IDC Manufacturing Insights

From Products to Services: Service Excellence as a Strategy to Combat Market Uncertainty

WHITE PAPER

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ECONOMIC RECOVERY CONTINUES BUT UNCERTAINTY REIGNS

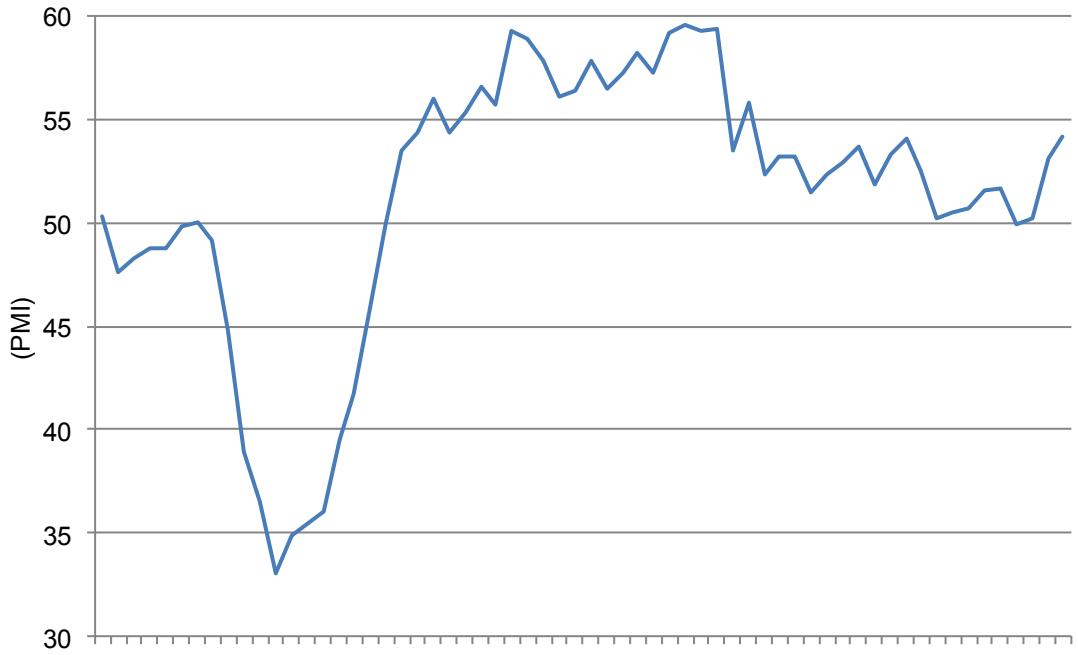
Manufacturing companies worldwide faced a severe decline in both product revenue and profit margins as a result of the economic downturn and challenging financial climate. But these trends have been steadily reversing their course since the bottom of the recession. Since 2009, the Purchasing Managers Index (PMI) of the Institute for Supply Management (ISM), which tracks the U.S. manufacturing economy, has been above 50, indicating manufacturing industry expansion. Although, as Figure 1 shows, the rate of growth slowed down in the second half of 2012, it is accelerating again in 2013. Indeed, as Figure 2 illustrates, the revenues of equipment manufacturing companies continue to show steady growth.

Certain sectors of the broader manufacturing industry are highly cyclical. Revenues are highly dependent on the cyclicality of private and public construction projects, the state of the agriculture and farming economy (itself subject to the cycle of natural events), and overall economic conditions. Figure 3 depicts changes in sales revenue of a major U.S. manufacturer of heavy equipment between 2003 and 2013.

Managing volatility, which seems to be becoming the new norm, is particularly important in cyclical markets such as industrial machinery, construction equipment, and farm equipment. It is no longer a matter of managing the downturn as much as it is about managing the uncertainty and finding ways to rekindle growth. One way that equipment manufacturers are able to counteract the unpredictability of new product sales and the relentless pressures from competitively priced, high-quality products is to shift their focus toward previously underutilized sources of revenue such as equipment service.

