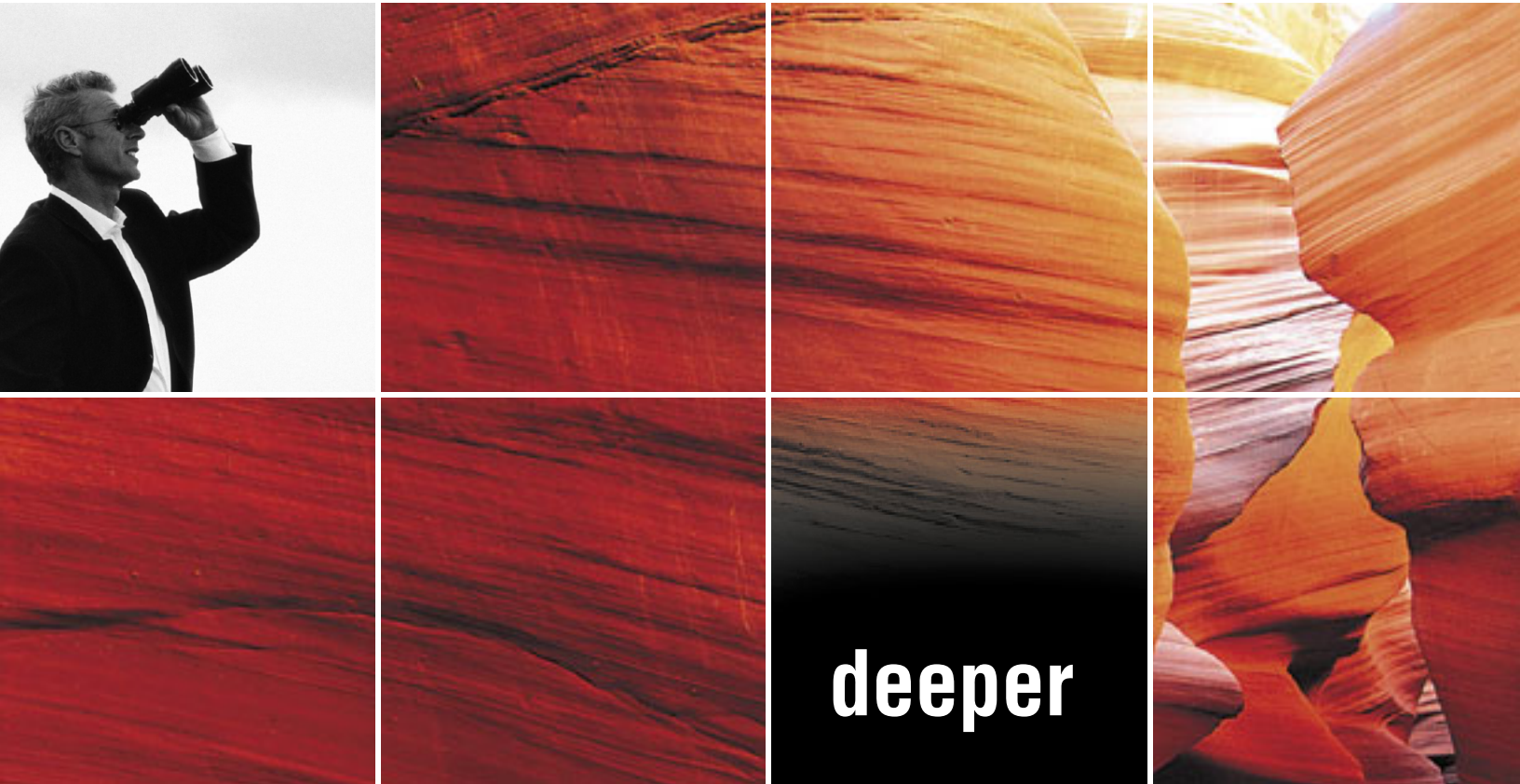


**On demand business:
The new agenda for value creation**



An IBM Institute for Business Value Futures Series

The IBM Institute for Business Value develops fact-based strategic insights for senior business executives around critical industry-specific and cross-industry issues. Clients in the Institute's member forums benefit from access to in-depth consulting studies, interaction among a community of peers and dialogue with IBM business consultants. This paper is a part of an ongoing commitment by IBM Business Consulting Services to provide forward-looking industry and business points of view, and to help companies and industries transform their futures. You may contact the authors or send an e-mail to iibv@us.ibm.com for more information.

Contents

- 1 Meet the on demand future
- 5 Accept reality: On demand is here to stay
- 10 Shape up: What the new agenda requires
- 16 Help is here: New enablers emerging
- 20 Move it or lose it: Positioning yourself for the new agenda
- 24 Think big and act fast: Rolling out the new agenda
- 28 Make it your agenda: Start now
- 30 About the authors
- 30 About IBM Business Consulting Services
- 31 References

Meet the on demand future

The beginning of the twenty-first century marks the era in which the structure of business begins to reflect fully the changes brought about by the information age. Although businesses have certainly had to adopt the tools of the information age to enhance their employees' productivity, they have not had to, nor been able to, fundamentally change their competitive and operational structures, until now. With business pressure more intense than ever and emerging enablers finally making more substantive change practical, business has reached a tipping point where the need to act has run headlong into the ability to act, unsettling the very nature of business.

Just as successful industrial age companies were substantially different than their predecessors in terms of scale, scope and organizational structures, the successful firms of the near future will look much different than they do today. The incremental improvements that businesses have made over the last decade or two to differentiate themselves, stay attuned to their markets, reduce costs and deliver reliable returns are about to be outdated. Companies that will thrive in an increasingly turbulent market environment will be those that can transform themselves into even more focused, responsive, variable and resilient enterprises that connect their businesses end-to-end with suppliers at one extreme and customers at the other, fusing the best of business and technology, to accelerate value creation. We call these companies on demand businesses.

Imagine for a moment how a fictional company, **Traditional Enterprises, Inc.**, might respond to an on demand business competitor:

Jim Cranes the CEO of Traditional Enterprises, Inc., was not in a happy mood as he entered the senior management meeting. He had called this special strategy meeting to try and understand what had changed in the industry and had asked his core management team to do one more deep dive to reflect on developments over the last five years. Walking briskly into the boardroom, he tapped on a remote to display on the large screen a newspaper article that had caught his attention. The headline read "Transformational Corp. releases best ever quarterly results, with revenues up 9 percent and earnings growth of 14 percent. Stock poised to rise in morning trading."



“Who can help me understand this?” he demanded. “We’ve just had one of the most challenging quarters in recent history, while our number one competitor continues to outpace us in growing revenues, earnings and market value.” Raising his voice as he addressed the people in the boardroom he added, “This is not acceptable.”

Sitting around the table were Traditional Enterprises’ top executives. We’ve got a great team with considerable talent and experience, Jim thought, what are we doing wrong? Just five years ago, Traditional Enterprises was the dominant player in the industry, but Transformational Corp. owns that spot now. Through a period of economic turmoil, the two companies had approached the market with different strategies – and different tactics. And as the newspaper article reminded him, with very different results. “Over the past year,” Jim continued, “while we struggled with a wide number of financial and management issues, Transformational Corp. charged forward with twice as many new product introductions as we had, they celebrated their 20th consecutive quarter of margin growth and their working capital requirements have been cut in half. We need to understand how they’re doing this, and take corrective action now.”

Susan, the Vice President of Strategy, responded, “Jim, we’ve just completed an in-depth assessment of Transformational Corp. which sheds some light on what is happening.”

“Well go on,” Jim directed urgently.

“As you know,” Susan responded, “we have always sought to be best-in-class across the industry value chain and are continually seeking industry benchmarks to guide our operational improvement targets.”

The Chief Financial Officer leaned forward. “Of course we are. We’ve made tremendous progress across all aspects of the business, and that applies to our core operations as well as our overhead functions.”

Susan continued, “Apparently Transformational Corp. decided to focus most of its time and resources on managing those capabilities that really set it apart in the market. It organized its business into distinct components, such as Web sales returns, quality control and shared procurement, determining which ones were differentiating and which ones were not. In the differentiating business areas, our market intelligence says that it is now best-in-class in terms of cost and performance. In other areas, it leans more toward partnering with outside specialists who can provide higher value at a lower cost.”



Jim thought about this for a moment. “So Transformational Corp. is focusing on the business components that really matter, and letting others take care of everything else?”

“Exactly,” Susan confirmed, “but that’s just the beginning. Transformational Corp. has also redefined its relationships with customers and suppliers, allowing it to respond rapidly as the market changes.”

“But don’t we do the same thing?” challenged the Vice President of Marketing. “For example, we’ve invested millions in customer market research, developing needs-based segmentation that forecasts what our customers want in considerable detail.”

“Yes we have,” explained Susan, “but we think Transformational Corp. has moved to the next level of market responsiveness. Not only does it collaborate closely with its customers and other stakeholders to understand how their needs are evolving, it has also put in place systems that help track how market dynamics are shifting at any given moment. And even more importantly, the company has made changes that allow its people, processes and technologies to adapt rapidly to any market change, good or bad. As you all know, we tend to build things for what we think is going to happen – and have a hard time changing the status quo once it’s in place.”

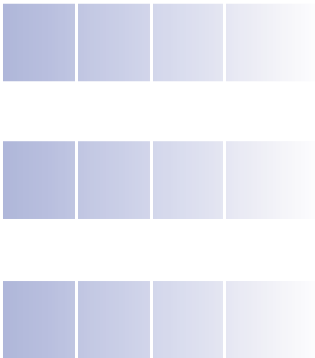
Jim frowned when he heard this, and then exclaimed, “While we’ve spent all this money trying to predict precisely where the market was headed, Transformational Corp. has built an organization that can respond rapidly no matter what happens – swings in market demand, supply imbalances or even our own competitive threats?”

