The manufacturers' organisation

BDO Stoy Hayward

Manufacturing Advantage: Changing the ground rules of global competition

Contents

About BDO Stoy Hayward

BDO Stoy Hayward is the award-winning UK Member Firm of BDO International, the world's fifth largest accountancy network, with more than 600 offices in over 100 countries. We operate from 14 offices in the UK with more than 3000 partners and staff. We believe that clients want an adviser they can trust, one who understands them and their objectives. One way we do this is by continually building our sector related expertise, and applying this to the way we do business.

Most manufacturing clients are now active internationally. So are we and in regions that are important to manufacturing. Most are involved in acquisitions, public offerings and major capital projects. We have great experience in these areas. Our manufacturing clients have regulatory, reporting and legislative issues. We bring sector expertise and a proactive approach to assist. Our clients want to mitigate and manage tax liabilities globally. Our international specialist teams have the skills to assist. Manufacturing remains one of the key industries of the UK economy. We are delighted to be able to play an active role in supporting the businesses that operate in this vibrant, changing and challenging sector.

To talk about any issues your manufacturing business may be facing please contact Tom Lawton, Head of Manufacturing at BDO Stoy Hayward, on 0121 352 6372 or 07778 343346 or email tom.lawton@bdo.co.uk.

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Foreword

There is little doubt that UK manufacturing is facing its most challenging time for several decades. The rapid downturn in activity in automotive, metals and other key sectors will have significant knock on effects across UK manufacturing. The economic outlook across the world has deteriorated rapidly and significantly and there remains a great deal of uncertainty around how the current crisis will play out and how enduring the downturn will be. However UK manufacturers have been working hard in recent years to reshape their business strategies and will enter this period of economic turbulence in a stronger position than they have in the past.

The latest research in a series on modern manufacturing from EEF and BDO Stoy Hayward focuses on two strategies that companies have deployed to enhance their competitive position for the longer term – service provision and supplying to niche markets.

In recent years the proportion of manufacturers offering services alongside their products has been on the increase. Companies are offering customers additional value, from customer training and maintenance to end-to-end manufacturing solutions. There are clear benefits on both sides. Customers receive a seamless service from one company, which may involve everything from design right through to installation and disposal. Service providers gain from a more diversified revenue stream and a distinct competitive advantage, particularly against lower-cost producers.

Similarly, we have seen more companies move into niche markets. Although traditionally associated with smaller companies, our research shows that this can be just as applicable to some product lines of large companies. Effective and innovative production processes and a focus on designing for customer specifications are key to being niche.

Importantly, companies have matched these new strategies with significant investment in new equipment, better skills and continuous innovation. But will this be enough to keep UK manufacturers ahead of the competition and carry them through the economic storm ahead? Manufacturing has demonstrated its responsiveness in the face of rapidly changing global economic challenges in recent years. But UK manufacturing will need to respond again to the current challenges in terms of market positioning and cost base in order to maintain all important cash flows. Companies that have established or can quickly develop the service and niche positions outlined in this report will be well placed to come out of this recession in better shape.

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Summary

Manufacturers' activities have evolved in recent years to include a broad range of value-adding functions. Unrelenting pressure from lower-cost producers and the prospect of these producers competing more effectively on home turf with improved products has prompted UK firms to develop new strategies. Certain sectors have clearly been reaping the rewards, with some parts of manufacturing reporting exceptional rates of growth in recent years.

Our previous research has shown that firms are investing abroad and offshoring some manufacturing functions in order to tap into new markets and reduce operational costs. In addition, more companies have been looking to widen their customer offer to include services as well as products. These services can range from fairly basic maintenance support and warranties right through to the provision of integrated solutions which encompass design, manufacture, project management and installation.

There are potentially significant gains on offer for those that choose to go down this route. The strategy can contribute to improved customer retention, greater resource efficiency through upgrading rather than replacing equipment and, of course, a positive impact on companies' bottom lines. However, meeting customer expectations and delivering this added value can require major upfront investment in workforce training and development, capital equipment and other intangibles. It also demands time and effort to develop the right business model, but a successful move into service provision can allow companies to widen their lead against competitors.

Another option increasingly being adopted by manufacturing is that of supplying to specific niche markets. Niche manufacturing has become the buzzword of modern manufacturing in recent years and more and more companies are implementing their own niche strategies. Our survey shows that being niche is more than low volume, customised production. Niche strategies are focused on a combination of customer demand, innovation and production capacity and flexibility. A number of companies have developed winning formulae, gained from stronger output and offset some downward pressure on margins.

Defending a niche position requires ongoing emphasis on customer service, from delivering tailored solutions to ensuring consistently high quality products and services. In addition, continuous product improvement and development will support firms' aims of increasing penetration in existing markets and breaking into new ones.

As the economic outlook becomes increasingly ominous, many manufacturers look in better shape to weather this particular storm. While these new strategies have provided a significant boost for a more promising future for the sector, manufacturing and production remains central to this success. Creating the right environment for ongoing and critical investment in capital, skills and innovation is more important than ever if manufacturers are to deliver even greater value to customers and defend their niche positions in the market.

1. Introduction

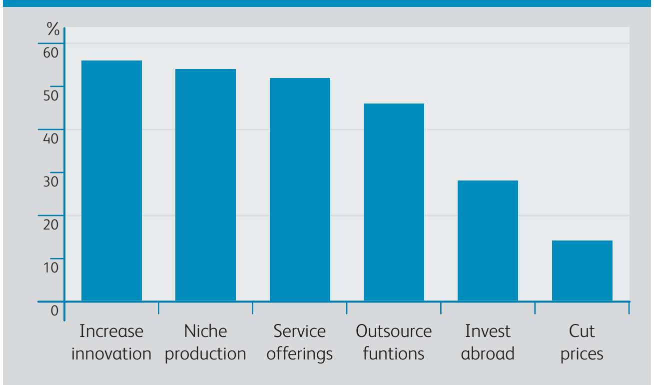
The role of manufacturing in a balanced UK economy has become increasingly significant as global economic growth has slowed and the fallout from the current financial crisis has become more widespread. Over the past five years, parts of manufacturing have expanded rapidly and have made an important contribution to both output and productivity growth.