FIGURE 1

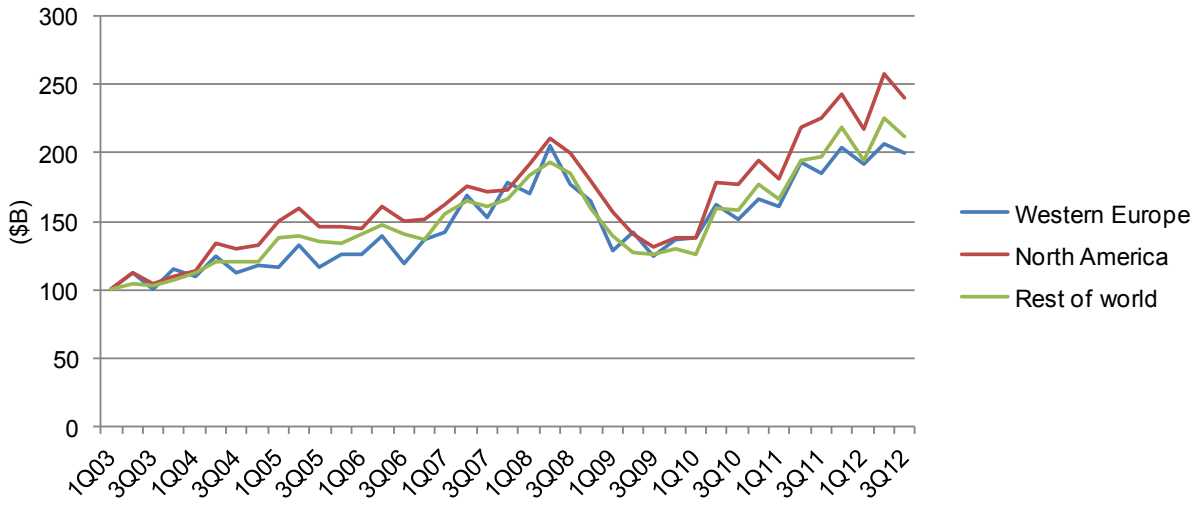
U.S. Manufacturing PMI, 2003–2013



Source: IDC Manufacturing Insights and ISM, 2013

FIGURE 2

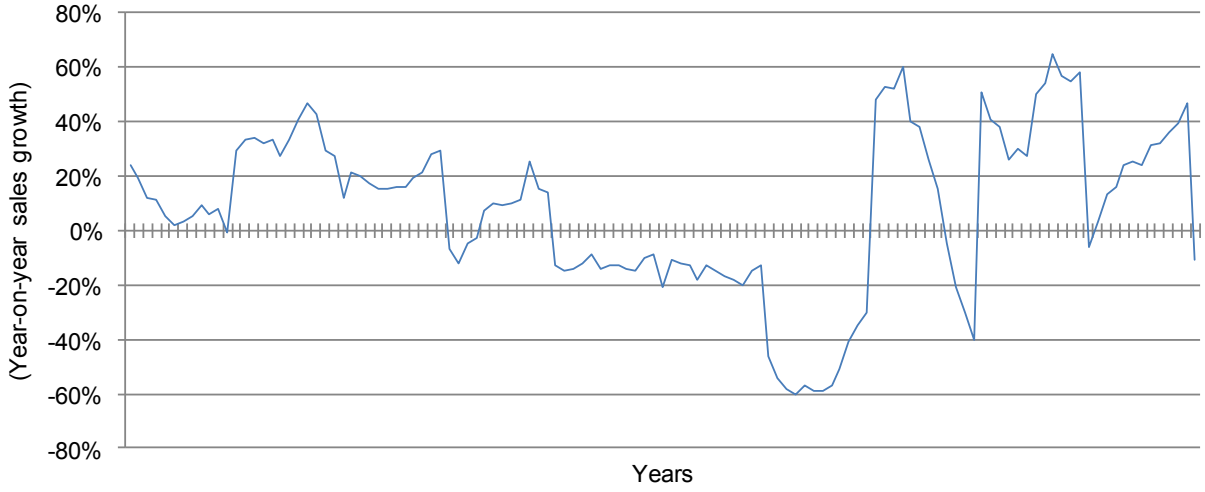
Equipment Manufacturing Companies' Revenues, 1Q03–3Q12



Source: IDC Manufacturing Insights, 2013

FIGURE 3

Sales Cyclicality for a U.S. Heavy Equipment Manufacturer, 2003–2013



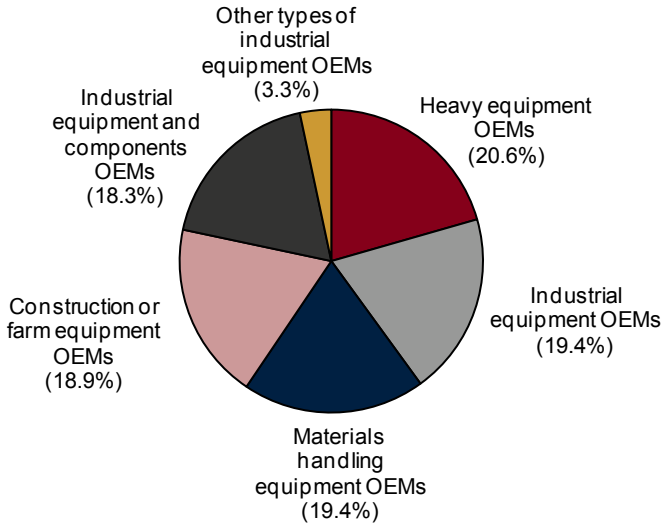
Source: IDC Manufacturing Insights, 2013

To assess how equipment manufacturing companies plan to address the economic challenges and capitalize on the opportunity that service presents, IDC Manufacturing Insights conducted a study of line-of-business executives and IT executives with knowledge of their organization's service operation to assess how they view these trends and their plans to address them for sustained profitable growth. The 180 survey respondents represent a broad range of manufacturing companies — including construction, farming, materials handling, industrial, and heavy equipment — in France, Germany, the United Kingdom, and the United States (see Figure 4), and they range in size from 100 employees to more than 5,000 employees.

Given the uncertainty of the economic growth in the equipment manufacturing industry, it was not surprising that when we asked survey respondents about their revenue growth expectations over the next three years, they were evenly undecided whether their company's revenue will decline, stay the same, or grow (see Figure 5).