Nodding her head, Susan replied, “Unfortunately this appears to be the case. Another factor we’ve discovered has to do with variable costs. You know how we’ve always considered this a fixed-cost business and how we have been focused on cranking out more in terms of production?”

“Yes,” piped up the Vice President of Production. “We have been the most aggressive company in our industry when it comes to going after new markets and customers – high volume helps us better spread our fixed costs.”



On demand business
An on demand business accelerates value creation by connecting its business components end-to-end with suppliers, partners and customers to focus on differentiating components and respond rapidly in a variable and resilient manner to any opportunity or threat.



Susan continued, “Unfortunately, Transformational Corp. looks at our industry very differently, especially given the demand fluctuations we’ve all seen over the past several years. It has aggressively pursued ways of reducing fixed cost investments, by relying on third parties for business functions deemed as non-differentiating, as well as leveraging internal shared services, wherever possible. As a result, the company has been able to weather periods of economic downturn without paying for capacity that it doesn’t need, and it has been able to ramp up capacity as economic growth returned and whenever it launched new products.”

Jim nodded his head as he heard this. “Transformational Corp. has made its business model more variable than ours, which allows it to navigate periods of demand swings faster and more profitably than we can.”

“Exactly,” said Susan. “And there’s one more thing. Remember the hackers that shut down most of the commercial networks in India last year?”

“Do I ever!” exclaimed the Chief Information Officer, “They created havoc for three long days. Customers couldn’t dial into our call center in Bangalore – it hurt us and all of our competitors.”

“Well, almost all of our competitors,” corrected Susan, as she completed the lesson. “Transformational Corp. committed several years ago to implement highly resilient business components that could withstand a multitude of shocks ranging from natural disasters to political unrest to network hacking. When the Indian networks went down, the company seamlessly shifted its load to the Eastern European and Latin American capacity provided by the company’s external partners. I’m afraid we probably lost a bit of business on those three days, since Transformational Corp. was literally the only one answering the phone!”

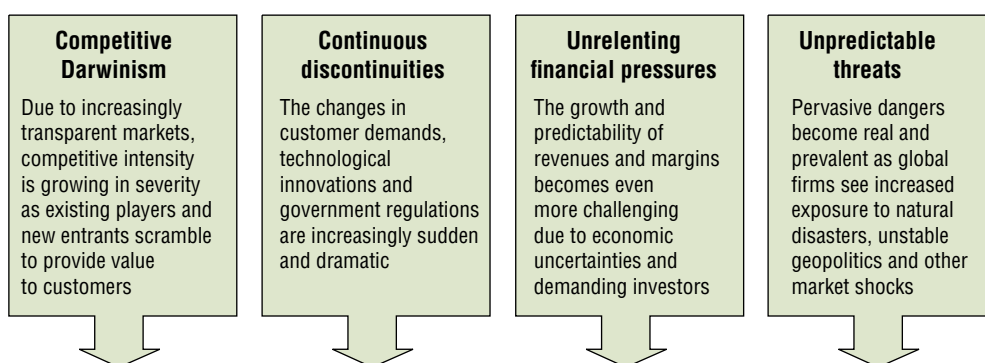
The entire management team was quiet, reflecting on their situation. Finally, Jim spoke. “Let me see if I understand this. Transformational Corp. has rewritten the rules of our industry, taking share from us in the process, by dividing its business into components, focusing on those that really matter, responding rapidly to market changes, creating a variable business model and operating in a resilient manner. In doing so, it has created an 'on demand' business that can be successful, regardless of the opportunities and threats that arise. Is that what we now face?”

Looking around the room, Jim saw from the sober faces that his team was in agreement. Down, but not out, he announced: “Okay then, let’s clear our calendars. Unfortunately, Transformational Corp. had to show us the way, but we now have a new agenda for this company. And it’s called on demand. Let’s get to work.”

Accept reality: On demand is here to stay

Unstoppable drivers are creating a new on demand environment where competition is intense, change is continuous, financial pressures are unrelenting and threats are unpredictable (see Figure 1). For firms rooted in traditional mindsets, this new market reality promises increased pricing pressure as customers demand more for less, lost market share as more nimble competitors respond rapidly to changing customer needs, stranded assets due to market requirements that have evolved beyond the fixed investment infrastructure, sudden risks from unexpected business, geopolitical and natural disaster shocks, and lower levels of profitability. But, for a new breed of businesses prepared for the inevitable market realities, this super-charged environment serves as an incubator for a brand new phase of accelerated value creation.

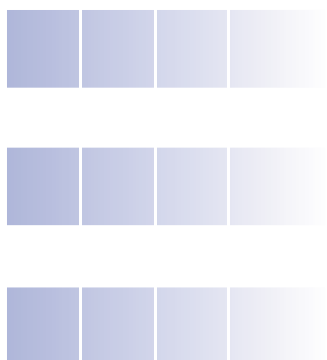
Figure 1. The new on demand environment.



Source: IBM Institute for Business Value, 2003.

Competitive Darwinism

The competitive environment is becoming even more intense as established and new companies scramble to provide value to customers in increasingly transparent markets. Customers, armed with greater information and more choice than ever before, continue to extract value from providers in terms of discounts, increased service levels and higher-quality products. For example, a recent study found that over 100 million Europeans, representing 78 percent of the European online population, regularly research products online before making purchases.¹

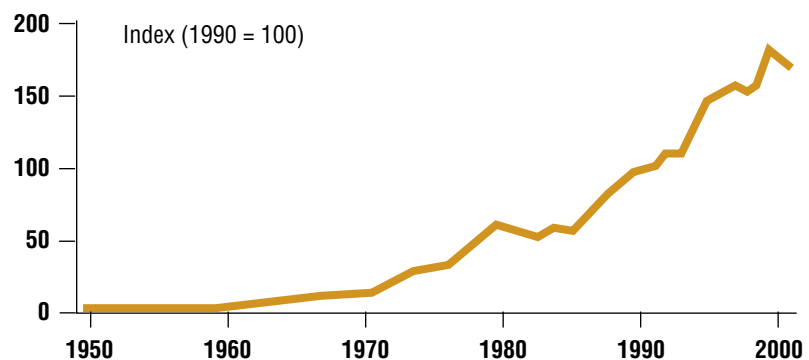


This is changing the way customers buy and how much they will pay for products and services. A survey of people across North America who bought travel services online in 2002 indicated that 78 percent felt brand had no impact on their travel planning, and 43 percent would significantly change plans to take advantage of a last-minute discount price.²

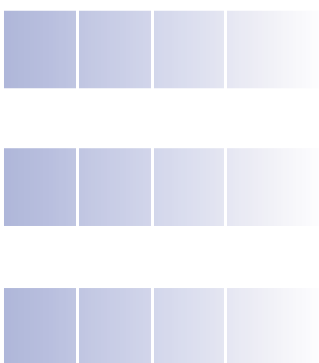
Traditional as well as new competitors, in search of elusive growth opportunities, are seeking to expand market share and enter new geographic, product and even demographic markets at the expense of established players. Retail giant Wal-Mart, for example, the leading U.S. retailer in apparel, groceries, videos and toys, is developing an arsenal of retail concepts and categories that leaves no format unturned.³ These include drive-thru supermarkets, Hey Buck! Dollar stores, convenience stores, used car centers, gourmet food, private label wine and custom-designed diamond rings. Not content with the U.S. market, it has expanded aggressively into international markets including Mexico, the United Kingdom, Canada, Germany, Brazil and China. Total international sales reached nearly \$41 billion in 2002, an increase of 15 percent over 2001 and accounting for more than 16 percent of its total business.⁴

The globalization of business processes, in addition to traditional manufacturing activities, will further intensify competition as enterprises exploit scale and cost disparities on a global basis at an ever-increasing rate. For instance, the total amount of world exports grew 82 percent in the decade between 1990 and 2000⁵ (see Figure 2).

Figure 2. Growth of world exports.



Source: World Trade Organization.



IDC estimates that U.S. companies will increase their use of offshore outsourcing from \$5.5 billion in 2000 to \$17.6 billion in 2005, as they take advantage of the lower cost of high-quality labor in countries like India and China and in Eastern Europe.⁶ Similar trends are observed in Europe with acceleration expected as former Eastern European countries are added to the European Union. Countries like India are now increasing their competitiveness by moving upstream from IT services to higher-value activities. For example, J.P. Morgan Chase is planning to hire 40 junior analysts and support staff in Bombay, India, to set up an equity research department there. It also plans to increase the several hundred employees doing back-office work at its Technopolis office park in Bombay to 1,100 by the end of the year.⁷

Combined with a mosaic of conflicting and changing local, country and global regulations, business executives face the most difficult competitive environment in at least the last generation.

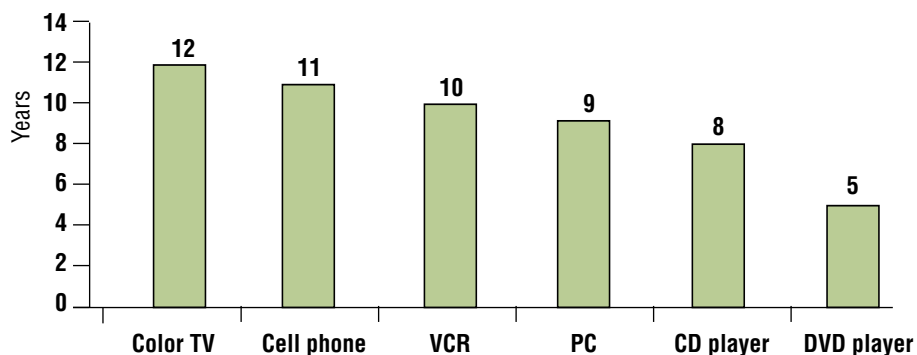
Continuous discontinuities

Change is not constant – Despite the recent economic slowdown, change continues to accelerate across nearly every dimension of business. Technological innovation is racing forward exponentially not only in processing power, but in areas like storage and connectivity, changing the realm of what is possible at any given time. We tend to forget how much change has already occurred over the past decades – the slide rule was replaced by the calculator, typewriters have given way to personal computers and e-mail has surpassed physical "snail mail" volumes. Music records have been replaced by CD, and CDs are in danger of being replaced by MP3s downloaded over the Internet.

