. Small, new companies require a close-knit organisation that supports the inspiration of the founder; as they grow, it becomes necessary for the direction to be supplied by one whose talents lie in consolidation. Conversely, sometimes it is necessary for a large, public company to undergo a period of conflict, because the period of consolidation has outlasted its usefulness and become stagnation. In the field of haute couture, we see that the companies have very different characters, not purely because of the different people involved. The scale of the organisation is also important and it is partially for this reason that the couture ready-to-wear brands, in general, are members of one of only two or three luxury conglomerates or 'stables'. The emphasis here is less on the individual designer's inspiration, and more on the production of a small sub-selection of the range, which is targeted at a subtly different market. In recent times this has been brought home by the fact that the Jimmy Choo ready-to-wear shoe division has been sold off, leaving the designer free to concentrate on his catwalk range.

### 9.5.2 The market for fancy yarns

Not the least of the peculiarities of the market in fancy yarns is its extremely uneven nature. The reason for this is partly historical – in the old-fashioned perception of fancy spinning as being slow, prone to faults, and difficult to maintain. However, it also lies in the curricular constraints that have resulted in fancy spinning receiving scant coverage in design and technical courses during some periods in the past. This in turn has meant that in some times the newly-graduated generations of designers and technologists have

possessed relatively little knowledge or understanding of this admittedly somewhat complex subject.

The domination of 'price-points' has been another factor in the uneven fortunes of the fancy yarn. 'Price-points' are the price-brackets chosen by retailers, which give them a target price for any particular item. They are also seen by customers as indicating a certain level of quality, and each customer will have a mental picture of the price they expect to pay for a given item. Every retailer hopes that their series of price-brackets and quality levels coincides with that of their customers, and they will work hard to try to ensure that it does. The domination of prices in this way makes buyers reluctant to include the more expensive yarns and fabrics for the simple reason that they fear that the expensive yarn will push the item into a higher price-bracket, and will result in reduced sales. In other words, they expect a significant customer resistance to the costs they will need to pass on. Sometimes, of course, the risk will be taken, and the company rewarded with a best-seller – and sometimes not. But it is not necessarily the end customer whose resistance is the dominating factor. If the intermediate customer (the retailer) is fearful of these potential cost implications, the final customer will never be given the opportunity to make their opinions known.

These factors, although contributing, still do not tell the whole story. We have already commented on the effect of technical innovation upon the consumer markets. In the second half of the twentieth century, the geographical distribution of the textile industry was radically altered, with far-reaching effects. In the simplest possible terms, production was removed to low-wage countries, relying on the reduction in production costs to offset the higher freight charges and longer lead times. This had many consequences in the manufacturing sectors of high-wage countries, which had once been the driving force in the textile industry. Firstly, there was the general discouragement that was a not unnatural result of the loss of market share, with its accompanying mill closures and redundancies. Without their local customers continually demanding improvements in machine automation and productivity, the machinery manufacturers were at risk of stagnating – wage bills in the new textile mills in the Far East were so low that, even when using the old labour-intensive equipment, they could significantly undercut western prices, and so the competitive drive to reduce costs lost its edge. These factors may in themselves have given the appearance of a sector in its death-throes, as it certainly also led temporarily to an understandable but extremely unfortunate reluctance to innovate or experiment.

These downward trends have been partly reversed in the recent past, creating yet another example of the phenomenon we have already noted, where a new product generates a new market. Previously unknown yarns

have been created and exploited, and previously slow and difficult processes have been made faster. This in turn has brought the resultant yarns within the range of reasonable use at less exalted market levels than was previously the case. The most notable example of this has been in the surge in interest in the 'chenille' yarn, which followed this pattern very closely. It was due to the development of a new mechanism, which created, at reasonable speeds, a yarn that provided an effect remarkably like that of a yarn that was already known, but that was prohibitively expensive to manufacture. This in turn inspired variations in fibres and fibre mixtures with specialised uses for individual applications, all in reasonably economic, conventional, embodiments of the yarn. We should remember that, to a spinner, a fancy yarn imparts a textural or 'volume' feature, not simply a surface one, and therefore the innovations that will be of interest are not only those that create a surface appearance, but also those that provide alterations in the volume and texture of the yarns.