FIGURE 4

Respondents by Industry



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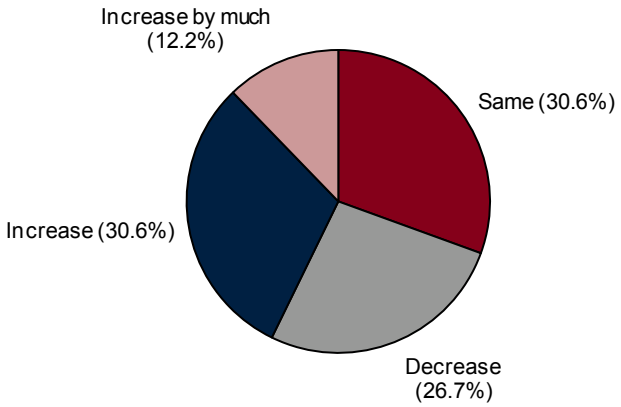
Source: IDC Manufacturing Insights, 2013

FIGURE 5

Revenue Growth Expectations



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Source: IDC Manufacturing Insights, 2013

THE PROMISE OF SERVICE REVENUE

The cyclical nature of the equipment manufacturing industry and the overall economic uncertainty represent both a challenge and an opportunity for manufacturers of complex industrial equipment that need to find a way to attenuate the potentially devastating sales troughs.

70–90% of the total lifetime cost of heavy equipment is in maintenance and repair.

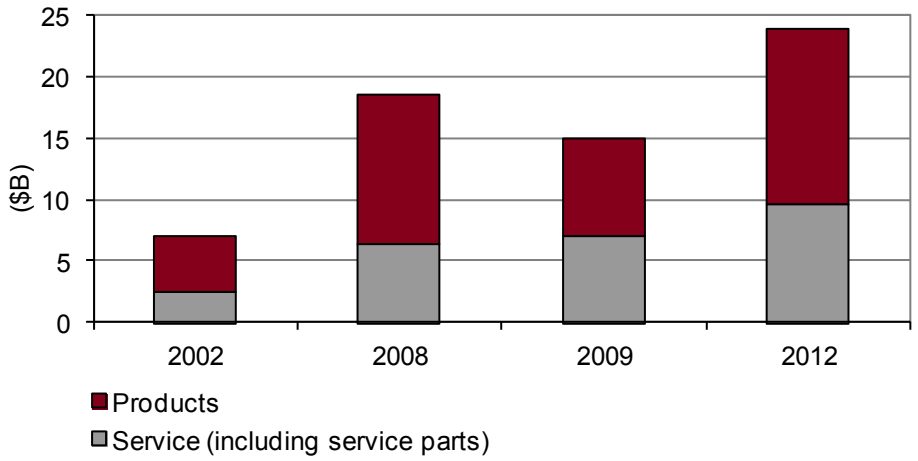
Owners and lessors of production capital equipment, whether industrial machinery, farm equipment, or other types of industrial machinery, spend resources on servicing and maintaining their assets. In fact, 70–90% of the total lifetime cost of heavy equipment is in maintenance and repair. Furthermore, in the very active market of used farming and construction equipment, well-maintained hardware grants sellers greater return on their investment.

During uncertain economic times, owners of expensive capital equipment hold back capital expenditure to refresh and upgrade their fleets, and they strive to keep existing assets operating longer, requiring maintenance service and spare parts. Over time, the criticality of equipment maintenance and service increases because the assets are aging and require increasingly more frequent, and often more expensive, service.

Figure 6 clearly depicts this trend. The chart shows the product and maintenance service revenue mix of a leading U.S. manufacturer of heavy equipment. The data demonstrates that during the recession of 2009, the revenue from maintenance service, including service parts, exceeded that of the previous years even while the company's overall sales revenue suffered. Moreover, while the company's revenue was at a historical high in 2012, service revenue continued to grow — an indicator of the aging install base — and represented 40% of the company's total revenue.