The pressures of globalisation and the progress that many low-cost economies are making towards industrialisation have led to a shift in the activities of manufacturers in the developed world. Previous research by EEF and BDO Stoy Hayward has highlighted some of the steps that manufacturers have taken to advance their competitive position in the marketplace. Our 2007 Global Challenges Survey showed that the majority of manufacturers were implementing new strategies in order to stand out from the competition.

Chart 1 shows some of the steps that companies have taken in response to increased competitive threats. Most have looked within their businesses for ways to improve competitiveness, through increasing innovation and concentrating on low volume, niche production as well as developing service offerings for customers. In addition, around 45% of companies have offshored some functions or invested abroad as a means of reducing costs while focusing their UK operations on the higher value added end of the spectrum. Relatively few companies now regard price-cutting as a sustainable means of competing with lower-cost producers and, of those that have cut prices, most are doing so in conjunction with other strategies.

Chart 1 Niches and services can give firms competitive lead

% of companies adopting strategy

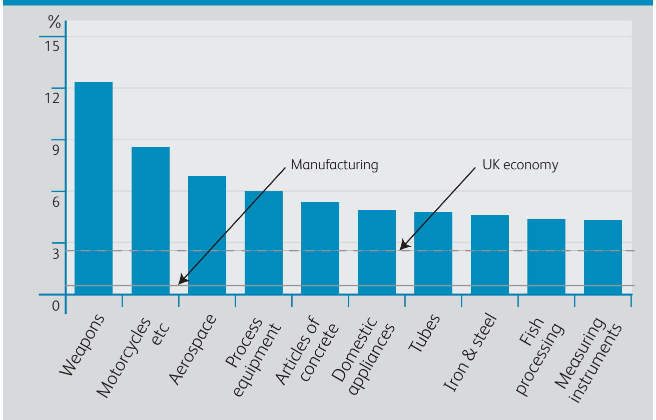


Source: EEF/BDO Stoy Hayward Competitive Challenges Survey 2007

The implementation of these strategies has resulted in a fitter manufacturing sector and one that is better placed to deal with weaker global economic conditions. Indeed, in recent years some parts of manufacturing have reported exceptional rates of growth. Chart 2 illustrates the top ten fastest growing manufacturing sectors, all of which have shown a stronger performance over the past five years than manufacturing in general and the UK economy as a whole.

Chart 2 Some sectors racing ahead

Average annual % growth 2002-07



Source: National Statistics

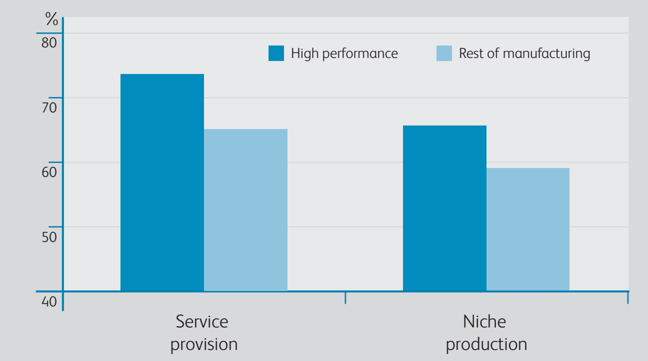
These high-performing sectors cover a broad range of manufacturing activities – from the R&D intensive and technology-driven aerospace and instrumentation sectors to the more traditional basic metals and mechanical equipment sectors. Moreover, there are significant differences across the sectors in terms of their investment in innovation and capital equipment. Our research[1] concluded that the successful manufacturing sectors are gaining a competitive advantage by offering customers tailored products and solutions, supporting these with after-sales services and taking the lead on responding to environmental regulations and changing consumer tastes.

EEF conducted two short surveys to investigate some of these strategies further and to monitor the trends in companies engaged in higher value added activities. The surveys were also designed to gain more insight into the range of services that manufacturers are offering customers and into the activities that companies regard as niche.

1 EEF/BDO Stoy Hayward (2008) *Modern Manufacturing – the High Performers*

Chart 3 New strategies support high performance

% of companies engaging in high value activities



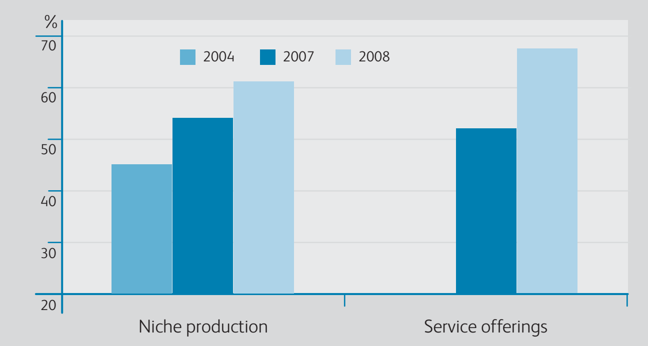
Source: EEF Business Trends Survey

The surveys confirm that these activities have contributed to the success of the high-performing manufacturing sectors in recent years. Chart 3 shows that the companies in the top 20 high-performing manufacturing sectors have a greater propensity to provide services and operate in niche markets relative to the rest of manufacturing.

Moreover, our surveys show that more and more manufacturers are adopting these strategies across the board to deal with the low-cost competitive challenge. For example, the proportion of companies operating in niche markets has been on the increase. In 2004, around 45 % of companies described some or all of their production as niche, with this figure rising to 54 % in 2007 and 61 % in 2008. Similarly, over two-thirds of manufacturers provide services as a part of their offering to customers. The next sections will look in more detail at how companies are implementing these strategies, the benefits derived from them and the outlook for the future.

Chart 4 More companies broadening offers to customers

% of companies offering services or niche production



Source: EEF Global Challenges Survey 2004 and EEF Business Trends Survey

Case Study – M Wright and Sons, Loughborough

M Wright and Sons are specialist manufacturers of high-tech woven narrow fabrics, rigid and elastic webbings and technical ribbons. The vast majority of their product range is niche and they export around a quarter of output across the world. M Wright are a vertical manufacturer, with all aspects of the businesses on one site.