Consumers continue to break records by embracing new technologies into their lives faster in each successive wave of adoption. While it took 12 years for the color television to spread to 20 percent of the U.S. population, mobile telephones achieved the same milestone in 11 years, personal computers in 9 and DVD players in 5 years⁸ (see Figure 3). More recent technologies, like broadband Internet service and wireless LANs, are likely to grow even faster.



Figure 3. Number of years to reach 20 percent penetrations (U.S.).



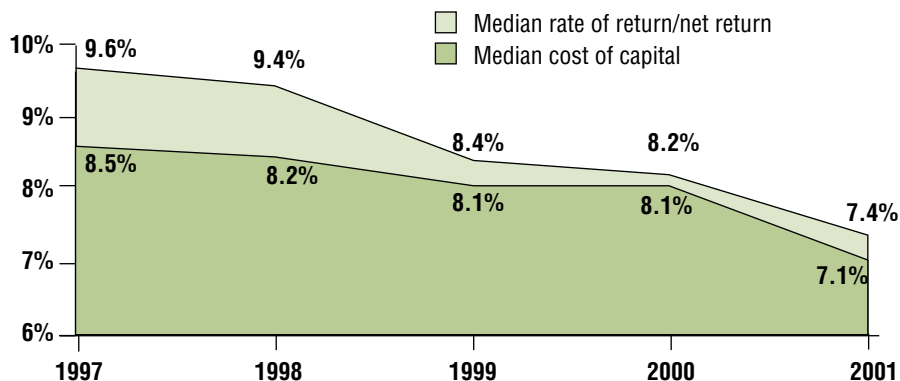
Source: Consumer Electronics Association FastFacts Database.

After discovering that being first-to-market with a new product or service often results in creating the standard, locking in a critical mass of customers and driving down the cost curve, companies accelerate innovation efforts further. As organizations find that competitive advantages are harder to sustain, they are compelled to respond to market changes more dynamically than in the past, resulting in more rapid business cycles across the entire industry value chain. And in some cases, the balance of power across a complete value chain can be reversed in a matter of years, as has happened in consumer goods, where retailers now often hold greater sway than their consumer packaged goods counterparts.

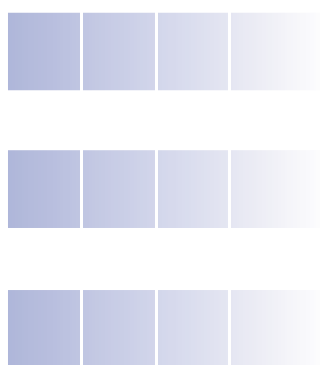
Unrelenting financial pressures

Creating business value is difficult as top line growth slows, as the bottom line shrinks and as investors remain cynical about business performance. For many industries, increased competition and lower demand has created an environment of lower margins and rates of return. For example, the U.S. consumer product goods industry has seen its median rate of return fall from 9.6 percent in 1997 to 7.4 percent in 2001⁹ (see Figure 4).

Figure 4. Economic profit return - Consumer packaged goods companies.



Source: Swander Pace & Company, Member of Kurt Salmon Associates.



Given the financial markets performance over the past several years, well-publicized scandals, closer scrutiny by accounting firms that are under pressure themselves and a host of large corporate bankruptcies, investors now demand a new level of financial and managerial performance. To return to healthy profit levels, companies are attempting to boost their bottom lines through cost cutting and process performance improvement – however, they are finding that this by itself is not enough. To create new value, firms need to find ways to grow their revenues faster than the overall rate of the market and alternatives for increasing asset efficiency. And they must do so with financial transparency, predictable results and reputable management standards.

Unpredictable threats

Business risks are becoming more prevalent and pervasive as global firms are exposed to greater and more damaging impacts from shocks to the environment. Geopolitical instability can threaten the operational performance of globally integrated firms that must be prepared for terrorism, war, labor unrest or political actions in every country in which they do business. Virtual dangers, such as computer hacking of corporate infrastructure, may disrupt business operations or place customer and employee security and privacy at risk. Natural disasters, like hurricanes, tornadoes, earthquakes and floods, continue to have the ability to shut down key components of a business or even an entire industry value chain unexpectedly. And as we've seen recently, other completely unexpected dangers can emerge quickly and have far-reaching business consequences in very short periods of time. For example, Severe Acute Respiratory Syndrome (SARS) emerged in Asia in late 2002 as an isolated illness with flu-like symptoms. By May 2003, the World Health Organization (WHO) had issued travel advisories limiting travel to China, Hong Kong, Singapore, Taiwan, and even Toronto, Canada.¹⁰ As a result, Pacific Rim countries scaled back their 2003 economic growth forecasts¹¹, and airline traffic to the region plummeted.¹²

Recent unpredictable events and costs

- World Trade Center attack, September 2001 - US \$200 billion¹³
- Kobe Earthquake, January 1995 - US \$120 billion¹⁴
- SARS, 2003 - US \$16.5 billion (first six months)¹⁵
- Chernobyl, April 1986 - US \$10 billion¹⁶
- “Love Bug” computer virus, May 2000 - US \$8.75 billion¹⁷
- Prestige oil tanker, November 2002 - US \$1 billion¹⁸

Source: United Nations, International Monetary Fund, Asian Economic News, ITAR - TASS World Service Wire, Computer Economics, El Pais

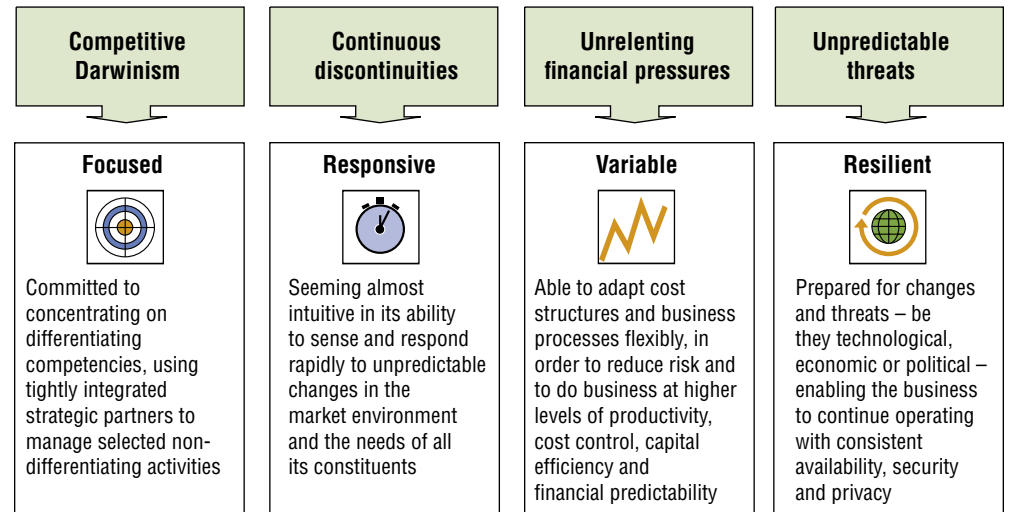


Firms that operate with a traditional business mindset may not be able to compete in such an intense business environment. New thinking is required. Anticipating risk is insufficient; companies need to have planned safeguards in place for what's imaginable – but more importantly, sufficient flexibility to react quickly to the unimaginable when it happens.

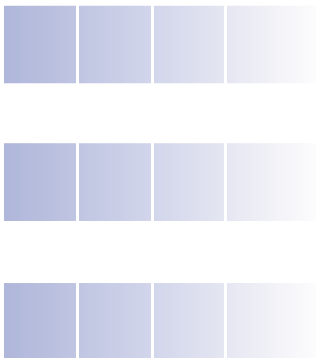
Shape up: What the new agenda requires

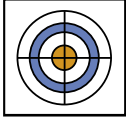
On demand businesses address competitive Darwinism by focusing on differentiating capabilities. They become far more responsive to successfully navigate continuous discontinuities and spend less time and money building inflexible business models based upon inevitably wrong predictions. While these companies can't escape unrelenting financial pressures, they migrate more of their cost structure to variable models, which can adapt quickly to changes in demand, moving away from committed investments. In addition, they develop resilient operations that can withstand a multitude of unpredictable threats. Successful organizations master these four dimensions – becoming focused, responsive, variable and resilient – and, in doing so, they make on demand their new agenda, accelerating the creation of value for their customers and other stakeholders (see Figure 5).

Figure 5. Unstoppable drivers lead to four on demand imperatives.



Source: IBM Institute for Business Value; "The New Agenda", Samuel Palmisano, October 2002.





Focused

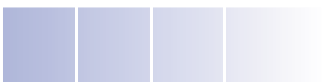
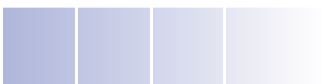
On demand businesses concentrate on differentiating the competencies that matter most to their success, relying on a tightly integrated network of business partners to manage non-differentiated activities.

Focus requires a vision of how the market is likely to evolve and what the organization's long-term role will be in the industry value chain. It requires a value proposition that is clearly defined for customers and stakeholders, along with an understanding of where the company can gain meaningful comparative advantage vis-à-vis competitors. It also means putting the responsibility for non-differentiating elements in the hands of outside specialists who bring scale and scope efficiencies and higher-quality service, often at a lower cost than can be accomplished internally.

The overall choice of what to focus on varies by company and is determined by factors such as industry maturity, corporate experience, available competencies, tacit and tangible know how, and competitors' strengths.