FIGURE 6

Product and Service Revenue Mix of a U.S. Heavy Equipment Manufacturer

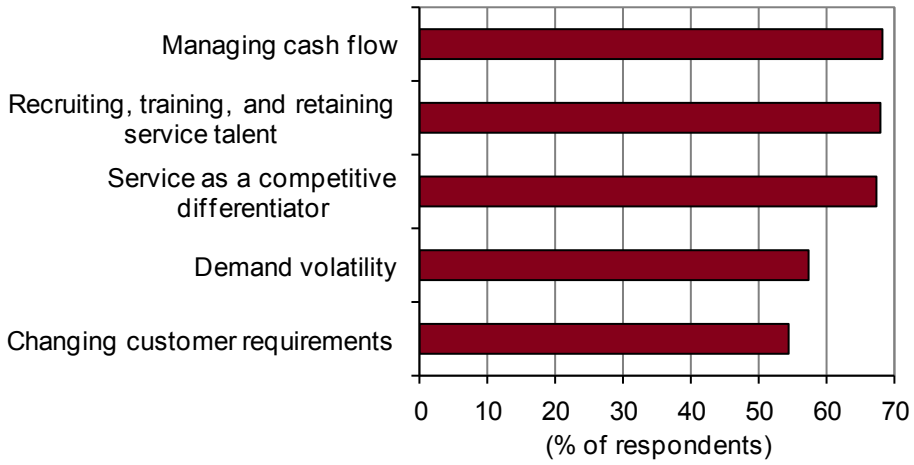


Source: IDC Manufacturing Insights, 2013

The importance of service as a means to protect revenue as well as to offer customers superior value for their investment is well established, and survey respondents expressed concerns about their ability to use service strategically. As Figure 7 shows, respondents are equally concerned about their company's ability to position excellent service as a competitive differentiator (67.2%) and their company's ability to recruit, train, and retain the talent to deliver service differentiation (67.8%). Their top concern is managing cash flow (68.3%), which aligns nicely with inherently high gross-margin service revenues. Next, companies identified market demand volatility, which, coupled with challenging cash flow, reinforces the observation about market uncertainty. It is important to note that this uncertainty affects not only the top line but also the ability to forecast service capacity needs.

FIGURE 7

Top Business Concerns for Companies in 2013



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Source: IDC Manufacturing Insights, 2013

The emphasis on service is also apparent in equipment manufacturing companies' strategies to spur growth. As Figure 8 shows, service-related topics such as value-add services and service innovation rank behind only quality improvements and acquiring new customers and product markets.

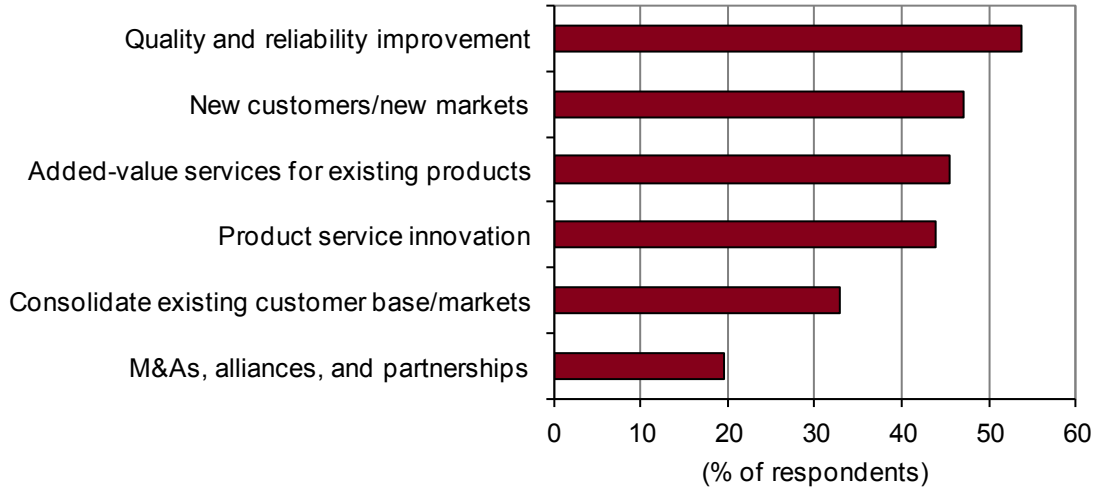
We view the findings shown in Figures 7 and 8 as a testament to the fact that leading companies are thinking about service more holistically and strategically than before. For these companies, service is not limited to cutting cost and honoring warranty obligations; rather, it is becoming strategic and is ready to play a key role in helping companies achieve their strategic and revenue goals.

Leading companies are thinking about service holistically and strategically and are leveraging it to achieve their strategic and revenue goals.

As discussed previously, the companies surveyed for this study realize that while equipment service is critical to brand loyalty and product differentiation, it also offers an excellent source of revenue. Service revenue not only carries a high profit margin but also — when delivered through long-term contracts — offers a predictable annuity that attenuates the periodic painful troughs in sales.

FIGURE 8

Key Elements of Growth Strategy



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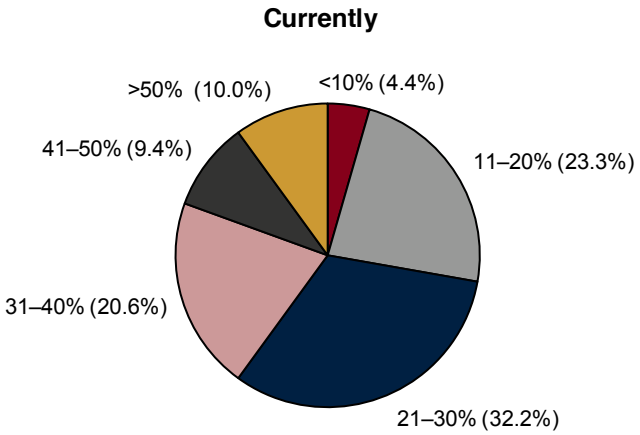
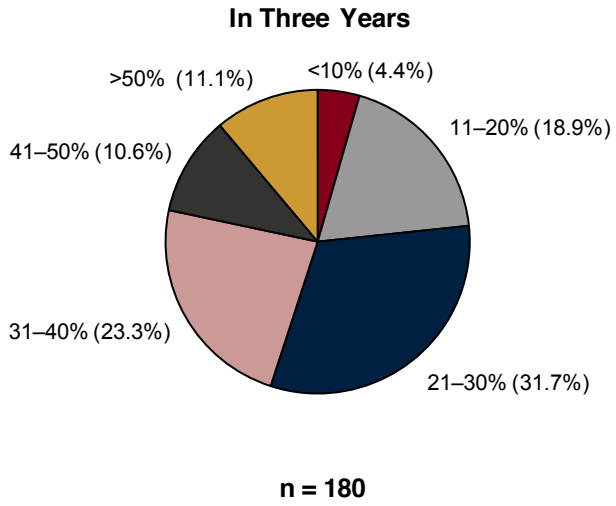
Source: IDC Manufacturing Insights, 2013