The niche products are used in a number of different applications. For the defence sector, products are used in body armour and combat uniforms, and they must comply with strict performance criteria and quality. In the aerospace sector, they are one of a handful of textile companies to achieve the Aerospace Industry Quality Management standard and produce products to exacting technical requirements.

Innovation is customer focused. The majority of products are developed specifically to meet the requirements of customers and the company is responsive to individual requirements when designing and developing new products. M Wright invests heavily in research and development and capital equipment in order to fulfil customers' orders and requirements. Its reputation and ability to meet customers' needs and build a good relationship ensures they are successful in their niche.

2. Manufacturing and services

- **Two-thirds of companies are offering services on the back of production activities.**
- **Some sectors have greater scope to provide services.**
- **Services offered range from basic maintenance support to integrated solutions for customers.**
- **Companies are deriving revenue from service activities, but scope remains to improve the return on the investment needed to deliver them.**

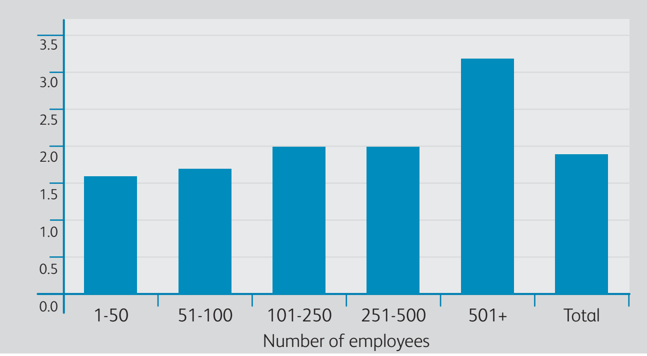
Manufacturers are increasingly looking for ways to add value to their activities in order to improve their competitiveness. The traditional view of manufacturing as a purely production- or process-led industry no longer holds true. And as our Global Challenges Survey showed, price is becoming less important for companies in the competitiveness equation. Pressure from both customers and low-cost producers has led companies to rethink their position in the market and to develop new business models to support their drive to compete on the basis of customer service and quality. This has resulted in around two-thirds of companies adding a range of services to their customer offer.

The breadth and scope of services offered by manufacturers varies widely across the industry. In some cases, they are now providing a whole-life service to customers, from design and development through manufacture and maintenance and ultimately to disposal. In others, service provision may be limited to maintenance contracts or help desk support. Nevertheless, this evolution of modern manufacturing in the UK and in other parts of the developed world has ultimately led to a blurring of the distinction between the manufacturing and service sectors. It also suggests that manufacturers are increasingly focused on meeting the individual demands and requirements of their customers.

Our survey shows that many manufacturing companies are supplementing production with a number of services. Small and medium-sized companies (with between 1 and 250 employees) offer customers one or two service lines, on average. The largest companies tend to offer a broader range of service support to customers – on average, between three and four.

Chart 5 Large firms most likely service providers

Average number of services by firm size

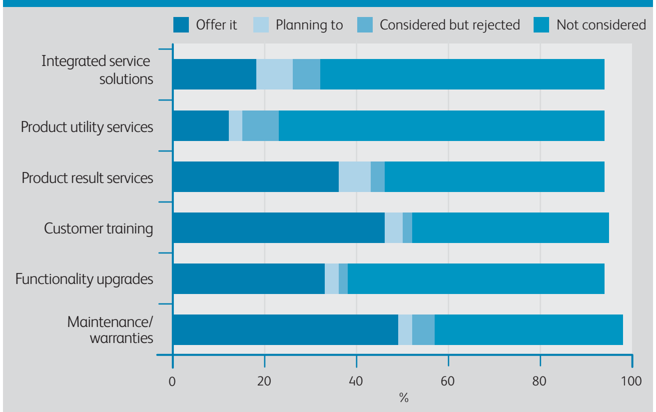


Source: EEF Business Trends Survey

The most common service was maintenance contracts and warranties, with almost half of the companies currently offering these to customers. The proportion of companies offering maintenance contracts or warranties rises to 58% for large firms with more than 250 employees. Growth in demand for maintenance contracts has been driven by the increasing sophistication of manufactured goods, particularly in industries such as electronics and mechanical equipment, for example. Table 1 confirms that the provision of maintenance contracts is especially widespread in these sectors.

Chart 6 Many firms yet to consider service options

% of companies offering services



Source: EEF Business Trends Survey

Manufacturers can, therefore, offer greater value to customers through the development of maintenance and service contracts which go beyond simply providing spare parts. Furthermore, relatively few companies offer this service in isolation. Almost three-quarters of companies surveyed provide maintenance in conjunction with customer training and three-fifths offer it alongside functionality upgrades.

This approach can allow companies to form a longer-lasting relationship with customers and can potentially enhance the life of products through maintenance and upgrades rather than replacement. It also saves on the costs of product disposal. The WEEE Directive has placed new demands on manufacturers of electrical and electronic goods, for example.

There are further benefits to the service provider. By developing closer links with the product through its life cycle, a manufacturer can incorporate feedback gained from servicing and maintenance into future product design and development. This highlights the crucial link between services and the manufacturing operations within a business. That said, our survey showed that, for some companies, maintenance services were not inextricably linked to manufacturing and production.

Interviews with service providers found that companies offered maintenance and repair of competitor products as well as their own. In one case, the fact that most of their products were designed and built to individual specifications allowed them to service similar products manufactured elsewhere. The knowledge gained from manufacturing niche or customised products can allow some companies to build on their core capabilities and offer services beyond the customer base for their own products.

Nearly half of companies (45 %) offered customer training. Again, large companies were more likely to do this, with 54 % of companies with more than 250 employees currently offering training and another 10 % planning to do so. Companies in the electrical and optical sector were more likely to provide this service. At the other end of the spectrum, most companies operating in metals and in rubber and chemicals had not considered the option.

Like maintenance contracts, supplying training is a further means of delivering additional benefits directly to customers, helping them derive the maximum benefits from a product. Further research showed that customer training can take a number of forms, ranging from customer training seminars to on-site training support. While some companies offer online access to user manuals, it seems that e-learning or web-based training materials have yet to be exploited to any great extent.