### 9.5.3 Changes in the market size and form

The procedures of the 'successive scenario technique' are described in Chapter 3. For the present, we note that the changes in the market profiles we expect will not be easy to reduce to simple quantities. This will be because, before the market changes significantly, or fulfils the potential it must have, there will need to be major managerial changes from the present concentration on profit, market share, or contribution. Such changes will be the result of new opportunities identified, which should be sought out and developed. These changes will be expensive for the initiators, since they will involve a variety of expenditures. There will be costs in studies, surveys and analyses of the market. Then the costs in machinery and equipment development will need to be met. Finally, there will be charges incurred in the development of fabric design, and in support for innovations in fashion, product, and style design.

We note and appreciate the endorsement implied by the adoption of these innovations by fashion or style leaders or prominent public figures. It may prove in the future to be crucially important that innovation in design (both technical and aesthetic) and innovation in marketing should go hand-in-hand. In this way, the market may be expanded to a much greater extent, without sacrificing either production or design quality.

### 9.5.4 Service

Fancy spinners often have similar local specialisations in fibre or staple length to those of spinners of classic yarns. These local markets, sometimes covering the entire manufacturing process, have many sub-sets, usually

physical or mechanical in origin. They can form the basis of the expansion of activity for the spinner, in that these local markets offer the opportunity to begin from a known point. In the modern world, of course, 'local' is a relative term. It is at least as dependent on the availability of regular and reliable freight services as it is on geographical locality. However, the fact remains that there is an area for each manufacturer that is 'local' by some definition, and this is where the idea of 'service' begins; although if it is to have any useful effect on the balance sheet, it must expand to cover all customers insofar as that is possible.

The advantage of the local manufacturer, whether of yarns, fabrics, garments or home furnishings, lies in their speed of response to any order. The fancy spinner, being somewhat far back in the production chain, needs to appreciate the influence that the rapid feedback available to retailers will have on their own customers, who may be garment or fabric manufacturers. There is always a lower limit to the turnaround possible in manufacturing while maintaining an acceptable quality, and the fancy spinner will often find their prime task lies in balancing the requirements of their customers, which are often for a particular yarn to be instantly available on request, with the demands of their own manufacturing processes and the concomitant requirement that the yarn be consistent in quality. Since any item that is sold on largely subjective terms, as garments generally are, receives essentially 'instant feedback' when it is offered to the customer, the manufacturer can benefit particularly if they are able to respond promptly to unanticipated success. If they are relatively 'local' to their customers, they may also benefit because such local manufacturing will permit a relatively rapid response without large holdings of stock. This in turn reduces the cost of unpopular lines.

The acute manufacturer, wherever they may be based, will also find that their guidance is particularly valued by clients who are unsure of the best choice of fibre or material for their own particular end use. Time spent in advising customers is rarely wasted; even if it does not result in immediate sales, it certainly contributes to the enhancement of the relationship between customer and supplier, and this in turn markedly increases the probability of orders in the future.

Once again, as in most such cases, we come back to the idea of 'service'. If the customer, whether corporate body or private citizen, is pleased with the support and service provided by the supplier, both parties will benefit. This idea is at the core of the redevelopment occurring in the retail sector as well. It has been noted that Mary Portas, the former marketing director of Harvey Nichols, remarked in connection with fashion retailing that 'the secret of longevity is to find your true customer and indulge them' (quoted in the Financial Times 'How To Spend It' magazine, September 2001). No clearer statement of the benefits offered by excellent customer relations

practice could be made than this, which shows clearly that the reward for knowing one's customers and catering to their needs or their aspirations is that the company remains solvent and indeed improves its balance sheet. Various high-profile events among the fashion and clothing stores on Europe's high streets have also demonstrated clearly the penalties of any failure to bear in mind the needs and aspirations of the core customer.

### 9.5.5 Production capacity and the workforce

A level of demand for a product which exactly matches the production capacity for the product is clearly extremely rare. It is usual to have some excess either of capacity or of demand, and the skill with which an enterprise handles these situations is of course an important element in that organisation's overall success. It is clear that the widely varying levels of demand for fancy yarns offer grave challenges to the management and marketing sections of the companies involved. The difficulty posed by the production of chenille by the old method was a significant factor in its relatively rare and short-lived periods in the limelight – it simply was not possible, using the technology available at the time, to satisfy demand at its peak, and because so little of the demand was met, the product remained available only to the select few, and never attained the security (in production terms) of the mass market.