The significant contribution of service and parts revenues to the top line is apparent in Figure 9. As our survey data illustrates, equipment manufacturers focusing on product maintenance and repair service expect growth in service revenue over the next three years. This growth is especially evident in companies in which more than 30% of total revenue comes from service.

FIGURE 9

Contribution of Service Revenue to the Top Line Now and in the Next Three Years





Source: IDC Manufacturing Insights, 2013

REDEFINING SERVICE

As we noted previously, survey respondents see post-sales equipment service as essential to brand loyalty and product differentiation and as an additional revenue source. We asked respondents to rank the relative importance of these opportunities; their responses are illustrated in Figure 10. There may be some differences among respondents for the relative ranking, but there is certainly a consensus that all of these factors are important. These companies realize that reputation for excellent service, coupled with quality and high resale value, is often what wins customers in the first place and bolsters long-term loyalty. At the same time, effective and efficient equipment service enables companies to deliver superior service while maintaining profitability. Forward-thinking companies are becoming service focused throughout all operations and the entire equipment life cycle.

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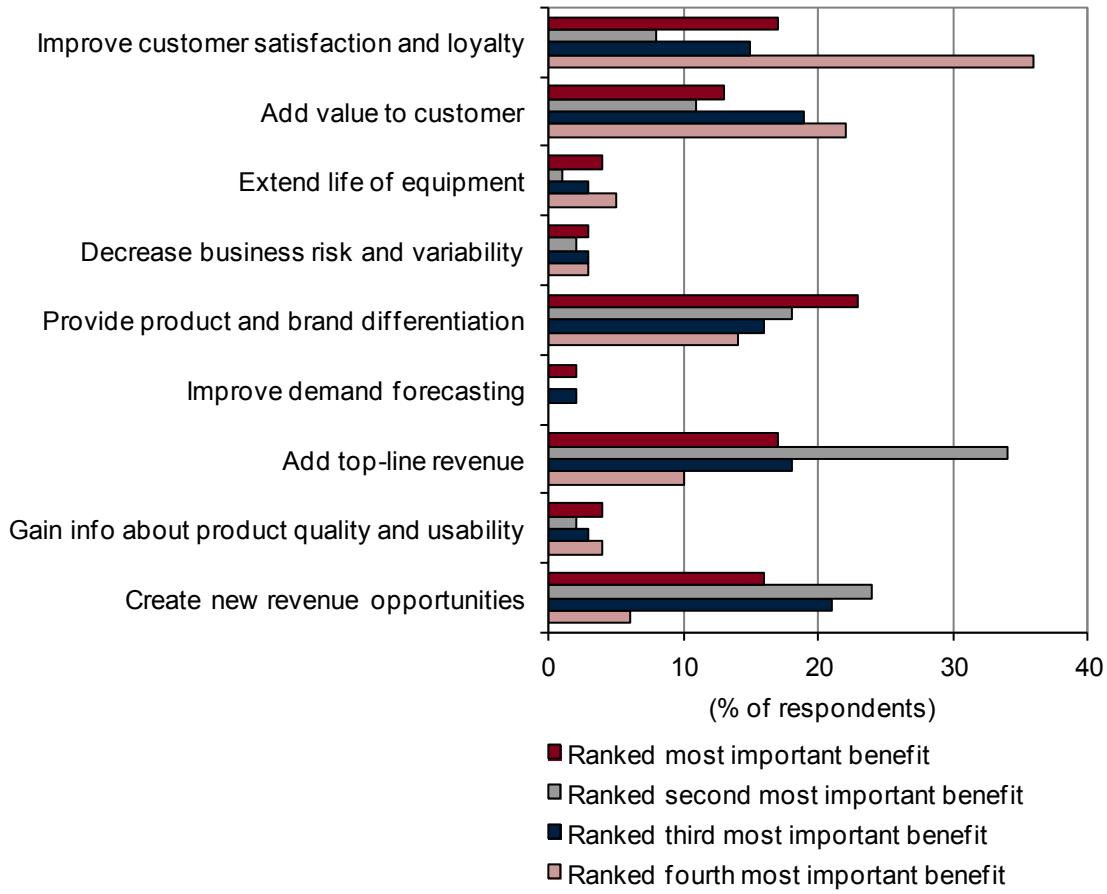
Forward-thinking companies are becoming service focused throughout all operations and the entire equipment life cycle.