Some companies choose to focus on customer-oriented activities like brand building and relationship management, emphasizing areas like marketing, sales and customer support that can help differentiate them. For example, eBay, the global online marketplace, primarily focuses on customer management, providing its users with an online trading platform that enables them to interact and trade with each other. The company emphasizes providing tools and services that help its customers become more successful, such as wireless connectivity, sales automation, freight cost management and online funds exchange. Non-differentiating functions are handled by third-party partners, and, of course, by eBay's users themselves. This customer-focused strategy has been very successful, with registered users increasing by 46 percent in 2002 to 62 million, and gross merchandise sales, which is the value of all items sold on eBay, increasing 60 percent to nearly \$15 billion.¹⁹

Other businesses believe that a strong focus on production is the key differentiator and stress areas like procurement, manufacturing and logistics. While not a household name, Solectron is a leading provider of electronics manufacturing services to original equipment suppliers globally. By focusing on manufacturing, supply chain management and product lifecycle services, Solectron has won the privilege of providing products branded and sold by major companies like IBM, Microsoft, NEC and HP.²⁰

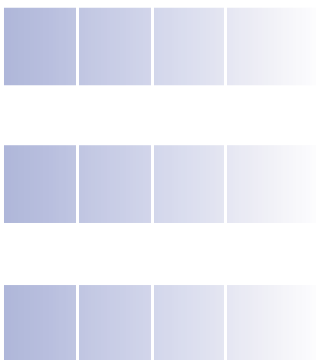


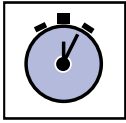
Still other enterprises take a more innovation-oriented stance, concentrating on research and development (R&D) and relying on best-in-class external providers for marketing and even production. In the life sciences industry, biotechnology and genomic companies currently perform nearly a fifth of all pharmaceutical R&D (a figure that may double within the next 10 years) and often choose to create relationships with larger pharmaceuticals that have scale in areas like government approval, production and distribution. For example, Roche and deCODE genetics have a strategic partnership to collaborate on gene and drug discovery in the fields of schizophrenia and peripheral arterial occlusive disease. deCODE focuses primarily on genomics research, whereas Roche is responsible for downstream research, development and commercialization.²¹

In the context of these broader decisions on corporate focus, on demand firms also look for opportunities to outsource many support functions that have traditionally been managed in-house. Rather than trying to be best-in-class across all areas of the business, companies are discovering that they can improve support functions like procurement, human resources administration and finance by turning to third parties who have decided to specialize in these domains.

Focus helps companies create value in an environment plagued by competitive Darwinism by keeping investments channeled into select areas that help sustain comparative advantage, rather than spreading resources thin across activities that could be better accomplished by focused external providers. Focus grows revenues by taking market share from traditional competitors who aren't providing customers the value they expect, and by concentrating on new products and market areas. Focus improves margins by reducing operational costs, withdrawing from products and markets with low profitability and targeting areas with the highest profit potential. Focus optimizes the use of capital by decreasing ownership of non-differentiating assets and reducing the working capital requirements of remaining activities. Focus can even help reduce risk by increasing the organization's expertise in the areas of the business that are most critical to its success.

Many companies are already taking significant actions to increase their focus in the on demand environment. AXA Group, a worldwide leader in financial protection and wealth management services, has decided to increase its focus on its main business by partnering for the integration of its server, mainframe and storage systems. Under the agreement, AXA pays only for the capacity it uses, which allows it to quickly adapt its IT needs to the requirements of the business. Moreover, AXA retains differentiating capabilities, including IT strategy and supplier relationship management, which it believes are core to its business. The company expects this move alone to save it several hundred million dollars over a multiyear period.²²





Responsive

On demand firms are able to adapt rapidly to unpredictable changes in their marketplace caused by shifts in customer activity, competitive actions, labor conditions, supply imbalances, regulatory change or other factors.

Responsiveness requires having a market view that closely tracks changing customer needs and other market conditions. It is not only about having information that is accurate, realtime and aggregated across the enterprise and its entire value net, but also having the ability to analyze the data and make realtime product and pricing decisions. Responsive companies are able to customize offerings to fit specific customer needs, often allowing for price premiums over less responsive competitors. Responsiveness means proactively gathering feedback on performance on a continuous basis to gain new insights and drive change. Not surprisingly, responsive companies create dynamic organizational structures and processes that capture rich market insights and encourage continuous adaptation.

Responsiveness helps accelerate value realization despite continuous discontinuity by helping on demand companies provide a closer match to changing market requirements than traditionally-minded competitors can offer. Responsiveness grows revenues by taking market share away from slower-to-respond competitors, introducing new products and services faster and with greater success and entering new markets with unmet needs. Margins are improved by gaining price premiums on customized offerings and reducing operational expenses through lower inventory levels and quicker turnover rates. Responsiveness helps optimize capital use by avoiding investments in unsuccessful product introductions, curtailing investment in products or markets that are proving unprofitable and may even help manage risk by keeping the business more closely in sync with changing market requirements.

There are many examples of on demand companies working hard to become more responsive. The Bekins Company, a transportation and distribution business, is meeting the needs of its agents, retailers and customers by creating a more responsive shipping system. The firm's manual process for fulfilling and tracking shipments was too slow to meet customer needs and too cumbersome for its agents. The company responded by creating a realtime fulfillment and tracking solution. Agents and corporate customers leveraged the information to optimize fulfillment logistics and improve both the speed and accuracy of deliveries to customers. These changes have resulted in significant new revenue from corporate shipping accounts who value the access to realtime information, and have also made Bekins more competitive by decreasing call center and other operating costs.²³





Variable

On demand businesses are able to adapt cost structures and business processes flexibly to respond to market changes and reduce the impact of financial and business volatility.

Variability adds a new dimension of business flexibility across the value chain. It means having the ability to increase or decrease production quickly as market requirements dictate, on a cost-effective basis. And variability is about having on demand external providers that help take the "fixed" out of fixed costs through variable pricing and supply. Since these providers execute similar activities for many other parties around the world, they are much better placed to offset swings in demand across various industries, thus enabling them to provide flexible supply at a lower cost.

Variability helps accelerate value realization in a world of unrelenting financial pressures by reducing risk and conducting business at higher levels of productivity, cost control, capital efficiency and financial predictability. Variability helps to grow revenues by having infrastructure at the ready (but not necessarily on the balance sheet), so that the business consistently meets demand volumes and avoids the awkward position of having to forego a new product or market opportunity. It improves margins by reducing fixed costs, allowing the company to pay only for actual use – not availability – and reducing costs across all levels of volume, especially lower levels. Variability reduces capital requirements by leveraging the capacity of external providers and optimizes working capital by creating more flexible internal capabilities. And importantly, variability manages risk by reducing investments in inefficient assets, potentially reducing the company's debt burden by decreasing the need to finance new assets and driving greater financial predictability.

J.P. Morgan Chase & Co. (JPMC), one of the largest financial services firms in the United States, is aggressively increasing its cost variability by externalizing a significant portion of its data processing technology infrastructure, including data centers, help desks, distributed computing, data networks and voice networks. With the help of an external partner, it created a virtual pool of computing resources that can be accessed and deployed on an "as needed" basis. Using this approach, JPMC can not only reduce costs, but also create capacity for growth and accelerate innovation.²⁴ With another spin on variability, Norwich Union (part of Aviva PLC), the United Kingdom's largest insurance group, is piloting a new variable, "pay as you drive" insurance product. Norwich Union is teaming with mobile technology providers to gain access to realtime car usage information through telematic devices installed in customers' vehicles, which are linked into



the firm's existing infrastructure. Using these new capabilities, the company is introducing a new insurance policy that charges premiums based on how often, when and where motorists use their cars. In addition to potential increases in sales, this type of realtime tracking can reduce insurance losses by helping locate and recapture stolen vehicles more quickly.²⁵



Resilient

On demand businesses can withstand business shocks in a global market. They are prepared for changes and threats – be they technological, economic, natural or political – and can continue operating with consistent availability, privacy and security features.

Resilience requires a commitment to plan and prepare for potential shocks that could impact the business in any location in which it operates globally. Testing helps determine the firm's limits and identify areas of weakness. Resilience means having the ability to safeguard human, physical and virtual assets. It is about protecting the privacy of employee, supplier, provider and customer information. Resilience builds redundancy in key parts of the operational model to help ensure continuity, and determines whether external partners are also prepared for changes and threats.

Resilience provides value where many unpredictable threats exist by finding ways to avoid or lessen the economic consequences of potential business disruptions and positioning the organization favorably against less resilient competitors. Resilience helps grow revenues by keeping the business constantly available to customers and allowing the company to gain market share while competitors recover from external shocks. It improves margins by reducing recovery costs through "self-healing" capabilities and potentially receiving price premiums from customers for non-stop availability. Resilience helps manage risk by reducing business disruptions, providing greater predictability in performance and using external specialists who increase overall resilience through their scale and distributed capabilities.



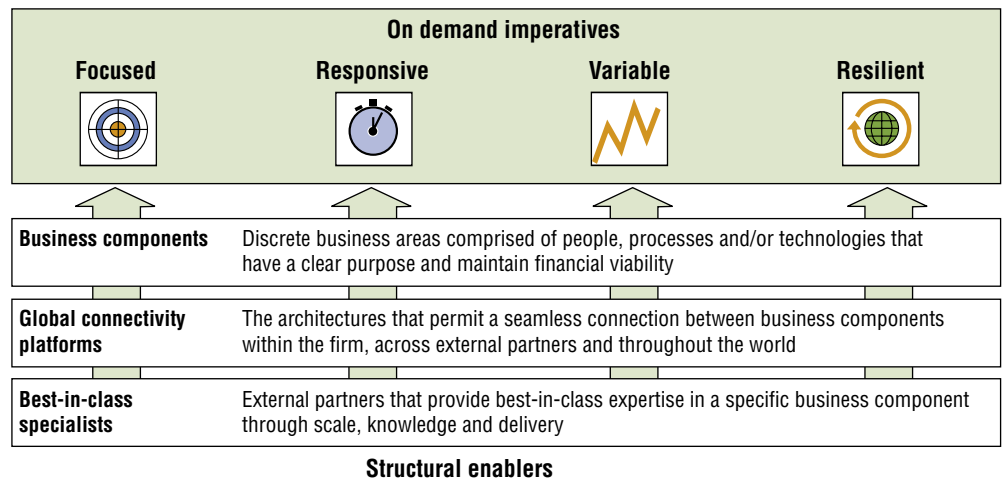
The new agenda

These four imperatives – focused, responsive, variable and resilient – together provide direction for today’s organizations as they become on demand businesses. None of these imperatives is new by itself. Indeed, companies have arguably been moving toward becoming more focused, responsive, variable and resilient for quite some time. Yet the new on demand market makes it more crucial than ever for companies to elevate performance in all four areas simultaneously. Fortunately, a number of structural enablers are emerging, creating the means to achieve a step-change in business performance and enabling businesses to operate in an on demand fashion.