Delivering benefits to customers

Our survey showed that customer-responsive strategies are the most common across manufacturing. Around a third of companies offer functionality upgrades, which may be considered a more proactive service. Table 1 shows that functionality upgrades tend to be offered by more technology-intensive sectors such as machinery and electrical and optical equipment.

Further research shows that upgrades can cover software for ICT-intensive equipment or retro-fitting equipment with new technologies to improve performance. Either option can improve the performance or productivity of a customer's existing equipment. For example, a company manufacturing communications equipment has moved to producing modular components which can be updated as technology advances. This means that the life of the product is extended and the product can be enhanced with new technology more frequently. Another example is a pump manufacturer that has developed a new range of energy-efficient products, the technology for which can also be used to upgrade existing pumps in the market. Refurbishing and upgrading pumps offers twin benefits – a more cost-effective solution for customers and a reduction in the environmental impact of manufacturing new products.

Table 1 Service provision by sector, % of companies offering service

	Maintenance/ warranties	Functionality upgrades	Customer training	Product results services	Product utility services	Integrated service solutions	Average number of services
Rubber and chemicals	23	17	38	40	7	7	1.3
Metals	28	15	23	21	3	13	1.0
Machinery	78	52	72	51	24	22	2.9
Electrical and optical	69	60	71	46	17	27	2.8
Transport	59	37	49	44	16	26	2.3
Other manufacturing	33	17	41	26	5	12	1.3
High performing sectors	57	41	54	39	20	19	2.3

Source: EEF Business Trends Survey

Case Study – SPP Pumps, Coleford, Gloucestershire
SPP Pumps design and manufacture pumps for use in a range of applications including in the oil and gas industry, industrial fire safety systems, industrial and municipal water supply and treatment and mobile pumping solutions. They have been making pumps for over 130 years and export extensively worldwide.

They have five product divisions concentrating on specific application niches plus a dedicated service division having the expertise and knowledge to maintain and repair both SPP and other manufacturer's products.

Their Indian parent company supply some basic pumps and parts but key to SPP's success is the extensive addition of engineering, packaging and test resources to tailor products to the respective niche requirements.

Within the water pumps division, SPP have a low life cycle cost series concentrating on sustained pump efficiency, durability and environmental and cost savings over the whole lifetime of the pump. This niche will only become more successful as more companies are forced to reduce energy costs and turn to environmentally friendly products.

Another niche division is the manufacture of industrial fire pumps, the pumps need to meet numerous safety standards and be approved for the purpose within each country they are to be used. SPP can manufacture the product and meet these quality standards.

Product results services are another means of ensuring that customers receive maximum benefits from products, with the supplier guaranteeing a certain level of performance. This can range from repeatability checks in the instrumentation sector to polymers which have been developed for safety-critical applications, such as power generation. Overall, our survey found that over a third of companies guarantee the performance of some, if not all, of their product lines. While this service is again common across the machinery sector and the electrical and optical sector, it is also offered by two-fifths of companies in the rubber and chemicals sector. Moreover, as the next section will show, product results services complement the rubber and chemicals sector's focus on the manufacture of niche products. In what is a relatively mature industry in the UK, the guaranteed performance of products is clearly seen as an important means of differentiation from what is becoming a fast-growing industry in emerging markets.

Guaranteed performance has also become a more widespread service model in the aerospace sector. Rolls Royce is the oft-quoted example of this type of service[2] provision. It guarantees a maximum cost per flying hour to the company. This type of service contract can generate substantial revenue streams and provides the customer with greater certainty over total cost while removing an element of risk.

The provision of integrated service solutions takes customer- and product-related services a step further. This service line can involve a supplier taking responsibility for one or more areas of a customer's business. It is a more highly evolved service for manufacturers and relatively few companies are currently offering it – only 18 % overall. Furthermore, there is a more significant difference between firm sizes in their propensity to offer integrated service solutions; just over 10 % of small companies currently offer this service compared with 30 % of large companies.

In addition, 60 % of companies offering integrated service solutions do so in conjunction with three or more other services. This would suggest that these companies are most likely providing services across the whole life cycle of a product. This model requires strong project management capabilities, as the supplier may contract with other providers to deliver a complete solution for customers, including systems integrations, installation or performance monitoring.

Like other service lines, the provision of integrated solutions is more common among the electrical and optical and the transport equipment sectors. In addition, one in eight metals companies offers this service to customers. Large scale projects, such as those involving offshore construction, can provide opportunities for companies in the metals sector to provide these complete solutions. For example, companies supply not only the manufactured products but also take responsibility for design, materials testing, process outsourcing and off-site assembly.

Managing aspects of a complex project with customer and contractor relations requires a broad range of capabilities. This can involve significant investment in workforce development. Furthermore, manufacturers have had to raise their game on branding and marketing in order to promote their wider service capabilities. Intangible investment is therefore making a growing contribution to companies' overall investment expenditure.

Scope to grow service provision

While the survey results show that a large proportion of manufacturers are complementing their production

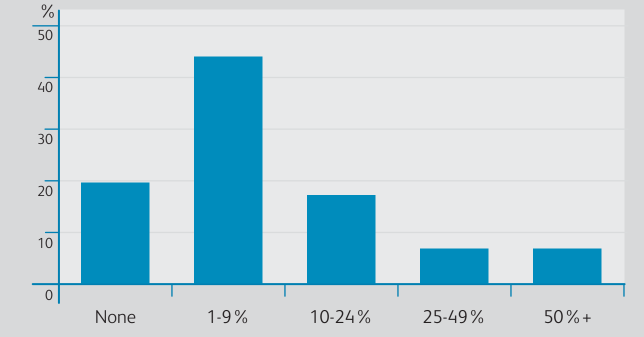
2 Source – Institute for manufacturing

activities with service provision, around one in six respondents had not yet considered offering any services to customers. As Table 1 showed, there are clear differences in service provision across manufacturing sectors. In metals, for example, over a quarter of companies have not yet considered services as an option. The next section will show that companies in this sector are more likely to be operating in niche markets, which is currently giving them a competitive lead, but there may be scope to build on this advantage.