FIGURE 10

Top Benefits of Service Excellence



n = 180

Source: IDC Manufacturing Insights, 2013

Almost 80% of respondents ranked the addition of top-line revenue as one of the top 4 benefits of service excellence; this was closely followed by improving customer satisfaction and loyalty. However, if we look at those who rated the ability to improve customer satisfaction as their first or second benefit only, it moves down the list. This suggests that some manufacturers don't completely understand the connection between better service and customer loyalty, or they believe that other benefits such as creating new revenue opportunities and providing product and brand differentiation have greater impact on their business. Benefits that were not seen as important include improving demand forecasting, mitigating business risk, and helping extend the life of equipment.

Certainly, leading product companies recognize that service must be part of the entire product strategy; customers expect superior service to be an integral part of the product's functionality and overall ability to meet their needs, and they will pay for such service. These companies are moving forward, investing in process improvements and technologies to realize these opportunities. Indeed, as Figure 11 illustrates, survey respondents identified service-oriented product strategy as the most critical aspect of service excellence they will seek to improve over the next three years.

FIGURE 11

Service Excellence Improvement Areas

n = 180

Source: IDC Manufacturing Insights, 2013

While the survey findings clearly demonstrate that equipment manufacturing companies recognize the criticality of service excellence, some responses highlight a certain level of conservatism that is likely a reflection of the respondents' understanding of the challenges in mobilizing the organization behind a service-focused strategy and operationalizing service excellence.

As Figure 12 shows, 63% of respondents identified lack of top management commitment to service as a major barrier to achieving service excellence. Additional barriers to realizing service excellence are also shown.

FIGURE 12

Barriers to Achieving Higher Level of Service Excellence

n = 180

Source: IDC Manufacturing Insights, 2013

The blame does not lie entirely with top management. The accelerated introduction of new and increasingly complex products challenges service technicians to deliver effective and efficient service. In addition to dealing with the increased complexity of products, equipment manufacturing companies are struggling with the aging and retirement of experienced workers who they are unable to replace, a topic we discuss later in this document.

Implementing a service-centric strategy to capitalize on the opportunities requires a comprehensive approach and thoughtful planning. To deliver excellent service profitably, equipment manufacturing companies need to optimize the entire service delivery chain, including information, training, and qualified personnel.

Furthermore, many products are not designed with service excellence in mind. The product development practices in many organizations do not incorporate serviceability and service delivery consideration early enough in the design, and often highly optimized decisions made early in the product life cycle end up impeding the service organization's ability to deliver efficient, profitable equipment service.

Design for service excellence requires a comprehensive approach, one that often involves rethinking existing processes and challenging the status quo. "Service excellence thinking" starts when the product is designed and marketed, not just when it is sold.

It becomes obvious, then, that service excellence is not an ad hoc delivery of excellent service but a strategy that necessitates a deliberate effort and therefore a business framework to plan, prioritize, and invest in.

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New Service Models Emerge

The long-standing traditional view of equipment service has been that it's a "necessary evil" to keep equipment running, meet service-level commitments, and try to keep customers happy. However, as customer demand for cost-effective service contracts heightens and service organizations want to take advantage of the financial and strategic opportunities in service excellence, new strategies and business models emerge.

Products and Services

This is the traditional approach to product service. Initially, it is provided as a no-fee warranty service, with the hope that the equipment owner will extend it under an extended service contract or on a pay-per-call basis. For the service provider, this is often a low-margin, resource-intensive, and disruptive activity. For the asset owner, the service level is often less than satisfactory. While this model is the most well understood of the three models discussed in this section, it can suffer from poor profitability and customer satisfaction.

Performance-Based Contracting

Fundamentally, service and service excellence need not be defined exclusively as equipment repair service, or "break/fix" in industry parlance. In fact, owners of production equipment often consider a performance- or yield-based contract to be a preferable form of service contract.

To meet the higher uptime and quality standards of more demanding asset owners, brand owners and manufacturers can provide a performance assurance contract. The service-level agreement is to keep the asset performing according to agreed-upon criteria such as availability and throughput. The advantage to asset owners is that the service-level agreement is tailored to their business objectives. While required to deliver a higher level of product service, the service provider benefits from a predictable, higher-margin long-term revenue stream.