In this period at the very start of the twentyfirst century, the problem is reversed, and there is some over-capacity in comparison with the production at present required of it. This, of course, is not entirely unfortunate as it allows for a rapid and flexible turnaround on design development and production deliveries, within the constraints – largely of time – presented by the available technologies. Too great an over-capacity for too long a period may see some of the companies involved in this sector going out of business entirely, or simply losing touch with relevant customers in their struggle for survival. Both of these possibilities may lead in turn, as fashions change, to a significant reduction in capacity, and even to under-capacity in relation to any future increase in demand.

It is this see-saw of demand and capacity that proves particularly challenging, in the speciality sectors above all, as such ups and downs can lead to an irrecoverable loss of expertise. If there is storage space available to do so, it is relatively easy to take equipment out of production and retain it against future need – but unless it is possible to find other work for them, it is not possible to do the same with the operatives. In small, specialist companies it is often the case that the workforce needs to have a wide range of skills, and frequently all of those employed need at least some level of training that covers all the installed machinery. Such a company-wide full training of the workforce to enable all of its members to operate all of the



machines is likely to repay the initial investment several times over, in the flexibility it permits the plant manager to exercise in planning assignments. Depending upon the complexity of the equipment and the experience of those being trained, the initial training period may be of between one and six weeks, although a further probationary or supervised period is clearly advisable. It is therefore clear that, in the event of a sudden surge in demand for a particular type of fancy yarn, there would necessarily be some delay in attaining production of the full capacity of each plant, while additional operatives complete their training. However, the existence of such a multi-skilled workforce can be used as a marketing tool by a spinning company's sales force, as it will create an atmosphere of optimism and confidence in the company and its future. It also tends to produce a more committed and enthusiastic workforce.

### 9.5.6 The effects of serendipity

When we talk of serendipity in the context of design and technical development, we are attempting to describe the unpredictable and incalculable combination of circumstances that allows the right product or combination of products to be set before the right group of customers. The phrase 'the right group of customers' in this case, of course, represents the group of customers most likely to wish to buy the product. The serendipitous combination of circumstances to which we refer may affect the design and technical development of a new product, by allowing the designer or the creative technologist to take full advantage of their moments of inspiration in solving problems or devising new ideas. It may also affect the choice of market first targeted, which, although it is never a matter of chance, can have a considerable effect on the eventual larger success of a product. It is much easier to expand the target market by building upon a successful base than it is to re-launch a product successfully when it has already failed in one market.

Serendipity may be described as the creative element that forges links between a designer's ideas and a manufacturer's capability, and that therefore eventually results in new products being put forward to the consumer. It is never the sole contributor to the success of an idea or development, but it has its place in the unpredictable element of design success. Serendipity is the combination of circumstance, situation and personality that allows an idea to be engendered in the mind best suited to take advantage of it. Contrary to popular mythology, at least ninety percent of any innovation is the result of sheer, unremitting hard work, but few would deny that this hard work is frequently guided by what seems to the outsider to be an astonishing intuitive grasp of the particular situation or of the capabilities of the materials and techniques available.

### 9.5.7 The secrets of serendipity

There will be persons in both the technical and the design fields who will seem to benefit more consistently from these serendipitous events than others; this will, of course, seem to the outsider to be miraculous, or else to offer evidence of genius. When these people are interviewed, however, a pattern emerges that makes it very plain that the apparently effortless effects of these serendipitous events are in fact the results of more prosaic forces. These consistent beneficiaries of serendipity have certain characteristics in common, and they rarely consider themselves geniuses. They are interested in and knowledgeable about the aspects of technological development that concern them, either directly or indirectly. They have considerable inventive talent, which is often demonstrated outside their main field of interest as well as within it; they have a gift for perceiving links or patterns where less fortunate people see only unconnected events. They also have imagination, without necessarily being imaginative in the ordinary sense, and they have considerable powers of observation. The ability to perceive links between otherwise unconnected events is one that can be enhanced by maintaining an interest in a wide variety of fields and pastimes – it is often notable that the serendipitous events occur more frequently as the person involved becomes older and more experienced, developing a wider range of interests. These inventive people will be curious about their surroundings, and they will have a record of success, possibly in more than one field. As a consequence of this, they will also be confident of success.