In addition to providing companies with a means of differentiating themselves from lower-cost producers, service provision can deliver bottom line benefits. On average, companies offering services said they contributed around 14 % of their total annual turnover. However, there are some striking differences in companies' abilities to raise revenue from services. Around one in five service providers said that this activity brought in no additional revenue. This would imply, therefore, that some firms see services purely as a way to stand out from the competition.

Chart 7 Most service providers seeing revenue benefits

% of companies deriving share of turnover from service provision



Source: EEF Business Trends Survey

Chart 7 shows that manufacturers generally derive less than 10 % of revenue from services. Around one in eight companies report generating more than a quarter of revenue from services. Interestingly, there is not a significant difference between firms of different sizes in the proportion of turnover accounted for by services. On average, small service providers said that 13.9 % of turnover came from service provision compared with 15.1 % for large companies.

Companies offering only one service line are more likely to report no additional revenue. The proportion not generating revenue streams from services declines as the number of services offered increases, as shown in Table 2. This could suggest either that companies that are new to service provision have not progressed to developing a pricing structure for their offer or that the service is, initially at least, offered for the purpose of differentiation rather than raising revenue.

As might be expected, the more services on offer, the greater the revenue-raising potential. However, the share of turnover accounted for by services does not increase significantly with the number of services offered. Interviews with companies revealed different objectives of service provision. For example, some more established service providers felt that customers value service offerings and are therefore willing to pay for a more complete manufacturing solution. Pricing services is a different ball game to pricing products, which have physical inputs, transport and logistics costs, for example, which can inform prices. Services may be more of an abstract sell for companies relatively new to this business model.

Table 2 Companies generating revenue gains

Number of services	% of companies deriving no turnover	average % of turnover
1	41	12.3
2	19	10.9
3	15	16.7
4	5	14.8
5+	6	18.1
Total	20	14.2

Source: EEF Business Trends Survey

In addition, the combination of services offered may be a factor in raising revenues. Further analysis of our survey data showed that the various service lines appear to offer different revenue potential. Companies offering the complete package of integrated service solutions report the highest revenue streams as a proportion of turnover. This is not surprising, given the potential complexity of managing other agents in the supply chain or other partners in the assembly process.

Functionality upgrades also provide higher than average revenue potential. More companies charge for this service, possibly because the potential benefits to customers, in terms of improved performance in the long run, are more visible. Revenues from customer training, however, come in below average. Customer expectations of training as an added benefit may be one reason why fewer companies are able to raise revenues of the back of this.

Table 3 Complete solutions offer greatest revenue potential

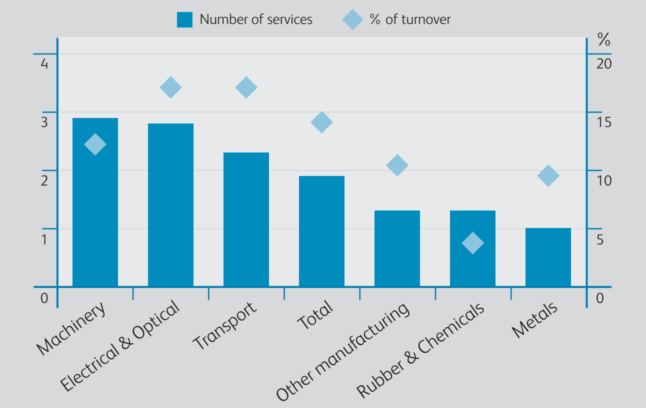
Service	% of companies deriving no turnover	average % of turnover
Maintenance/warranties	14	14.5
Functionality upgrades	8	16.5
Customer training	14	13.6
Product results services	20	14.6
Product utility services	3	14.1
Integrated service solutions	16	20.2

Source: EEF Business Trends Survey

Chart 8 shows that, at the sector level, the propensity to provide services is not necessarily linked to revenue. Machinery – the largest service provider – gains less revenue from its service activities as a proportion of turnover than other sectors. Transport, on the other hand, would appear to generate a disproportionately large share of revenues from services. This would suggest that companies in the transport sector have more experience at pricing services. Alternatively, mechanical equipment's exposure to competition could suggest that customers receiving a level of service provision take the additional benefits for granted as the offering has grown.

Chart 8 Transport sector gains most revenue from services

Average number of services and % of turnover from services by sector

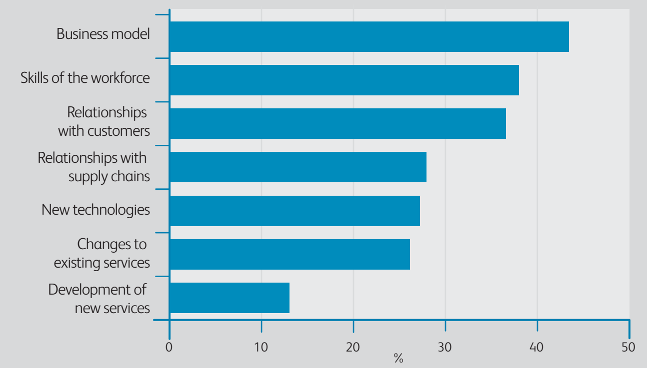


Source: EEF Business Trends Survey

Chart 9 shows that companies have implemented significant changes in order to exploit the potential of services. This strategy can involve significant investment in skills, innovation and new equipment – both capital and supporting IT infrastructure. EEF's Innovation Monitor, conducted earlier this year, shows that companies have focused on adapting their business model, improving workforce skills and developing different relationships with their customer base.

Chart 9 Service provision requires change within the business

% of companies



Source: EEF Innovation Monitor 2008

Potential for further growth

Discussions with a number of companies showed that investment in workforce skills was one of the most significant changes necessary in order to provide a total solutions package to customers. In addition, a new approach to branding and marketing was needed, requiring additional investment. The concentration on internal restructuring has allowed companies to offer customers a more complete package. In many cases this may have started as a survival tactic but, in order to maximise the benefits, our survey suggests that some service providers may need to develop the offer further in order to reflect how best to build on their success in providing greater customer value and to improve profitability.