Products as Service Platforms

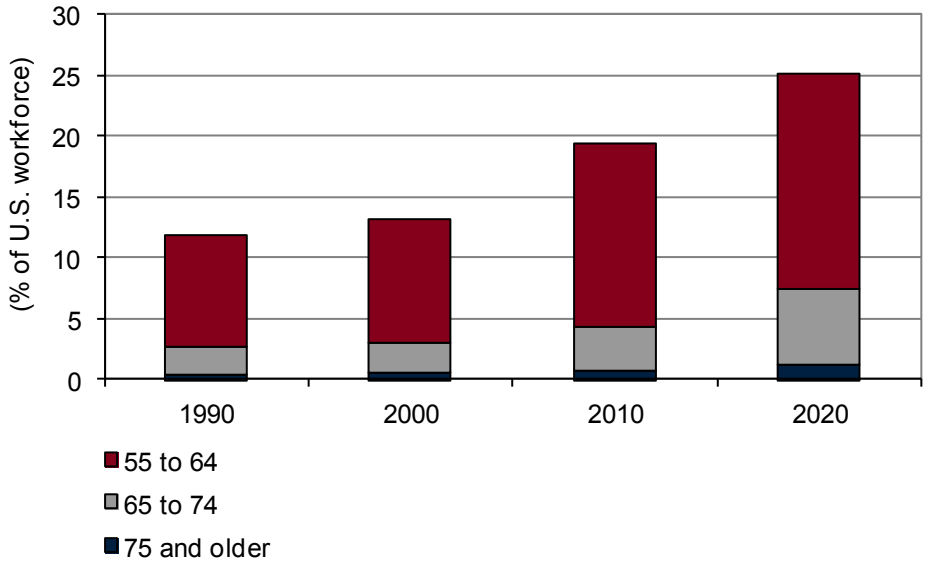
In this approach, product manufacturers and brand owners utilize the product as a foundation to sell various add-on services beyond the traditional break/fix service. Examples of such high-margin services include managed print services, alerts and replenishment of consumables, and remote equipment monitoring. Not all services need to be physically "connected" to the device or even related to repair service. For example, companies that equip service technicians with information and tools to sell relevant items such as consumables experience higher affinity to the consumables of their brand and an increase in sales.

THE SKILLS SHORTAGE

As discussed previously, nearly 70% of survey respondents identified the recruiting, training, and retention of qualified service personnel as a significant challenge (refer back to Figure 7). Indeed, companies around the globe — especially those in the United States, Western Europe, and Japan — are experiencing a steady attrition in qualified and experienced workers. As Figure 13 shows, the number of workers who are 55 and older continues to grow, and this segment of the population will make up more than 25% of the U.S. workforce in 2020. Indeed, there is a general tendency among workers in industrial countries to retire later in life, and overall economic uncertainty and lingering high unemployment keep many who are eligible to retire in the workforce. But as the economy improves and the memory of the recent recession fades, the pace of retirement will accelerate. Companies that are unable to fill this gap will have to expand the use of information technology and focus on improving the efficiency of service operations and delivery.

FIGURE 13

Age Distribution of U.S. Workforce over 55



Source: U.S. Bureau of Labor Statistics, 2010

THINKING ABOUT SERVICE HOLISTICALLY AND STRATEGICALLY

Manufacturing companies are adopting a broader and more strategic attitude toward the maintenance service of customer-owned or -leased equipment. Instead of treating service as a mere cost of doing business, they seek opportunities to provide additional services that offer value to customers, enhance customer relationships and strengthen the brand, and, of course, provide revenue and help manage market uncertainty.

Incidentally, many of these enhanced services are highly profitable and can be delivered without significant new investment in personnel; instead, they rely on information technology. For example, companies that migrate from an exclusive break/fix service model, which is based on equipment failures and is therefore much less predictable and profitable, enjoy the annuity offered by a performance-based contract. Equipment manufacturing companies that offer umbrella coverage to a broad portfolio of customer assets — including servicing competing equipment — not only generate more service revenue but also, and just as important in the long run, strengthen their brand and service operation, making them a stronger candidate when a customer is ready to replace or upgrade an aging piece of competitor-brand equipment.

As companies transition from servicing products to performance-based contracts and exploiting products as service platforms, they also begin to adopt a holistic view of the portfolio of products and service offerings. The types and range of services a company offers and the terms of service-level agreements are highly dependent on a complex set of business and technology factors.

A compelling service offering is designed to meet customers' expectations for a cost-effective and competitively priced service. Obviously, from the point of view of the service provider, expectations are that these service contracts are profitable and serve to reinforce the brand's value. But it's also critical to recognize that these considerations, as well as the slew of accompanying factors such as workforce development and technology investments, must be optimized for each individual product as well as the company's portfolio as a whole. For instance, offering a superior, aggressively priced service for a new product would be a good strategy to capture a new market or displace a competing product. Conversely, a basic maintenance service for a commodity product that is nearing the end of its life cycle would be more sensible, especially as the company is launching a replacement product.

The ability to provide such a flexible and dynamic portfolio of equipment services requires companies to rethink their entire product life-cycle process, including design, supply chain planning, and service delivery, as well as service and logistics outsourcing strategies.

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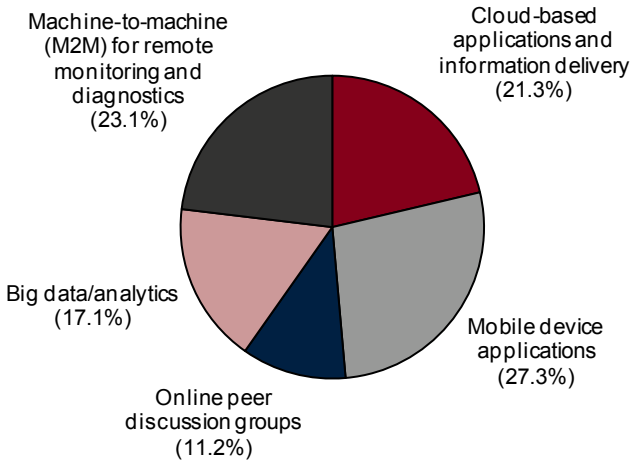
Role of Information Technology

The companies we surveyed for this study have made significant investments in information technologies such as field service management, warehousing and inventory management, warranty and claims processing, and procurement and parts logistics. These companies are well along in evaluating the role and the significance of emerging technologies such as smart mobile devices, machine-to-machine (M2M) communication, and cloud-based delivery as a means to improve the efficiency and efficacy of service.