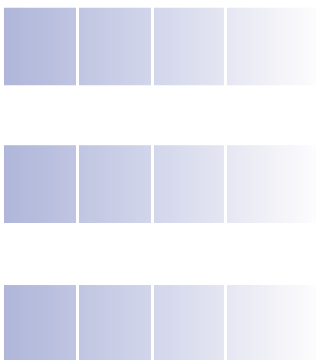
Help is here: New enablers emerging

Three critical structural enablers – business components, global connectivity platforms and best-in-class specialists – make it possible for firms to act as on demand businesses (see Figure 6).

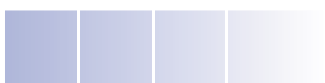
Figure 6. Structural enablers are emerging.



Source: IBM Institute for Business Value, 2003.



1. *Business components.* Enterprises are already dismantling their traditional vertical silos, creating shared business processes that provide services to the overall organization. However, as practices standardize, software adoption becomes widespread and networks more ubiquitous, enterprises can create an even more granular business composition – one based on business components. A business component can be viewed as a distinct business within the larger enterprise, managed with some degree of autonomy and held financially responsible for its own performance. Each component collaborates closely with the rest of the organization to create optimum value for the whole. Business components consist of a mix of people, processes and technologies working together to achieve set objectives within a financial framework that adds value to the broader enterprise. While each company needs to define its specific business components based upon what makes sense in the industry in which it operates, some common business components are: design components (like product development), buy activities (like procurement), make functions (such as subcomponent assembly), sell components (like technical support) and management services (such as finance).
2. *Global connectivity platforms.* The widespread availability of low cost broadband networks, open standards and middleware now allows companies to easily and seamlessly interconnect business components globally. Broadband commercial network connectivity is nearly ubiquitous in developed countries and becoming more readily available in developing ones, creating the ability for realtime interoperability regardless of location. And as bandwidth, reliability and wireless technologies continue to improve, more complex functionality can be performed at what were previously considered “distant” locations, often without the encumbrances of being “wired.” Business standards, many brought about by the adoption of packaged software solutions, are making it easier for previously disconnected business functions to interact with each other using common business process languages. And even when businesses are operating on diverse infrastructures, middleware and open standards have emerged to accelerate and simplify integration.

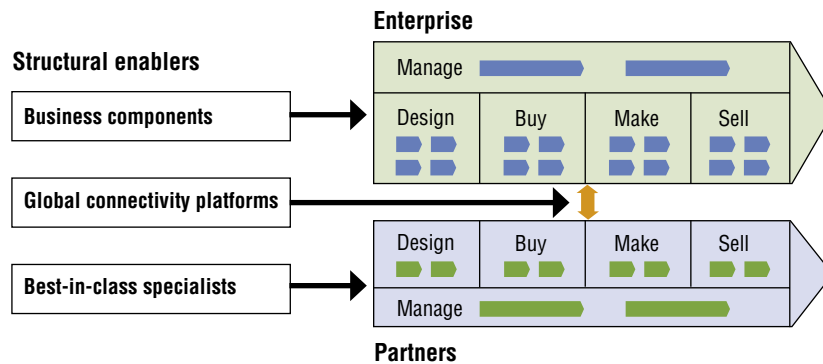


3. *Best-in-class specialists*. At the same time, an army of specialists continues to expand, meeting the needs of almost any conceivable business requirement. These specialists build scale and competencies around specific business components, offering best-in-class services at a cost lower than what it would cost to build internally. This is hardly a new phenomenon – companies like ADP in payroll processing, Solectron with contract manufacturing, IDEO in design and IBM in IT services have seen steady growth in their services businesses for years. But what’s changing is the breadth and depth of services that specialists today provide, including such functions as diverse as logistics, customer service, human resource management and corporate treasury. As global network platforms provide higher functionality with lower transaction costs, on demand businesses have at their disposal a wide array of partnering options that expand beyond traditional outsourcing and can include a broad spectrum of on demand relationships.

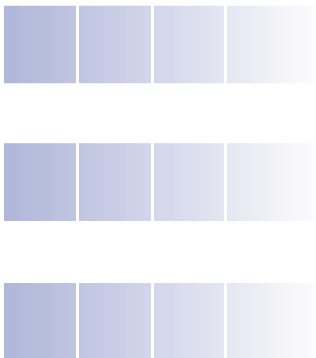
On demand business models

These three structural enablers – business components, global connectivity platforms and best-in-class specialists – have reached a tipping point in their evolution which now allows organizations to form an on demand business model comprised of independent, yet interdependent, business components (see Figure 7). This on demand business model provides a new way of organizing and managing the enterprise, with each component serving a unique purpose and collaborating seamlessly with other components based on agreed cost and service levels.

Figure 7. Enabling an on demand model.



Source: IBM Institute for Business Value, "Simplify to Succeed", 2002.



To construct an on demand model, firms need a consistent business design and technology architecture that enables their business components to connect their people, processes and technologies seamlessly. Best-in-class specialists are an integral part of the business design, responsible for specific business components, delivering agreed-upon services on a high-quality, variable and cost-effective basis. With a more modular business design based on business components and greater connectivity and collaboration from open industry standards, an on demand business can adapt to technological and market changes rapidly, even if that entails reconfiguring itself. Existing resources, processes and systems are integrated, not only within the internal organization, but also externally with providers, suppliers and customers. Usage-based capabilities and costing are exploited whenever possible, creating on demand availability that does not always require ownership of physical assets. When individual business components are designed to operate in an autonomic fashion, with the innate ability to self-diagnose and self-heal organizational structures, processes and technologies, they are better able to meet the changing objectives of the broader business.

The on demand business model, supported by key structural enablers, allows firms to address the imperatives for competing successfully in an on demand environment (see Figure 8). Greater comparative advantage is achieved by focusing on truly differentiating internal business components, while outsourcing other components to best-in-class providers. The model also promotes greater responsiveness and resilience; because the business can refine components, outsource them or even change providers at will, it can more readily identify, analyze and react to market changes in realtime. Sharing internal components and externalizing others where appropriate helps improve variability, increasing overall business flexibility and asset leverage. Building redundancy throughout the model, including increased reliance on external providers with globally-distributed scale efficiencies, reduces the impact of business shocks and creates a more resilient enterprise. By taking advantage of what these structural enablers provide, organizations have the opportunity to transform themselves into on demand businesses poised to accelerate value creation.

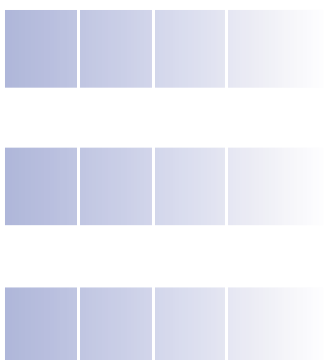
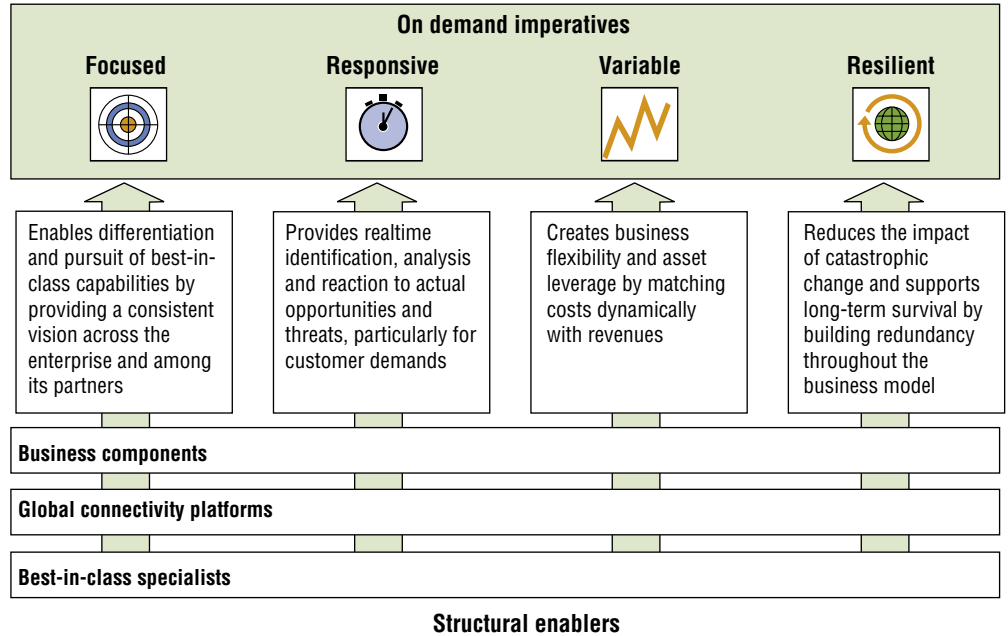


Figure 8. Structural enablers support the four on demand imperatives.