Moreover, there are likely to be more opportunities for companies in overseas markets. In some cases, service offerings are restricted to the domestic market. Data from National Statistics, however, suggests that manufacturers exported services to the value of around £11bn in 2006, with most destined for developed markets in Europe or North America. There are some administrative and regulatory hurdles for manufacturers offering services to a wider market and some companies may have to refine and market their offers to ensure that they generate returns on the investment needed to provide value added services.

The question is, will this new emphasis on services diminish as the current economic environment provides new challenges? The results from our surveys suggest not. The upfront investments that firms have made in order to adapt to the changing competitive landscape and to offer greater value to customers suggest that companies are in this for the long haul. Many are seeing the benefits in terms of customer retention, if not revenue generation, and this should stand them in good stead for the future.

They must ensure, however, that the focus given to product and process development also applies to service innovation. Despite the fact that two-thirds of companies are now offering services, our Innovation Monitor showed that less than 15 % had developed new service offerings in the past three years. Continuous improvement in services and growing the range of services on offer will play an important role in the longevity of this strategy for manufacturers.

3. Niche manufacturing

- **Over three-fifths of companies manufacture for niche markets.**
- **Niche manufacturing encompasses a broad range of activities to give companies a competitive edge.**
- **Production capabilities can be key to successful targeting of niche markets.**
- **Defending a niche position requires ongoing investment as well as continuous improvement and development of products**

In our previous report, Modern Manufacturing – the High Performers, developing and manufacturing unique products contributed to the success of the top-performing sectors. With the growth in the number of manufacturers seeing themselves as niche and the success of those producing unique products, niche manufacturing is an approach which is being increasingly adopted by manufacturers in order to stay competitive in the face of low-cost competition from emerging economies.

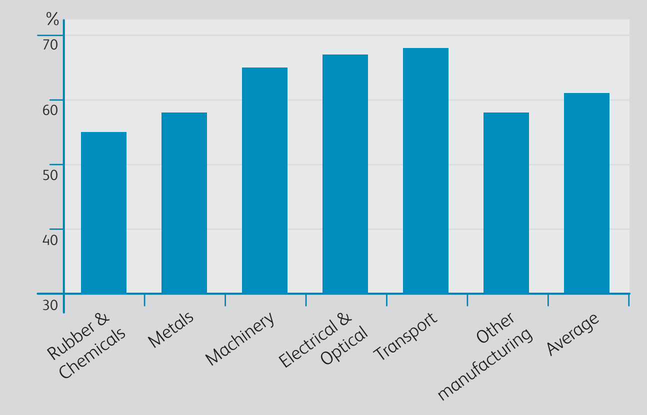
As discussed in the Introduction, the number of companies reporting themselves to be a niche manufacturer grew from 45% in 2004 to 54% in 2007. Over 600 companies responded to questions regarding niche manufacturing on EEF's Business Trends Survey and the proportion regarding themselves as niche has now risen further to 61%. The growth would suggest that manufacturers are turning to niche production as a business approach; many cannot compete on cost or volume terms with emerging economies like China and India. To remain in the market, companies are choosing to manufacture niche products where the design, production and quality cannot be matched by others. The EEF/BDO Stoy Hayward Global Challenge Survey showed that firms see innovation as the primary means of responding to competitive pressures and tend to reject options such as price cutting and offshoring.

The traditional view of niche manufacturers is that they are small, but our survey shows that niche can be large, even global. While small and medium-sized companies were the most likely to see themselves as niche (62% and 61% respectively) just over half of large companies see themselves that way. Small companies may only produce niche products whilst larger companies might have niche product lines side by side with other larger-volume product runs.

Sector differences were also evident and can be seen in Chart 10. The metals sector cannot compete with the sheer volume of production in countries such as India, where annual steel production growth is at around 12% and is set to achieve 124 million tonnes of steel capacity by 2012. By moving into niche production and offering flexible production and high quality products, metals companies can survive in the face of relentless growth from emerging economies.

Chart 10 Higher concentration of niche manufacturers in certain sectors

% of companies reporting they are a niche manufacturer by sector



Source: EEF Business Trends Survey

Similarly, the electrical and optical sector has been under intense competitive pressure from a growing number of emerging markets such as the Philippines and Vietnam. The manufacture of electronics goods, in particular, has been growing rapidly in the Far East; over the past ten years the fastest-growing imports from China to the UK have been computers, televisions and audio equipment. The UK has therefore maintained a competitive edge in these sectors by developing more sophisticated goods and technologies. Our survey shows that many companies in this sector are also manufacturing for niche markets.

What is niche manufacturing?

With so many companies now claiming to be niche, how can this strategy be defined in a modern manufacturing context? A niche can be described as a special area of demand for a product or service, so niche manufacturers can be described as making a product that fills an area of demand. But is being a niche manufacturer as simple as making a product that no-one else makes? Our results would suggest that this is not the case. We asked companies what they saw as their particular niche, and the wide range of responses shows that niche manufacturing cannot be boiled down to one simple explanation.

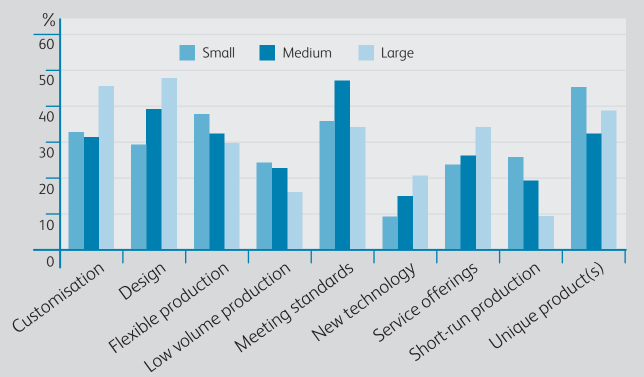
Two-fifths of respondents saw their niche as being a unique product or products, probably the definition of niche manufacturing that most people would immediately think of. However, nearly as many respondents (39%) saw their niche as meeting product or quality standards, particularly in the metals sector where precision engineering is an important factor and many quality concerns have been raised with products from low-cost countries. Producing goods to specific standards is especially crucial for companies supplying to offshore industries where manufacturing standards may be safety-critical.