Figure 14 shows the percentage of equipment manufacturers ranking emerging information technologies as "very important" and "significantly impacting business." Mobile devices, M2M communication, and cloud-based information storage and delivery were ranked the highest, indicating that these companies focus on technologies that facilitate easy access to information and shortening the latency of critical decisions. Next, these companies look at analytic applications to harvest additional value from the data and further enhance service operations.

FIGURE 14

Business Value of Emerging Information Technologies



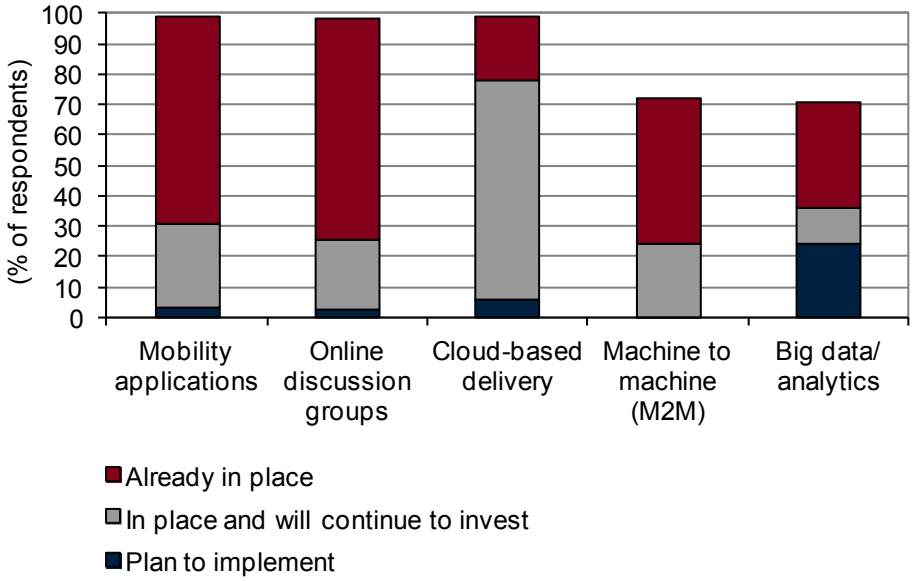
n = 180

Source: IDC Manufacturing Insights, 2013

The survey found that many companies have already invested in these technologies and many have plans to further invest. As Figure 15 details, nearly all the surveyed companies have already invested or are planning to invest in mobile applications and in internal online collaboration and discussion groups. Nearly all companies have started to use and will expand the use of cloud-based applications. M2M and analytics (which to a certain extent relies on M2M) lag behind, presumably because of the technical complexity and the infrastructure needed for M2M.

FIGURE 15

Current and Planned Investments in Emerging Information Technologies



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Source: IDC Manufacturing Insights, 2013

WHAT'S NEXT?

As the results of this survey and other IDC Manufacturing Insights research show, service excellence is becoming a critical organizational capability. We expect that over the next several years, equipment manufacturing companies will pay more attention to service and accelerate their investments in service excellence to achieve better product differentiation, higher customer loyalty, and increased service revenue.

Service excellence is becoming a critical organizational capability, and companies will accelerate their investments to improve it.

Service will shift from "products and services" to "service centric" to "products as service platforms."

Not only will companies invest in improving service, but, in fact, the balance in many companies will shift from "products and services" to "service centric" to "products as service platforms" as a continuum of improvement. Successful companies will create a balanced portfolio and mixed-model approach to products and services that meets their strategic goals and is optimized to meet the needs and preferences of different customer segments and respond to market dynamics and competitive threats.

Capitalizing on these opportunities requires product companies to restructure processes that are often disjointed and leverage information that is scattered throughout the organization, such as customer and contract information, service work instructions, part inventories, and so forth.

Historically, making such a system work was an expensive endeavor that did not scale well and often suffered from elusive return on investment. However, modern ERP and service management systems, coupled with the proliferation of new IT platforms (in particular pervasive connectivity and mobile platforms), give service organizations the ability to create a rich business and technical service–related context in product-related decisions throughout the product life cycle.

Forward-looking manufacturers should use ERP and integrated advanced service management systems, or ERP solutions that address the complete equipment life cycle, to implement a "digital thread" that connects the product life-cycle phases from design to service and delivers complete, error-free, and timely context for decision making. This data continuity forms the foundation for process-wide analytics, continuous improvement, and opportunity to create sustainable, value-added services, providing service organizations and their customers with competitive advantage.

Companies that implement a complete service-centric digital thread as a foundation for optimizing service delivery are better positioned to capitalize on the promise of service excellence: customer service as a profitable way to create product differentiation and bolster customer loyalty.