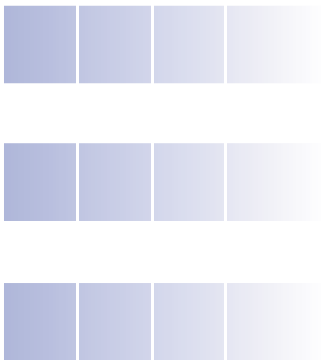


Source: IBM Institute for Business Value, 2003.

Move it or lose it: Positioning yourself for the new agenda

Every enterprise has the opportunity to reap the benefits of becoming an on demand business – but not all will make the journey. Those who do will transform over time into much more focused, responsive, variable and resilient businesses with stronger economic models that drive increased revenues, lower costs, higher asset productivity and lower operating risk. They will be part of a select group of organizations setting the bar for business value creation over the next decade.

A traditional operating model simply cannot meet the imperatives of the new on demand environment; its constraints become more obvious as business becomes more demanding. Historically, large companies have optimized activities within business units and functions, often ignoring duplication of people, processes and technology across different areas. Striving to be comprehensive in their approach and best-in-class across all processes, they tended to organize with a silo mentality, sought control of as much of their value chains as possible and

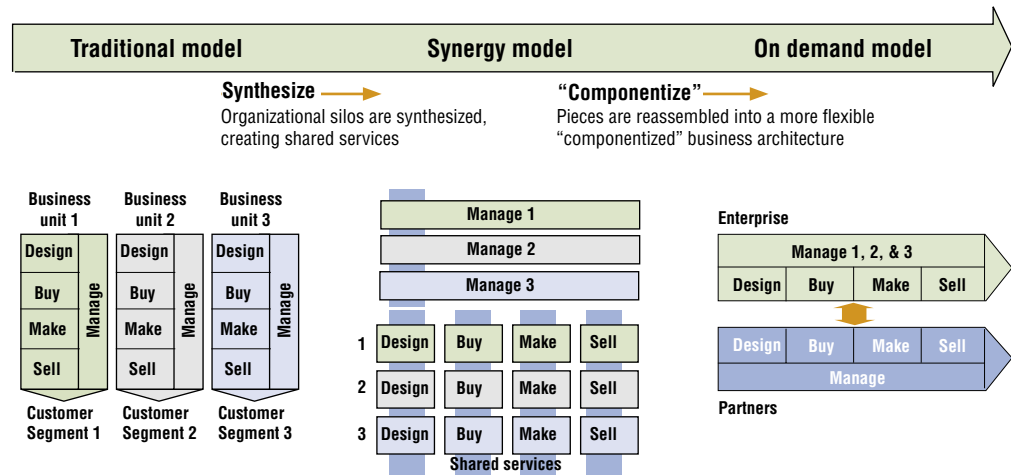


considered outsourcing primarily as a cost-cutting measure. Decision-making was based on a deliberate process with methodical analysis of business cases based upon assumptions and historical inference. Fixed assets were considered worthy investments, despite the fact that they too frequently resulted in inflexible structures that hampered more than helped when new market opportunities emerged. And while companies generally recognized the importance of managing external threats, most remained unaware of just how many types of potential shocks and threats there were, leaving their businesses significantly exposed.

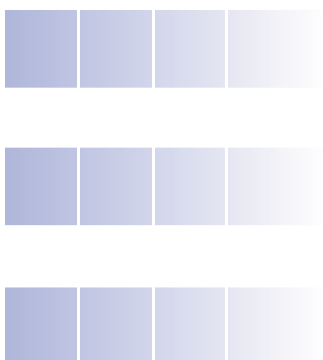
Synthesizing into shared services

Becoming an on demand business requires a strategic migration. This on demand transformation begins with an understandable and practical first step: synthesizing traditionally managed vertical silos into services that can be shared horizontally across the company (see Figure 9).

Figure 9. Transforming to an on demand model.



Source: IBM Institute for Business Value, "Simplify to Succeed", 2002.

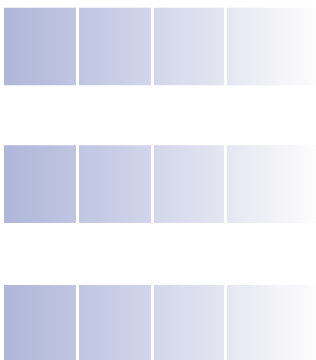


This initial step offers obvious cost benefits, and many companies have already launched initiatives to develop shared services that centralize distributed functions within and across business units. Functions that perform similar actions in compatible manners albeit in separate silos are candidates for consolidation. Resources can be combined into a shared service that serves all of the silo organizations, providing standardized service at a lower cost. Similarly, companies are seeking opportunities to improve the speed and accuracy of coordination between functions operating within the same business unit. Most importantly, new connectivity is being created that allows for sharing of resources and capabilities within functions, across silos and with external suppliers and partners.

Even though the synergy model is an intermediate milestone on the way to on demand, it can offer some sizable benefits. IBM underwent a significant transformation between 1992 and 2001 that centralized distributed functions and created shared services across business units. For example, the number of financial data centers was reduced from 67 to 8, key applications decreased in number from 145 to 55 and the days for accounting close dropped from 18 to 7. As a result, expenses for this business component decreased from \$2.1 billion, or 3.2 percent of revenue, to \$1.3 billion, or 1.5 percent of revenue. Similarly, IBM reduced its overall number of CIOs from 128 unit and geographic CIOs to 1 corporate CIO, its host data centers from 155 to 11, the number of Web hosting centers from 80 to 7 and the number of total applications from 16,000 to 5,200.

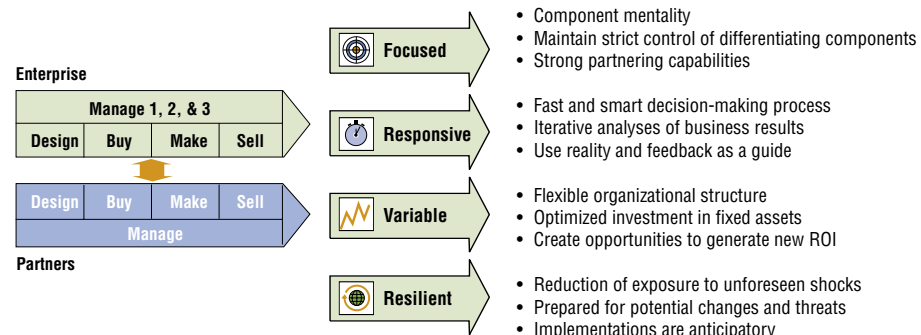
Transforming to on demand

As companies continue to carve their enterprises up into more discrete sets of services, it becomes easier to take the next major step toward on demand: reassembling the pieces into a more flexible and configurable model consisting of independent, yet interconnected, business components. This process is not simultaneous across all aspects of the business, nor is it always linear, but the end result is transformation into an on demand business that can react, readjust or even reconfigure itself whenever the market demands.



The flexibility afforded by a cohesive set of tightly integrated, purpose-driven business components pushes play to a new level, allowing firms to become more focused, responsive, variable and resilient than ever (see Figure 10). Making this next step requires firms to rethink their businesses in terms of components, develop stronger partnering skills, speed up decision-making processes, create flexible organizational structures and prepare for broader changes and threats. As an enterprise's on demand business model evolves, the company invests most of its time and resources in differentiating business components that provide comparative advantage and organizes all of its business components – both internal and external – under a common governance model aligned with the company's strategic and tactical objectives.

Figure 10. Meeting the on demand imperatives.



Source: IBM Institute for Business Value, 2003.

Accelerating value creation

Successful transformation to an on demand business results not only in the transformation of business components and their underlying people, processes and technologies – it also results in the transformation of a company's economic model as well (see Figure 11). On demand businesses grow revenues faster by taking share away from traditional competitors, introducing new products and services and entering new markets more successfully. They improve margins dramatically by gaining significant cost efficiencies and finding opportunities to price products and services at premium levels. They optimize capital by reducing working capital and divesting non-differentiating fixed assets. And they look for ways to lower their cost of capital by increasing the predictability of the business and hedging against external threats. On demand businesses vastly accelerate their ability to realize value, making them the most attractive businesses of the foreseeable future.

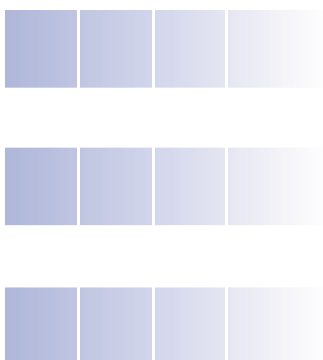
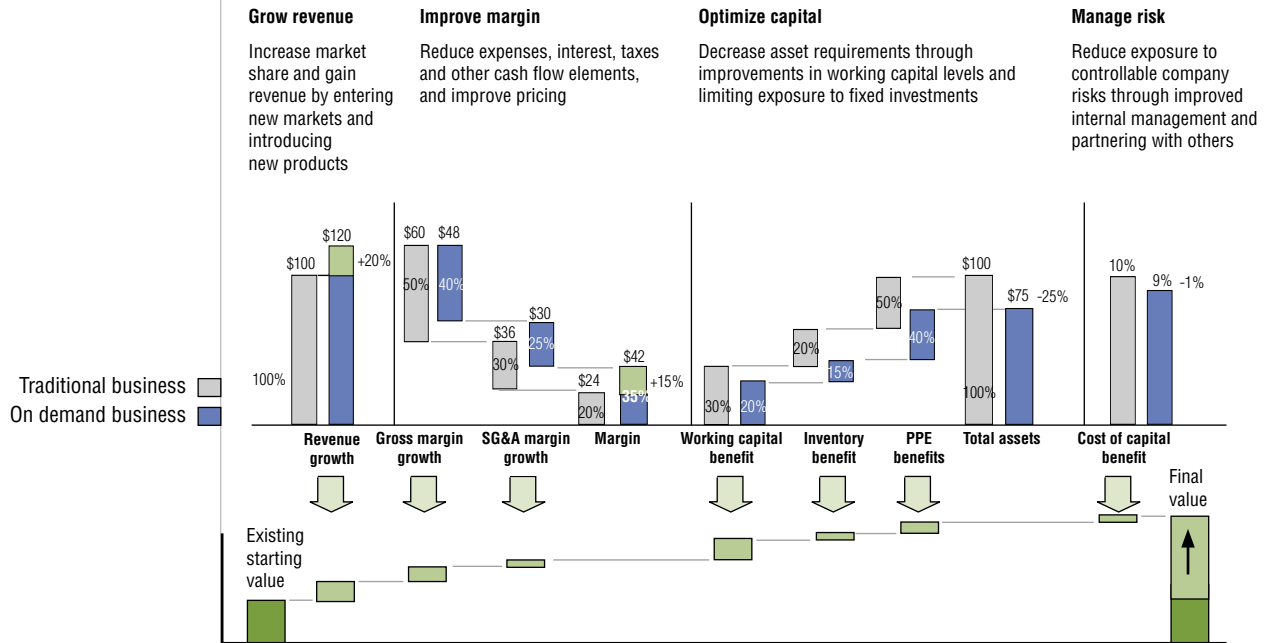


Figure 11. Realizing value as an on demand business (illustrative).