Around a third of respondents saw design, flexible production and customisation as their niche. A quarter of respondents considered the service offerings linked to products to be their niche, reinforcing the view that services are an increasingly important constituent of UK manufacturing. So whilst the product itself might not be unique, the quality and means of production – whether it be flexible, low-volume or short-run – and other value added services allow the product and manufacturer to fit into a niche.

The categories of niches vary by size of company and the sector in which they operate. Large companies stated design and customisation as the most common niches. For medium companies the top niches were meeting product standards and design, and for small companies they were unique products and flexible production. Production niches in particular, such as short-run, fast-turnaround production, low-volume production and flexible production, showed size differences, with small companies much more likely to report these as their niche. More large companies reported their niche as service offerings. Chart 11 illustrates the differences within niche categories by size of company.

Chart 11 Companies operating in wide range of niches

% of companies reporting niche



Source: EEF Business Trends Survey

Comparing sectors, those in the machinery sector were high on customisation, design, new technology and unique products. Rubber and chemical companies were most likely to consider unique products as their niche. Indeed, firms in this sector were increasingly looking to address environmental concerns and to develop products that minimise pollution or improve fuel performance, for example. Those in the electrical and optical sector were the most likely to consider one of their niches to be their service offerings.

The metals sector considers flexible production, meeting product and quality standards and short-run, fast-turnaround production to be their niche, and for the transport sector it is unique products. Whilst volume production of vehicles continues to take place in the UK, many high-performance, specialist transport equipment components are also manufactured here, which explains the high proportion reporting unique products to be their niche. Overall, high-performing manufacturing sectors take the lead in design; unique products and new technology. Table 4 shows the top three niche categories by sector.

Table 4 Top three niche categories identified by sector

Rubber and chemicals	Unique products (46 %)	Flexible production (36 %)	Service offerings linked to products (32 %)
Metals	Flexible production (48 %)	Meeting quality standards (45 %)	Unique products (34 %)
Machinery	Unique products (48 %)	Customisation (44 %)	Design (42 %)
Electrical and optical	Design (45 %)	Meeting quality standards (45 %)	Service offerings linked to products (40 %)
Transport	Unique products (49 %)	Design (35 %)	Meeting quality standards (35 %)
Other manufacturing	Meeting quality standards (47 %)	Design (44 %)	Unique products (44 %)

Source: EEF Business Trends Survey

We grouped the niche categories (except service offerings) to determine whether companies tended to keep their niche within a certain area. Categories were grouped into customer-focused (customisation, unique products, meeting quality standards), production-focused (flexible production, low-volume production and short-run production) and thirdly innovation-focused (design and new technology).

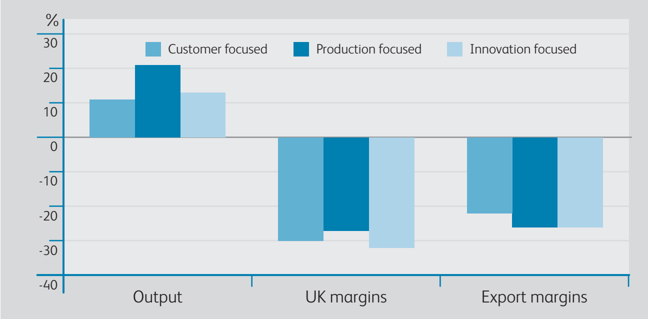
Over four-fifths of niche manufacturers fall into the customer-focused group, 53 % in the production-focused group and 41 % in the innovation-focused group. Just over two-thirds of respondents see themselves in two or three of the groups. Our interviews support this data. A pump manufacturer produces innovative, low life cycle pumps which reduce energy consumption over the life of the product. In addition, the company has the ability to manufacture according to individual customer requests. Another company – a bicycle manufacturer – produces a unique product that can be customised but in low volumes. They also manufacturer high-specification components in the UK and outsource production of standardised equipment. This cements the definition of niche as a wide-ranging one; companies are able to shape themselves precisely to fit the market and adopt whichever strategies are needed. It is not a case of "one size fits all".

It is clear from the results of the survey that niche manufacturing is not just low-volume production for local markets. Global niches are on a global scale and niche manufacturers are as export-reliant as other manufacturers. Brompton Bicycles exports 70% of their products.

Gone is the view that niche manufacturing is only for small companies. All companies have the potential to exploit niches, not just by being a preferred supplier, but by being the only company that can produce a product to a particular specification. Investing in the latest plant and equipment that no-one else has can give companies a wide competitive margin. High levels of expenditure on capital equipment allow the production capability and flexibility to produce niche products, and this in turn drives growth in output and order books. EEF's Business Trends Survey shows that production-focused companies show a larger positive balance in output than customer- and innovation-focused companies (Chart 12).

Chart 12 Production-focused companies show a larger positive balance in output

% balance of change in past three months



Source: EEF Business Trends Survey

Niche production yields significant benefits for companies but requires continuous investment in capital equipment and innovation. M Wright and Sons recently increased investment from 7% to 14% of turnover in order to produce a new carbon fibre product line for a customer. Investment continues to underpin niche manufacturers' success in the medium term, but for the success to continue into the long term, sustained investment must also continue. We need to ensure that in the current economic climate the investment is not derailed.

It is clear that niche categories do not stand alone; several will feed in to make up what a company considers to be their niche. So it is not only a unique product that makes a niche manufacturer, it is the elements such as method of production, quality and design that fit together to produce not only a unique product but also a niche offering.

Defending and protecting the niche position

Once a company has established itself and its products into a niche market, they need to protect their position. Being successful in a niche may prompt others to move into the same area, thus eroding the market position of the company.

We asked what primary tactic manufacturers use to protect their niche and customer service came top, with 42% of companies taking this approach. A number of companies reiterated that building a strong relationship with customers was an important element to their business, as this builds reputation and provides repeat business and commissions for products. This goes beyond good customer relationship management and extends to ensure reliability and consistency in the production process to guarantee the highest levels of quality as well as delivery of goods and services on time and on budget. *EEF's Innovation Monitor*[3] showed that companies are building strong collaborative relationships with customers, with four-fifths stating that customers play a significant role in generating innovative ideas.