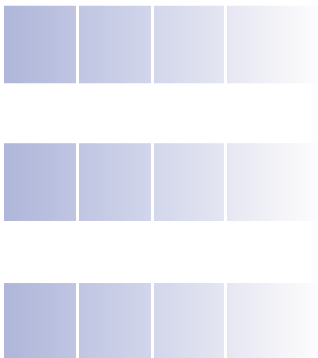
Source: IBM Institute for Business Value.

Think big and act fast: Rolling out the new agenda

Companies today are at a critical juncture. The business environment continues to intensify – some even suggest at an exponential rate. Now, however, key enablers are evolving quickly, creating the wherewithal to respond to that environment in brand new ways. Simply stated, ability has finally caught up with need. Those companies that capitalize on this culmination can push their business performance to new heights, setting off a new wave of value creation.

So, where should a company that's serious about stepping up to on demand start? We recommend you start by *thinking big* – define your areas of focus, create a component-based business and map your transformation journey with key milestones identified along the way.

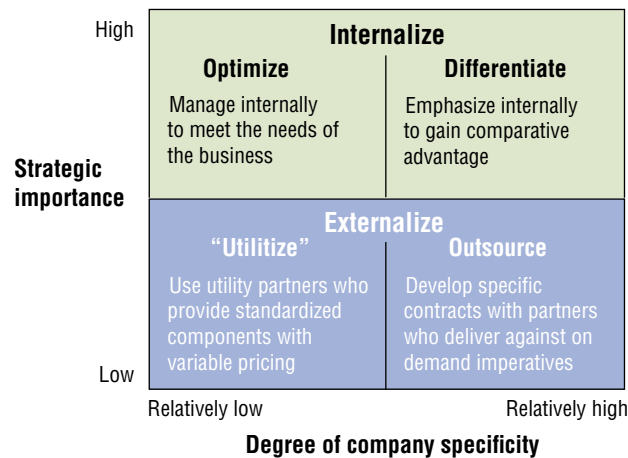
- *Define your focus.* Strategy is an essential component of setting the on demand agenda. Establish a shared strategic vision that clearly outlines the firm's future positioning, agreeing not only on overall strategic focus, but also the capabil-



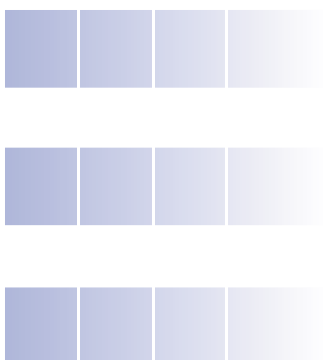
ities that are deemed differentiating, provide comparative advantage and are defensible against established competitors and new entrants. Recognizing that this is an iterative, ongoing process, develop this vision in the context of what a "componentized" business model will allow you to do. Companies pursuing a broad strategy – where they try to be excellent across every aspect of the value chain – are going to find it increasingly difficult to compete against focused competitors that have carefully picked their battle grounds (in terms of where in the value chain they focus) and that leverage external specialists' best-in-class capabilities.

- *Create components.* On demand businesses rethink their enterprises in terms of business components, determining which remain internalized and which should be externalized through best-in-class specialists. Identify people, processes and technology that can be grouped into potential business components with clear objectives, financial accountability and management independence. Determine whether an individual component should be differentiated, optimized, outsourced or "utilitized" (see Figure 12). Business components that truly matter, are specific to the company and cannot easily be replicated should be differentiated internally. Strategically important components that are less company-specific may need to be optimized internally when security, privacy, business risks, transactions costs or other factors limit the ability to use external specialists. Company-specific business components with lower strategic importance are targets for outsourcing to external providers who can deliver against on demand imperatives. Commonplace business components with lower strategic importance are ideally suited for utility providers that can perform services on a pay-per-use basis.

Figure 12. Establish business components.

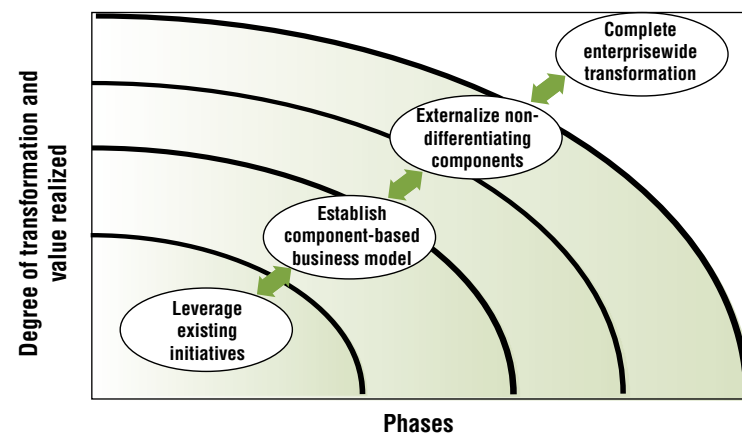


Source: IBM Institute for Business Value, 2003.



- *Map it out.* On demand transformation requires a roadmap that ties together the shared vision with the steps required to achieve it (see Figure 13). Develop a transformation map that outlines what is required to achieve the transformation objectives. Divide the effort into achievable phases, each with specific initiatives, well understood milestones and tangible benefits. Make sure the transformation map addresses how the firm plans to commit its resources, innovate existing processes, exploit information technology, migrate assets to variable models, enlist strategic external specialists and adjust governance systems to keep the business functioning cohesively even while it's undergoing significant transformation.

Figure 13. On demand transformation map.



Source: IBM Institute for Business Value, 2003.

Transforming to an on demand business also requires companies to *act fast* – start with existing initiatives, build the appropriate foundation, prepare the organization for change and make sure the journey shows positive returns right away.

- *Use what you have underway.* Don't start from scratch – use existing initiatives to increase the speed and efficiency of the on demand transformation. Take an inventory of existing initiatives to locate projects that best address on demand imperatives (see Figure 14). This on demand screening, used in addition to other criteria in the project selection process, should help prioritize initiatives that strengthen the company's strategic focus, increase market responsiveness, create more variable cost structures and deepen resiliency.

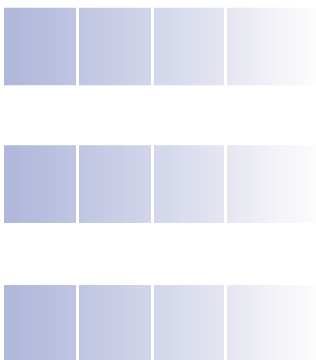
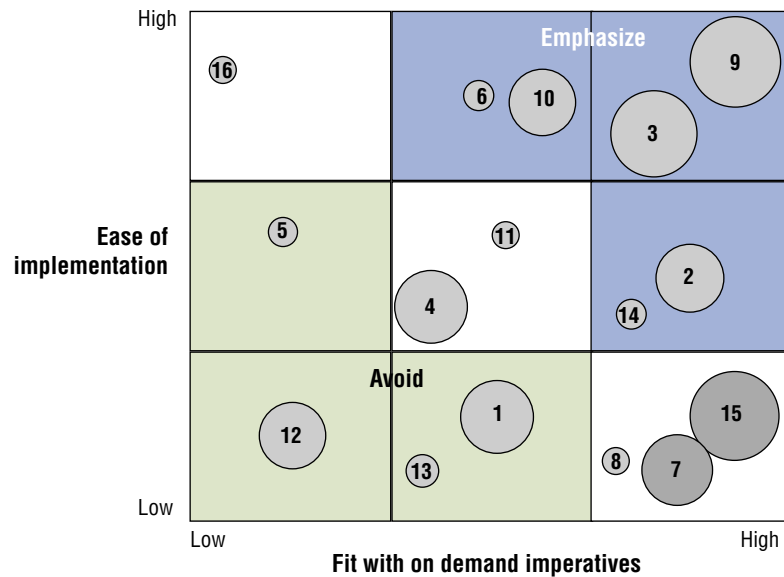


Figure 14. Leverage existing initiatives (illustrative).



Source: IBM Institute for Business Value, 2003.

- Plan for organizational impact.* Organizations need to move from vertical reporting structures and competency specialization to more flexible global teams, incentives that support collaboration and broader employee competencies. The rigid, top-down, vertical control with inflexible performance metrics that describe many traditional governance systems need to give way to more adaptive governance structures and practices, enabling more distributed and faster decision-making that is supported with dynamic performance management.
- Build a firm foundation.* Infrastructure is the foundation upon which on demand businesses are built. Create and execute a robust and viable technology strategy, which enables transformation and meets future business requirements. As your infrastructure becomes more open, integrated, virtualized and autonomic, it provides new ways of collaborating, eases business integration and reconfiguration and helps you better manage the rising complexity of managing IT. Work to make sure that your infrastructure platforms are:

 - Based on open standards – to simplify systems integration and adapt to technology changes rapidly
 - Integrated – to facilitate transaction and process integration across the enterprise; allow realtime connectivity among partners, suppliers and customers; enable active data mining and decision support



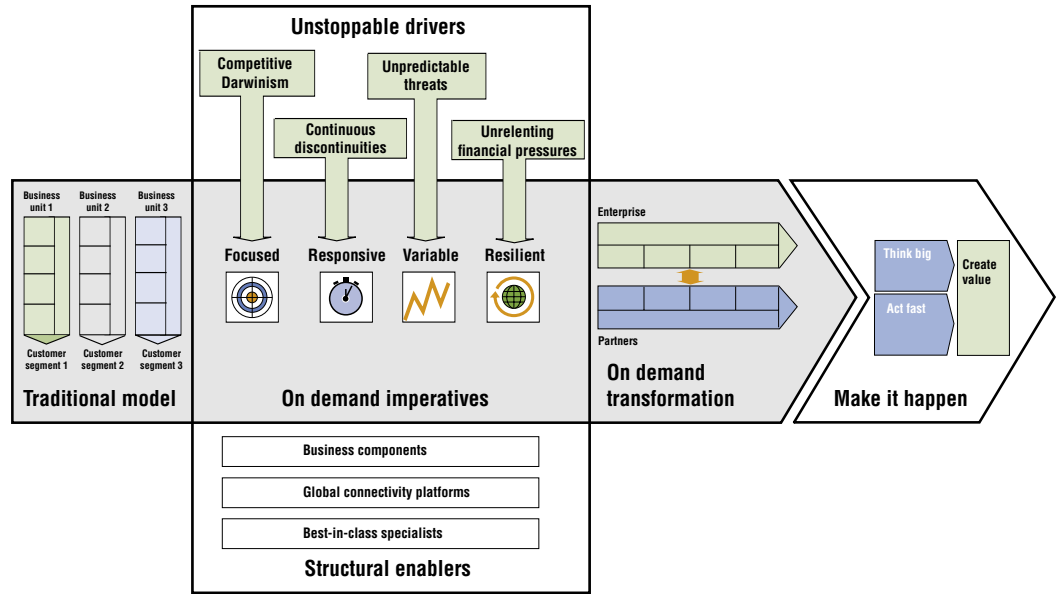
- Virtualized – to share and manage distributed computing resources as a single, virtual data center, increasing the utilization of existing assets and lowering IT costs
- Autonomic – with systems that can be managed remotely, have embedded privacy protection and security features and are capable of self-optimization, self-diagnosis and self-healing.
- *Make it pay its own way.* On demand transformation shouldn't break the bank. Actively seek out self-funding opportunities – initiatives that pay for themselves almost immediately through cost savings or incremental revenues. The externalization of business components provides an excellent opportunity for making initiatives self-funding, as some best-in-class business specialists fund much of the initial cost of the transformation in exchange for multiyear outsourcing agreements.

Make it your agenda: Start now

Look around. You'll recognize the new agenda – even if you didn't know it by name (see Figure 15). Unstoppable drivers are plowing through today's business environment, mowing down enterprises that can't operate as the marketplace dictates: on demand. Fortunately, a few critically important enablers have emerged that make it possible to instill the corporate characteristics that on demand performance requires – becoming more focused, responsive, variable and resilient. But, acting on these imperatives requires a different type of business structure – one that's agile and reconfigurable as the environment changes, comprised of the optimum mix of internal and external business components and tightly integrated end-to-end. With such an on demand business model in place, the financial picture brightens significantly – with more revenue, better margins, optimized capital and less risk. Yet no matter how great the upside potential is, the benefits of on demand can only begin to accrue if you think big, act fast...and start now.



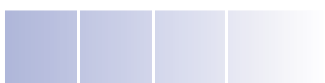
Figure 15. On demand business: The new agenda for value creation.



Source: IBM Institute for Business Value, 2003.

To learn more about becoming an on demand business, please contact us at iibv@us.ibm.com or visit our Web site

ibm.com/bcs



About the authors

Randall Hancock is the Global Leader of the IBM Institute for Business Value and a Partner in IBM Business Consulting Services. Randall leads global industry and cross-industry teams in developing business insights that help executives create and implement innovative business strategies. He can be reached at rshancoc@us.ibm.com.

Peter Korsten is the EMEA Leader of the IBM Institute for Business Value and a Strategy Consulting Partner in IBM Business Consulting Services. He can be reached at peter.korsten@nl.ibm.com.

George Pohle is a Partner and Global Leader for on demand Strategy and Marketing in IBM Business Consulting Services. He can be reached at pohle@us.ibm.com.

Contributors

Saul J. Berman, Partner and Global Executive, Strategy Consulting, IBM Business Consulting Services, saul.berman@us.ibm.com.

Steven Foecking, Managing Consultant, IBM Business Consulting Services, foecking@us.ibm.com.

The authors would also like to thank the entire staff of the IBM Institute for Business Value for their contributions.

About IBM Business Consulting Services

With more than 60,000 consultants and professional staff in more than 160 countries globally, IBM Business Consulting Services is the world's largest consulting services organization. IBM Business Consulting Services provides clients with business process and industry expertise, a deep understanding of technology solutions that address specific industry issues, and the ability to design, build and run those solutions in a way that delivers bottom-line business value.



References

- ¹ Reitsma, Reineke. "The Technographics Report: Online Retail Europe." Forrester Research, Inc. December 2002. pages 2-3.
- ² "Travel, 2002 Mail Survey." Data Crosstabs, Topic: Pricing Travel, Consumer Technographics North America. Forrester Research, Inc. 2002.
- ³ Edelson, Sharon and Rusty Williamson. "The Wal-Mart World: Giant Reaches Out with Banks, C-Stores." *Women's Wear Daily*. November 21, 2002.
- ⁴ Wal-Mart 2003 Annual Report and <http://www.walmartstores.com>
- ⁵ World Trade Organization. "World merchandise exports in current dollars, 1950-2002." [Spreadsheet]. 2003.
http://www.wto.org/english/res_e/statis_e/longterm_e.xls
- ⁶ Costanzo, Chris. "N.J. Law Pulls eFunds' Ops Back Onshore." *American Banker*. February 26, 2003.
- ⁷ Waldman, Amy. "More 'Can I Help You?' Jobs Migrate From U.S. to India." *The New York Times*. May 11, 2003.
- ⁸ Consumer Electronics Association FastFacts Database.
- ⁹ "Consumer Packaged Goods: Industry Financial Performance '02." Swander Pace & Company, Member of Kurt Salmon Associates. December 2002.
<http://www.swanderpace.com/Library/profiles-FinPerf02%20FPG%20v7.pdf>
- ¹⁰ World Health Organization. "Severe Acute Respiratory Syndrome (SARS) – Travel." <http://www.who.int/csr/sars/travel/en/>
- ¹¹ "Cabinet sees economic impact from SARS scare." The Taiwan Economic News. April 1, 2003. <http://www.taiwanheadlines.gov.tw/20030401/20030401b1.html>
- ¹² Hong Kong Trade Development Council. "A Reassessment of the Impact of SARS on Hong Kong Exports." May 28, 2003. <http://www.tdctrade.com/econforum/tdc/tdc030503.htm>
- ¹³ United Nations Economic Commission for Europe. "Economic Survey of Europe, 2001, No. 2." November 15, 2001. http://www.unece.org/ead/pub/surv_012.htm
- ¹⁴ International Monetary Fund. "World Economic Outlook." September 26, 2001. <http://www.imf.org/external/pubs/ft/weo/2001/02/index.htm>



- ¹⁵ "SARS to cost world \$16.5 billion; Asia to rebound: analysts." *Asian Economic News*. May 6, 2003.
- ¹⁶ Melnik, Mikhail. "Ukraine spends 12.2 bln dlr to deal with Chernobyl effects-speaker." *ITAR-TASS World Service Wire*. April 14, 2003.
- ¹⁷ Computer Economics. "An overview of the love bug." *IT Cost Management Strategies*, 2000, vol.19, no. 7, page 5. July 1, 2000.
- ¹⁸ Pereiro, Xose M. "Government pegs cost of 'Prestige' clean up at up to - 1 billion." *El Pais*. January 13, 2003.
- ¹⁹ eBay, Inc. 2002 Annual Report and SEC Form 10-K.
- ²⁰ Solectron Corporation. <http://www.solectron.com>
- ²¹ "deCODE and Roche Announce Major Progress in Turning Their Genomic Discoveries in Schizophrenia and PAOD into Novel Drugs and Diagnostics." *PR Newswire*. February 14, 2001.
- ²² Evers, Joris. "Brief: AXA picks IBM for \$1B 'on-demand' deal." *IDG News Service*. February 28, 2003.
- ²³ Caulfield, Brian. "Case Studies: Bekins Worldwide." *eCompany*. April 2001. <http://www.business2.com/articles/mag/0,1640,9566,00.html>.
- ²⁴ "JP Morgan Chase signs record outsourcing agreement with IBM." *Presswire via NewsEdge*. January 4, 2003. <http://www.computeruser.com/news/03/01/04/news4.html>
- ²⁵ Aviva PLC. "UK: Norwich Union appoints IBM and Orange for Pay as You Drive Insurance." March 12, 2003. <http://www.pressi.com/int/release/62253.html>





© Copyright IBM Corporation 2003

IBM Global Services
Route 100
Somers, NY 10589
U.S.A.

Produced in the United States of America
06-03
All Rights Reserved

IBM and the IBM logo are registered trademarks of International Business Machines Corporation in the United States, other countries, or both.

Other company, product and service names may be trademarks or service marks of others.

References in this publication to IBM products and services do not imply that IBM intends to make them available in all countries in which IBM operates.