Customer service feeds into and is important for the value added services increasingly being offered by manufacturers, as previously discussed. Small companies are more likely than medium and large companies to use customer service as their primary approach (47%) and it may be more cost-effective within small businesses to build long-lasting customer relationships than to use other strategies. This is likely to have become increasingly important as supply chains have become more and more complex. The primary tactics used by all sizes of companies can be seen in Chart 13.

Fewer than one in ten companies reported using intellectual property protection (IPP) as a strategy to protect their niche position. Using forms of IPP such as copyright, patents and trademarks also varies with company size, with large companies more likely to use it. Patents can be a valuable asset, allowing businesses to license others to produce a product which will generate revenue, but there are downsides. Technical information about a product will be made publicly available, so keeping the details of your product under wraps may keep competitors at bay more effectively.

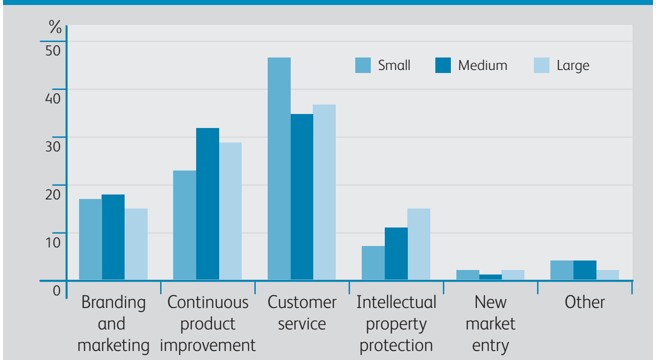
Furthermore, the patent process is time consuming. It may take two or three years to be granted, during which time new technology may have surpassed the product being patented. The use of IPP is more prevalent in large companies and in the

3 EEF (August 2008), *Innovation Monitor*

transport sector where 15 % and 19 % of companies respectively use it as their primary niche protection. This is unsurprising, given that the transport sector showed the highest proportion of companies reporting unique products as their niche.

Chart 13 Customer service most used primary tactic

% using tactic as primary protection for niche by company size

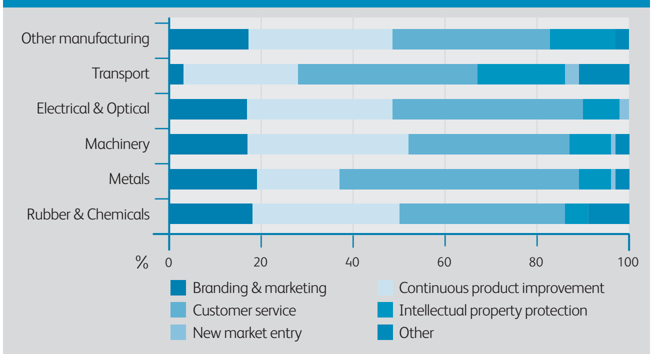


Source: EEF Business Trends Survey

With design and new technology coming in high as the basis of many manufacturers' niches, it is not surprising that continuous product development is the second most common means of protecting a niche. In the machinery sector, the same proportion of respondents used this tactic as those who used customer service (35 %), and it was more prevalent than in other sectors. The use of continuous product improvement is not surprising; EEF's Innovation Monitor showed that 62 % of manufacturers had engaged in some kind of product innovation in the past three years and 55 % plan to do so within the next three years.

Chart 14 Sector differences in tactics to defend the niche position

% using tactic as primary protection for niche by company size



Source: EEF Business Trends survey

Are these tactics sufficient to defend a niche? Many products that are niche now might not be seen that way in a couple of years. Particularly pertinent examples are products that address green and energy-saving issues. For example, energy-saving light bulbs were once a niche product but, as many countries phase out incandescent light bulbs, energy-saving light bulbs are becoming the norm and are no longer niche. The Toyota Prius was the first mass-produced hybrid vehicle and of course a niche product but, as concern over fuel consumption increases, more vehicle manufacturers are turning their sights to the production of hybrid models.

Nevertheless, the fact that our survey shows more companies successfully adopting strategies to target niche markets, and doing so in a variety of ways, gives a degree of confidence about their ability to continue to adapt in the future. However, like the investment required to deliver services to customers, the investment needed to maintain a niche position will be equally critical over the longer term. The production flexibility and unmatched quality offer that UK companies can supply will only continue if the UK continues to provide a business environment that supports firms' efforts to increase investment in equipment, skills and intangibles.

Case Study – Brompton Bicycles, London

Brompton Bicycles design and manufacture folding bikes from their premises in Kew, London. Brompton Bicycles have a unique product. The design and functionality of the products are the factors that make Brompton stand out from its competitors. The components used in assembling the final product are also unique as every one is Brompton's own design, e.g. other bike manufacturers will have brakes designed and manufactured by someone else but Brompton's are designed by them.

The bikes are made from around 1,200 parts with key components manufactured in the UK whilst others are sourced from a range of locations, including low cost ones. Around twenty thousand bikes are produced annually with around 70 % exported.

Core products are manufactured by Brompton themselves in order to keep the knowledge and expertise close to home. Non-core parts, whilst designed specially for the Brompton but not part of their competitive advantage, are outsourced. This also means that Brompton can draw on expertise outside the company for the manufacture of some components.

Whilst Brompton do not introduce completely new models to the market, innovation is focused on product evolution, improvement and refinement. New parts can be retrofitted on any age of bike allowing previous customer to benefit from new advances.

About us

EEF is a trusted partner to thousands of employers around Britain. We work on behalf of over 6000 companies, in manufacturing, engineering, technology and beyond. Together, they employ close to a million people. On any given day you'll find us helping our members tackle a whole range of employment challenges.

Our regional network brings us much closer to the businesses we support, whilst our offices in London and Brussels stay equally close to government – influencing the way policy is made and alerting our members to any changes in legislation that might affect them.

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